

Newcastle Experimental Economics Workshop

7 and 8 November 2024



Version: 2024-11-04

Programme

Thursday, 7 November 2024

12:30-13:25	Registration & lunch
13:25-13:30	Welcome remarks
13:30-15:00	Submitted talks 1 (Session chair: Jytte Nielsen)
	 Emotional Echoes: Emotion dynamics and reference-dependent preferences Clément Staner (Heidelberg University) Do as I Do: Paternalism and Preference Differences in Decision-Making for Others Georgia Buckle (University of Portsmouth) Performance-Based Assessment of Strategic Reasoning: A Recombinant Estimator Approach Maria Cubel (City University London) Naive Frequentists and Redundant Information David Walker-Jones (University of Surrey)
15:00-15:15	Coffee/tea
15:15-16:45	Submitted talks 2 (Session chair: Sue Chilton)
	 Low-carbon transition expectations and policy uncertainty: an experimental approach Maria Alejandra Erazo (University of Bologna) The Power to Conserve: Using Identity Primes to Promote Resource Conservation in Qatar Anomitro Chatterjee (London School of Economics) Zero-sum views and preferences for addressing global inequality Diego Marino-Fages (Durham University) Attribution of responsibility for corrupt decisions Alex Possajennikov (University of Nottingham)
16:45-17:00	Coffee/tea
17:00-18:00	Keynote lecture 1: "Are hiring algorithms acceptable and useful? Experimental evidence from the lab and the field" Dorothea Kübler (WZB Berlin Social Science Center)
19:00	Dinner at El Coto

Friday, 8 November 2024

8:45-9:00	Coffee/tea
9:00-10:00	Keynote lecture 2: "Learning Preferences from Response Times: An Overview" Carlos Alós-Ferrer (Lancaster University)
10:00-10:15	Coffee/tea
10:15-11:45	Submitted talks 3 (Session chair: Tom Lane)
	 Difficult Merits Flóra Drucker (Düsseldorf Institute for Competition Economics) Redistribution Over Gains and Losses: Social Preferences and Moral Rules Ernesto Gavassa-Perez (University of Navarra) Selection Pressure in Repeated Contests Stephan Jagau (University of Nottingham) Impact or Responsibility? Giving Behavior in a Televised Natural Experiment Dennie van Dolder (University of Essex)
11:45-12:00	Coffee/tea
12:00-13:10	Submitted talks 4 (Session chair: Smriti Sharma)
	 Effort Motivation and Performance Amid Stress and Failures <i>Martina Vecchi (University of Southampton)</i> Setting optimal test thresholds: A consumer-choice model and an experimental test <i>Morgan Beeson (Newcastle University)</i> Digital bodyguards and female autonomy: A field experiment on the role of personal safety on mobility and empowerment <i>Sheheryar Banuri (University of East Anglia)</i>
13:10-14:00	Lunch

Workshop venue

The workshop will be held at The Catalyst in rooms Gorgon and Faraday (1st floor). The Catalyst 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/

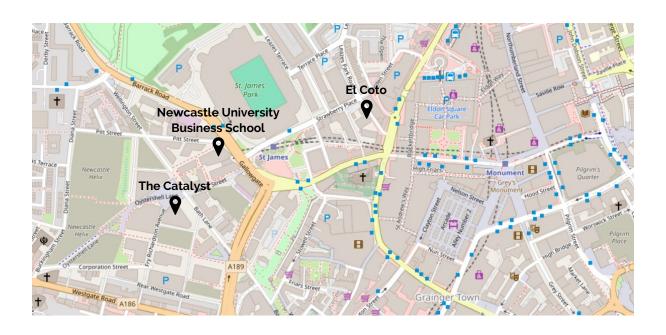
The Catalyst 3 Science Square Newcastle Helix Newcastle upon Tyne NE4 5TG

Dinner venue

We booked El Coto for dinner on Thursday, 7 November 2024, from 7.00pm. Walking from The Catalyst to El Coto will take approximately 8 minutes.

El Coto 21 Leazes Park Road Newcastle upon Tyne NE1 4PF

https://elcoto.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 on the landing in front of Gorgon and Faraday. 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.

