Book of abstracts

SABE / IAREP
CONFERENCE
2018

Middlesex University, London
JULY, 19TH - 22ND
“I am extremely glad to celebrate this amazing conference at Middlesex University London and very pleased to welcome to all of you. Not only as President of SABE but also as former faculty of Middlesex University its an honour to host Elke Weber (Princeton), Colin Camerer (CalTech), Joe Herbert (Cambridge), Dave Rand (MIT), Peter Wakker (Erasmus) plus about 300 papers from researchers from international institutions – among them experimentalists, theorists and policy makers.

I want to thank to all the people who made it possible: Praveen Kujal, Ericka Rascon, Fili ppos Exadaktylos and Valerio Capraro (Department of Economics), Anna Kyprianou (Pro Vice-Chancellor and Executive Dean), Nicola Skinner (Events Coordinator, RKTO), Erik Hözl (IAREP). Thanks also go to Alvaro Saco and Cecilia B. Garcia from El Alambre who designed and maintained the web”.

Pablo Brañas
President of SABE

“In my role as IAREP president, I am pleased to welcome all of you to this year’s conference! Pablo Brañas Garza and his team have put together an outstanding program with excellent keynotes, a large variety of presentation topics and a charming social program. We look forward to exciting insights from current research in behavioral economics and economic psychology”.

Erik Hözl
President of IAREP
“Oh, East is East, and West is West, and never the twain shall meet”.

Rudyard Kipling, in his *Barrack-room ballads*, 1892.

The twain did meet.

We at Middlesex University are extremely excited to host the SABE-IAREP (multidisciplinary) conference which is probably the biggest gathering in the world for Economists and Psychologists. It is our pleasure to have esteemed guest speakers, all path breaking researchers in their own right, working on wide ranging topics such as the role of hormones on financial decision making (Joe Herbert, Cambridge), who is susceptible to fake news (David Rand, MIT), choice architecture (Elke Weber, Princeton), salience in game theory and economics (Colin Camerer, Caltech) to measuring ambiguity for all events (Peter Wakker, Erasmus). Besides these wonderful speakers we have over 300 researchers presenting cutting edge on research on wide ranging topics such as social dilemmas, political economy, cyber security, food, ethics, happiness, behavioural health economics to behavioural finance. This conference is a testament to the convergence of disciplines and the broadening of social sciences to areas earlier unimagined. To the importance of research being topic oriented where researchers from different areas, methodologies and disciplines, and decision makers assemble to understand the nature of the human being. Thanks to all for providing us with this wonderful opportunity.

Praveen Kujal
*HOD Economics Department*
Abstracts
Salience in game theory and economics

Colin F. Camerer
CalTech

ABSTRACT

Behavioral economics and decision theory are beginning to understand how scarce attention is allocated. Of course, there is also a huge literature in psychology and neuroscience about attention. This talk describes visual salience—what people first look at—as a model system to understand attention. The center of my talk is about using computational salience models, carefully constructed and calibrated on actual human vision, to predict focality in games of coordination and hide-and-seek.
Fake news: Who falls for it and what to do about it

Dave Rand  
MIT

ABSTRACT

Why do people believe blatantly inaccurate news headlines (“fake news”)? In this talk, I explore this question through the lens of cognitive science. The dominant narrative in the press and among academics is that we believe fake news because we want to – that is, we use our reasoning abilities to engage in motivated reasoning, convincing ourselves of the truth of statements that align with our political ideology. In a series of studies, however, my colleague Gord Pennycook and I challenge this account. We consistently find that subjects are better at identifying truth among headlines that align with their ideology; and that performance on the Cognitive Reflection Test (a measure of analytic thinking) is positively correlated with the ability to tell truth from falsity or bias (media truth discernment) - even for headlines that align with individuals’ political ideology (https://ssrn.com/abstract=3165567). These findings suggest that susceptibility to misinformation is driven more by laziness and lack of thinking than it is by partisan bias or motivated reasoning. We then build on this observation to develop an intervention to fight the spread of misinformation, which we test in a series of experiments: inducing people to think about the accuracy of headlines before they decide whether to share them. Our results suggest that people do have the ability to tell fake from real if they pay attention, and suggest a simple, cost-effective intervention to fight the spread of misinformation.
Choice architecture for sustainability: giving the future a chance

Elke Weber
Princeton

ABSTRACT
Humans tend to focus their attention on the here and now. But many social problems require decisions that entail short-term costs for long-term and often collective benefits. Climate change is perhaps the quintessential example: individuals and societies must weigh up the immediate costs of business-as-usual GHG emission levels against the delayed, risky, and often disputed future benefits of climate mitigation efforts. Unfortunately, both economic and psychological theories predict that decision-makers will give short shrift to the long-term benefits of GHG mitigation efforts. I will present theory and data for three interventions that focus people’s attention on the future consequences of their actions and thus can help to enable choices that better balance short-term and long-term goals and objectives. (1) In tradeoffs between immediate and delayed consumption, decision-makers are more likely to choose options with future benefits if they are made the default. Query theory predicts that decision-makers are also more likely to make such choices when prompted to first consider arguments in their favour. (2) Individual and country-level data show that citizens may use perceptions of the length of their country’s history to predict its future longevity, with longer pasts predicting longer futures – and thereby justifying greater investments into sustainability. In other words, framing a country as a long-standing entity can promote pro-environmental behaviour. (3) Finally, individuals’ motivation to leave a positive legacy can be leveraged to increase engagement with climate change and other environmental problems.
The covert influence of hormones on financial decision making

Joe Herbert  
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ABSTRACT

The realisation that ‘rational man’ was an inadequate model for understanding the basis for financial decision making presents us with a conundrum. What, then, is a more complete explanation? Decisions are biased by many preceding or current psychological processes such as framing, experience, loss aversion and optimism, defined by Kahneman as ‘fast’ (emotion-based) and ‘slow’ (cognitive-based) thinking. But this leaves unanswered the question: what is the neural basis for these processes? And how does this vary individually and according to the context and nature of the decisions themselves? This paper suggests that testosterone and cortisol are major influences. There are many categories and circumstances of financial decisions, but attempts to advance general principles covering them all have proved problematic. This argument is, for the moment, restricted to acute decisions made under duress, such as financial trading. Many of the features of such decisions resemble those taken in other contexts, such as conflict or combat. Furthermore, males have been responsible for the construction of the financial world, and are still the main players in it. The influence that both testosterone and cortisol have on these decisions derives from their more general biological roles in reproduction and the response to stress or demand respectively. The levels of both hormones fluctuate both individually and according to environmental events, and both have major effects on risk appetite, reward value and competitive attitudes. Yet the actions of either are not apparent to those concerned, and so are covert. Both act on areas of the brain implicated in emotional responses, and influence both ‘fast’ and ‘slow’ appraisal and decision-making processes. Whether or not the same processes operate in females, as they begin to take an increasing role in finance, is still to be studied. Those concerned with financial decisions would do well to take more interest in how physiological and genetic factors, and the interaction between them, affect individual performance and thus the markets.
Measuring ambiguity attitudes for all (natural) events

Peter Wakker
Erasmus

ABSTRACT
Uncertainties usually don’t come with objective statistical probabilities, and subjective probabilities usually don’t work either (Ellsberg 1961). Gilboa & Schmeidler’s breakthrough brought fundamentally new models, opening up the field of ambiguity, sorely needed in behavioral disciplines. Ambiguity attitudes have so far been measured almost exclusively for artificial events (Ellsberg urns and experimenter-specified probability intervals) because researchers did not know how to control for unknown beliefs otherwise. Ellsberg (2011) and many others emphasized the importance of extending to natural events as in applications and everyday life. By showing how to control for beliefs even if unknown, we provide this extension. Ambiguity attitudes can now be measured for natural events, greatly enhancing external validity. We introduce indexes of ambiguity aversion and ambiguity perception (or sensitivity) for natural events that are easy to measure in experiments, taking only a few minutes. Thus, they can easily be used as an add-on in regressions. We prove that our indexes generalize and unify many indexes proposed before under various ambiguity theories, including multiple priors and prospect theory. Our indexes generalize their predecessors by: (a) being directly observable; (b) not requiring expected utility for risk; (c) being valid for a large number of ambiguity theories; (d) requiring no assessment of subjective likelihoods and, hence, which is our main novelty, (e) being applicable to natural ambiguities.
Because time pressure has recently been introduced in experimental economics to control cognitive factors – following decades of use in psychology – we apply our indexes to examine the role of ambiguity attitudes on behavior under time pressure in an experiment. We find plausible results, supporting validity. For natural events, the cognitive perception/sensitivity of ambiguity is more important, and the motivational aversion is less pronounced, than for artificial Ellsberg events.
An investigation of time preferences, life expectancy and annuity versus lump-sum choices: Can smoking harm long-term saving decisions?

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ABSTRACT

We used proprietary data from an Israeli insurance corporation and exploited the fact that Israeli pension insurance policies do not take health conditions or smoking status into account in annuity pricing to investigate the potential effect of being a smoker on long-term savings disbursement choices at retirement. We found that contrary to the theory suggesting that smokers have higher discount rates (and thus should prefer the lump-sum option), and even though the pension insurance policy-pricing mechanism means that (all else being equal) smokers would be offered the same annuity as nonsmokers, smokers did not prefer the lump-sum option. In a survey of life expectancy perceptions, we found support for the conjecture that smokers experience a certain degree of self-illusion regarding their own life expectancy and do not perceive themselves as having a shorter-than-average life-span.
The relative input of perceived risk and gain in risk acceptance

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**ABSTRACT**

The relative input of perceived risk and gain in risk acceptance was investigated. In particular, the two-step model of risk acceptance was tested: in the first step highly risky situations are rejected and all the remaining situations are accepted or rejected on the basis of trade-off between perceived risk and benefit. This is related to psychological accuracy of single-criterion models of risky choice vs. models, in which choice is a compromise between conflicting criteria.