Contact information

If you have any questions, please email <u>expecon@newcastle.ac.uk</u>, or contact the workshop organisers:

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Abstracts

Keynote lectures

Are hiring algorithms acceptable and useful? Experimental evidence from the lab and the field

Dorothea Kübler (WZB Berlin Social Science Center)

Abstract: The keynote will cover two studies on hiring algorithms. (1) An online experiment is conducted to study the origins of algorithm aversion. Participants are in the role of either workers or managers. When the algorithm does not use workers' gender and workers know this, they choose the algorithm more often than in the baseline treatment where gender is employed. Feedback to the managers about their performance in hiring the best workers increases their preference for the algorithm relative to the baseline without feedback, because managers are, on average, overconfident. Finally, providing details on how the algorithm works does not increase the preference for the algorithm for workers or for managers. (2) The adoption of Artificial Intelligence (AI) for hiring processes is often impeded by a scarcity of comprehensive employee data. We hypothesize that the inclusion of behavioral measures elicited from applicants can enhance the predictive accuracy of AI in hiring. We study this hypothesis in the context of microfinance credit officers. Our findings suggest that survey-based behavioral measures markedly improve the predictions of a random-forest algorithm trained to predict productivity within sample relative to demographic information alone. We then validate the algorithm's robustness to the selectivity of the training sample and potential strategic responses by applicants by running two out-of-sample tests: one forecasting the future performance of novice employees, and another with a field experiment on hiring.

Learning Preferences from Response Times: An Overview

Carlos Alós-Ferrer (Lancaster University)

Abstract: This talk reports on recent work showing how to use response time data and choice frequencies to elicit preferences nonparametrically when choices are stochastic and distinguish the preferences of different groups. It discusses theoretical results and their empirical implementation. Examples include (i) improving out-of-sample prediction for risky choices at the individual level, and (ii) separating behavioral anomalies (e.g., nontransitivities or heuristics) from noise-generated inconsistencies (a problem so far unresolved). The talk further shows how to apply the techniques to improve the analysis of survey data and determine whether a group (defined, e.g., by gender, age cohort, socioeconomic status, etc.) prefers an option over its alternative more than another group, even when individual choices are noisy, and without any assumptions on the noise.

Submitted talks 1

Emotional Echoes: Emotion dynamics and reference-dependent preferences

Clément Staner (Heidelberg University) with Yiwei Qu

Abstract: How do past emotional reactions shape current decisions? This paper investigates the dynamic impact of negative emotions on investment decisions. We focus on the negative emotions triggered by outcomes that fall below the decision-maker's subjective expectation and

generically call these emotions frustration. Using these principles, we derive theoretical implications of frustration's dynamic in different investment environments without imposing shape or functional form restrictions and test them in the lab. We elicit participants' willingness to invest before and after they experience frustration in a within-subject design. Subjects exhibit strong and heterogeneous reactions to frustration. We show that these results can be explained by how sensitivity to frustration changes when frustration increases. Risk preference, loss aversion, and other individual traits cannot explain such dynamic behaviour patterns.

Do as I Do: Paternalism and Preference Differences in Decision-Making for Others

Georgia Buckle (University of Portsmouth) with Wolfgang Luhan

Abstract: We study whether money managers impose their risk preferences onto investments for clients paternalistically and whether they impose them more, the more their client's risk preference differs from their own. We conduct an online experiment, where participants make an investment decision for themselves and on behalf of another participant (as money managers). When investing for another (the client), we use the strategy method to elicit decisions for every possible investment the other participant could have made for their own payoff, such that money managers have complete information of their client's risk preference. With this, we systematically manipulate the difference in risk preference between the manager and client within subjects. Overall, we find that money managers do project their risk preferences onto clients' investments due to paternalism. The manager's risk preference significantly influenced their investment for others, despite knowing their client's risk preference, and them having no stake in the decision. Investments were also significantly predicted by the client's known risk preference, but this was a substantially worse predictor than the managers' preference. We also find, as predicted, that managers do deviate further from their client's risk preference, the more that preference differs from their own.

Performance-Based Assessment of Strategic Reasoning: A Recombinant Estimator Approach

Maria Cubel (City University London) with Santiago Sanchez-Pages, Junkai Wang

Abstract: This paper introduces a novel method for assessing strategic sophistication in two-player games. It diverges from traditional approaches that attribute a level of strategic reasoning to players. Instead, we propose a performance-based measure that evaluates players' ability to best respond to the empirical distribution of strategies among other players. This method calculates the loss incurred relative to a player's optimal strategy using the "recombinant estimator" introduced by Mitzkewitz and Nagel (1993). Our measure of strategic sophistication offers two advantages: It is applicable across games, facilitating comparative analysis, and it can inform strategic decision-making and game design. We demonstrate its applicability by leveraging experimental data from over 40 experiments comprising more than 8,000 unique participants. Finally, we validate our measure by showing its association with established metrics of cognitive performance.

Naive Frequentists and Redundant Information

David Walker-Jones (University of Surrey) with Umberto Garfagnini

Abstract: This paper introduces the Naive Frequentist model of belief updating, in which a decision maker updates their beliefs by taking simple averages of the numeric values in their most recent pieces of information, and tests the predictions of the model with an experiment. The model provides a parameter free prediction of posterior beliefs in a wide range of updating problems, does not require knowledge of the decision maker's prior or their perception of the

accuracy of information, and in many situations predicts large updates that are in the opposite direction of the change predicted by Bayes' rule. Our experiment features pieces of repeated, redundant, and inaccurate information, that should all be ignored by a Bayesian, and yet our model predicts should change beliefs in a specific way. Even though our setting is a simple one where Bayesian updating is normally as easy as averaging two integers, we observe large and systematic deviations from the predictions of the Bayesian model that are roughly in line with the predictions of the Naive Frequentist model, and predict simple contexts in another dataset on more standard "ball and urn" updating where a large majority of subjects update in the wrong direction.

Submitted talks 2

Low-carbon transition expectations and policy uncertainty: an experimental approach

Maria Alejandra Erazo (University of Bologna) with Emanuele Campiglio, Francesco Lamperti, and Roberta Terranova

Abstract: This study investigates the effects of climate policy uncertainty and political polarisation on expectations concerning the transition to a low-carbon economy. In a Learning to Forecast Experiment, subjects forecast carbon taxes over various planning horizons. The incentivised forecasts are then fed into a dynamic macroeconomic model that provides an estimate for investment decisions and generates carbon tax realisations for each period. We implement experimental treatments that vary the magnitude of shocks to the government's commitment to climate mitigation action. Our findings reveal that larger shocks to government's commitment lead to overreactions in expectations, significantly affecting the trajectory of the low-carbon transition.

The Power to Conserve: Using Identity Primes to Promote Resource Conservation in Qatar

Anomitro Chatterjee (London School of Economics) with Omar Al-Ubaydli, Alecia Cassidy, Ahmed Khalifa, Michael Price

Abstract: There is a large literature exploring how social identity influences economic behavior. We present evidence from a natural field experiment and supplemental survey to examine the impact of identity-priming messages on electricity use in Qatar, where residential customers have amongst the highest energy use per-capita in the world. We employ two treatments - a religious message quoting the Qur'an, and a national message reminding households that Qatar prioritizes energy conservation. We find intent-to-treat effects of 3.2% and local average treatment effects of 3.8% on monthly electricity use. However, this masks significant heterogeneity across different types of customers. Using machine learning methods on a subset of customers for whom we have survey data, we show how factors such as (i) agency and beliefs about the ease or effectiveness of various actions, (ii) motivation and perceptions of responsibility for climate change, and (iii) religion and characteristic of the home serve to moderate response to our identity primes.

Zero-sum views and preferences for addressing global inequality

Diego Marino-Fages (Durham University) with Anca Balietti

Abstract: Why do some individuals strongly favour redistributive policies while others oppose them, even when facing similar economic conditions? Why would citizens vote against redistributive policies, even when they benefit them? One explanation lies in differing perceptions of the economy. Zero-sum views- the idea that wealth is a fixed pie that can only be reallocated

(but not increased)- may heighten resistance to policies perceived as taking from one group to benefit another. From the Brexit referendum to debates over wealth taxes, zero-sum views shape how individuals perceive winners and losers in economic systems. Previous papers have shown how historical events (Chinoy et al, 2022) and inequality (Davidai, 2023) have shaped the zero-sum views of the United States but less is known about the case of the United Kingdom. In this project, we study how zero-sum views affect preferences for redistribution in the UK. For this, we run an online experiment with a representative sample of the UK (N=2000), in which we exogenously manipulate the zero-sum views using a priming technique. The priming consists of asking participants to reflect and describe a personal experience in which there was an element of a zero-sum game or one in which this element was not present. Our treatment induces an increase in zero-sum views by 0.26 standard deviations in the treated group and we find that this group is 6.11 percentage points less likely to donate to charities fighting world inequality. These results are in contrast to the findings in Chinoy et al (2022), who finds (for the US) that zero-sum terms correlate with more support of policies that redistribute income from the rich to the poor.

Attribution of responsibility for corrupt decisions

Alex Possajennikov (University of Nottingham) with Maria Montero, Yuliet Verbel

Abstract: This paper studies responsibility attribution for outcomes of collusive bribery. In an experiment, participants labeled as either citizens or public officials can propose a bribery transaction to another participant (labeled as either public official or citizen, respectively), who decides whether to accept the proposal. We then let either the victims of the corrupt transaction or the bystanders of it judge the individual decisions of proposing and accepting. We interpret these judgments as a measure of responsibility attribution. We find that labels (citizen or public official) have a stronger effect than roles (proposer or responder): public officials are consistently regarded as more responsible for corruption than citizens, while those accepting a bribe are regarded as only somewhat more responsible than those proposing it. Further, we find that victims judge corruption decisions more severely than bystanders, although bystanders' judgments are also consistently negative. In treatments with a neutral context, we find that judgments are less harsh than in the corruption context, bystanders' judgments are much less harsh than those of victims, and responders are judged more severely than proposers. Our results suggest that people judge corrupt actors in context, more harshly when they are labeled as law enforcers (i.e., public officials), and that unaffected parties (i.e., bystanders) react nearly as negatively to corruption as those directly affected by it (i.e., victims).

Submitted talks 3

Difficult Merits

Flóra Drucker (Düsseldorf Institute for Competition Economics)

Abstract: Empirical and experimental evidence supports that people, on average, find performance-based income inequality fair and inequality due to pure luck unfair. In reality, performance can also depend on factors that are, like pure luck, not necessarily under one's control. I study in an experiment how transparent inequalities in two such factors - difficulty of the task and ability in the task - affect redistributive decisions. In the experiment, participants perform a simple task and then decide how to redistribute the income earned for their performance. I find that participants compensate those with more difficult tasks but do not compensate the ones with lower ability. On the other hand, participants deciding about their own payoffs treat inequality in both factors in a self-serving way. A structural estimation of the shares of heterogeneous fairness views reveals that more than a quarter of participants consider unequal difficulties in their decisions, none of them unequal ability; more than half still leave performance-based inequality unchanged, and the rest always equalize the incomes.

Redistribution Over Gains and Losses: Social Preferences and Moral Rules

Ernesto Gavassa-Perez (University of Navarra) with Michalis Drouvelis

Abstract: We investigate redistributive behavior over gains and losses. Using two pre-registered experiments, we document a systematic asymmetry in behavior: people are more selfish when redistributing over losses than over equivalent gains. We use structural estimation methods and out-of-sample predictions to understand the drivers of choices made by experimental subjects, and identify that a mix of social preferences coupled with loss aversion (inequality aversion, social efficiency, and maximin) alongside moral rules (blame avoidance and praise seeking) are key to understand the individual heterogeneity of redistributive behavior.

Selection Pressure in Repeated Contests

Stephan Jagau (University of Nottingham) with John Duffy, Ethan Holdahl, Francisco Klapp

Abstract: Competition for scarce resources in the face of birth and death (the struggle for survival) has shaped social and economic interaction since the beginnings of mankind. This research is the first to induce selection pressure in controlled strategic decision-making experiments using performance-based replacement of participants over time. Strategic decision-making with and without selection pressure is considered in repeated Tullock-type rent seeking contests. Tullock contests' incentive structure drives a wedge between profit maximization and survival. Moreover, there is a large number of past experiments without selection pressure demonstrating a willingness to compete that cannot be justified by profit maximization alone and thus seemingly supports evolutionary game-theoretic predictions. Surprisingly, we find that the intensity of competition in repeated contests does in fact decrease once selection pressure is added. Participants' behavior under selection pressure is well-approximated by the finite population evolutionarily stable strategy (ESS) of the stage game. This happens because a significant share of contestants quickly adapt to survive under selection pressure at the expense of new entrants. By contrast, when selection pressure is absent, we observe a large variance in competitiveness and frequent competition far beyond profit-maximizing levels. Selection pressure has a disciplining effect on contestants' decision-making, boosting not only the lifespans of successful contestants but also average round payoffs across the entire population.

Impact or Responsibility? Giving Behavior in a Televised Natural Experiment

Dennie van Dolder (University of Essex) with Inka Eberhardt Hiabu, Paul Smeets, Martijn J. van den Assem

Abstract: We examine the influence of impact and responsibility considerations on giving behavior. Our data are from a television show where an audience of one hundred people divides ten thousand euros among three financially distressed candidates, and from independent raters who evaluated various attributes of the candidates and their financial predicaments. In contrast to the picture emerging from the literature, we find that the well-being benefit of a donation ("impact") outweighs the degree to which the candidate had control over the cause of their situation ("responsibility"). Giving increases more with impact than it decreases with responsibility, and the contribution of impact to the fit of our regression models is approximately two-and-a-half times that of responsibility. Additionally, our analysis shows no evidence of discrimination on age, gender, or physical attractiveness.

Submitted talks 4

Effort Motivation and Performance Amid Stress and Failures

Martina Vecchi (University of Southampton) with Nicolai Vitt

Abstract: Motivation to exert effort and performance in effortful tasks are fundamental determinants of success in various spheres, from financial management to academic and professional achievements. This study investigates the distinct and combined effects of acute stress and failure on effort motivation and effort performance using a behavioural laboratory experiment. In a 2x2 two-session design participants are randomly assigned to a stress task in either the first or second session, and to a failure or success feedback condition in the second session. We assess participants' motivation and performance in a real-effort task, as well as their motivation in a cognitive task similar to the one inducing stress for which feedback is provided. We introduce a novel method to elicit effort motivation separate from performance. We quantify effort motivation by asking participants the minimum payment required to abstain from completing the real-effort and cognitive tasks, which are compensated on a piece-rate basis. Results reveal a significant decrease in motivation to engage in real-effort tasks and subsequent effort exertion in a real-effort slider task following instances of failure. Conversely, acute stress does not exhibit a significant impact on effort-related choices.

Setting optimal test thresholds: A consumer-choice model and an experimental test

Morgan Beeson (Newcastle University) with Jytte Seested Nielsen, Peter McMeekin, John Wildman

Accurate detection of disease leads to earlier treatment with better patient outcomes. However, diagnostic tests have less than perfect sensitivity and specificity leading to false positive and negative test results. Tests that generate a test indicator on a continuous scale require a threshold indicator level to separate individuals into 'positive' and 'negative' test result categories. The chosen threshold determines sensitivity and specificity. Changes to the threshold increase sensitivity at the expense of specificity or vice versa. Plotting the possible sensitivity-specificity combinations produces the receiver-operator curve (ROC) which acts like a concave production possibility frontier for a given test. To find the optimal threshold based on individuals' preferences, empirical evidence on how individuals trade-off sensitivity and specificity is needed. Finding optimal diagnostic thresholds could increase the uptake of screening and diagnostic testing and guide the development of future tests. While previous literature has studied the trade-off between sensitivity and specificity in stated preference settings, this paper presents a novel experimental approach to setting optional diagnostic thresholds in an incentivised setting. We designed a laboratory decision-making experiment to mirror the diagnostic test. Subjects are endowed with £10 but face a loss determined by randomly drawing from an urn containing 100 balls that are a mix of orange (healthy/low loss) and purple (sick/high loss) balls. Each ball is wrapped in either an orange (negative test result) or a purple (positive test result) wrapper. The colour combination of ball and wrapper represents the four test outcomes: true negative, true positive, false negative and false positive which vary in loss amount. Subjects choose how many balls to wrap in purple from a set of options along a ROC ranging from 0% to 100% sensitivity but with decreasing specificity. We find, according to our model predictions, that subjects will have a higher Marginal Rate of Substitution (MRS) of specificity for sensitivity following increased prevalence, increased benefit of a true positive, decreased cost of a false positive, and for subjects who act risk aversely in the Crosetto & Filippin (2013) bomb-task or self-report higher risk aversion. The average MRS increases as the ROC improves through an outward shift which is not predicted by our expected utility model.

Digital bodyguards and female autonomy: A field experiment on the role of personal safety on mobility and empowerment

Sheheryar Banuri (University of East Anglia) with Zehra Aftab, Fareena Malhi

Abstract: This research paper examines the impact of providing information on a digital app (Women Safety App) on female mobility and autonomy, using a field experiment in a developing country with high levels of gender-based violence (Lahore, Pakistan). The app was designed by the Punjab Safe City Authority in a bid to improve safety. We ask whether providing information about the app improves female mobility (trips taken outside the home) on both the extensive and intensive margins. The intervention includes a comprehensive training and awareness session, followed by the download and registration of the app on participants' smartphones. Furthermore, we track participants' mobility in two ways: using google location data from their phones, and using monthly travel diaries to explore their modes, motives, and travel companions. We find no evidence of increases in the number of trips, or the distance travelled per trip by participants in the study period. However, we find large and significant increases in the duration of each trip. Further analysis shows that our participants change their patterns of travel: information about the app increases the number of walked trips by 14 percentage points. Most strikingly, however, we report a 9-percentage point increase in the number of unaccompanied trips overall, consistent with increased autonomy of our participants. Further results show that these increases in autonomy and mobility are concentrated among households that report trust in the serving institution (i.e. the police), and among households with female agency at baseline.