In the first approach, i.e. the expected value (EV) model, the fundamental assumption is that individuals integrate outcomes and probabilities in a compensatory way and choose the option with the highest weighted sum. Its mathematical formulation was modified frequently, e.g. in cumulative prospect theory (CPT-Tversky & Kahneman, 1992) payoffs and weights (nonlinearly transformed values and probabilities) compensate for each other and the products are summing. However, the main idea that expected or non-expected utility is the single criterion for choice remains unchanged.

The second approach is more diverse, but it does have a unifying feature - it acknowledges a conflict behind a risky choice. For example, assuming that higher return and lower risk were preferred, Markowitz (1959) proposed a dual-criterion model of a risky choice, in which the expected return is traded off against risk (variance).

On the basis of the second approach one may propose the following view of risk acceptance: Choice evokes a feeling of conflict between risk and potential gain defined by amount and probability of win. Since probability amounts to uncertainty, it is included in perceived risk. Thus, the following model of risk acceptance is proposed:

\[ f [\gamma_1(R), \gamma_2(\text{ag})] \]

(Equation 1) where \( R \) is perceived risk, \( \text{ag} \) is amount of gain and \( \gamma_1, \gamma_2 \) represent psychological functions of these two quantities.
These considerations raise a question: how do people resolve the conflict between risk and benefit? One possible answer is to assume trade-offs between risks and benefits. Then, the model takes the form:

\[-\gamma_1(R) + \gamma_2(ag)\] (Equation 2)

However, the observed unwillingness to make trade-offs indicates that, at least in some situations, a two-step model of risk acceptance may be more appropriate: (1) people exclude options with unacceptable risk level (Rcut) and (2) the remaining options are accepted or not by performing trade-offs between risk and the amount of gain. This leads to the following model:

\[H [Rcut - R] * f [\gamma_1(R) + \gamma_2(ag)],\] (3)

where \(H\) is the Heavyside function equal to 1 for positive arguments and 0 otherwise. This model has been verified in two experiments.

**Method:**

Task. In both experiments 253 participants (65% of women, Mage=25, std=6) evaluated risk and made a choice between getting $8 for sure and a lottery, where they can either lose $4 or win a higher amount (from $16 to $112) with different probabilities. This was repeated 9 times. At the end of the experiment one choice was drawn and participants received payoffs dependent on their answers.

Stimuli. In Experiment 1, the lowest amount of win ($16) was systematically increased by $12 for the other lotteries. Probabilities were assigned such, as EV and CPT of all lotteries were equal. Their certainty equivalents (CE) equaled $8 (the same as the sure thing). In Experiment 2, the lowest probability of loss 0.1 was increased systematically by 0.1 like in the set of lotteries proposed by Holt and Laury (2002). Amount of wins were assigned such as EV and CPT of all lotteries were equal and their CE equaled $8.

Additional measurements. In Experiment2, 127 participants judged perceived risk and benefits and declared willingness to engage in 30 risky activities with the aid of three subscales of DOSPERT questionnaire (Blais, Weber, 2006; E.U. Weber, Blais, Betz, 2002).

**Results:**

Risk rates and probability of loss. Since, the amount of loss was constant, the average risk rates for 18 lotteries (used in both experiments) were very well described as a linear function of the probability of loss \((R^2 = 0.95)\).

Risk rates and acceptance. In line with Equations 1-2, the acceptance rate was well described as a linear function of risk rates \((R^2 = 0.77)\) and as a logarithmic function of the amount of gain \((R^2 = 0.76)\). The actual acceptance rate was compared with the acceptance rate predicted from Equation 2 in the following form:

\[x_1-x_2(\text{Perceived Risk}) + x_3(\text{amount of gain})x_4\] (Equation 2')

where: \(x_1 = -0.21, x_2 = 0.12, x_3 = 1.26, x_4 = 0.05\).
Only for 3 of 18 lotteries the error was equal to 0.05 or more. These results support the idea that preferences follow both from risk rates and from possible benefits.

Risk rates and acceptance: individual data. To test the two-step model of risk acceptance given in Equation 3, individual data were analyzed in the following way: (1) for each participant, the risk rate was found that defined the level of perceived risk for which all lotteries below this level were accepted and above – were rejected (switching point); (2) the number of lotteries rejected below this point and accepted above this point (exceptions) was counted. It was found that for 45% of participants there were no exceptions. Therefore, for these participants acceptance was determined by their risk rates. For the others, however, perceived risk was not a single predictor of acceptance.

Since the probability of loss and amount of gain were correlated, one may not verify model described by Equation 3 on the basis of the made choices. Instead, the data from the three DOSPERT subscales were analyzed. The best model of risk acceptance that emerged from stepwise regression included both perceived risk and benefits ($R^2 = 0.41$). When this analysis was performed separately for participants who followed the lexicographic model of risk acceptance in their experimental choices and for the other respondents, it was found that: (1) in the first group, acceptance was best described by the model that included both perceived risk and benefit ($R^2 = 0.51$) and (2) in the second group, acceptance was best described by perceived benefits only ($R^2 = 0.61$).
Does (or does not) the smog influence our health? The effect of framing on perception of disagreement between experts

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ABSTRACT

Expert agreement has large influence on lay people’s beliefs. However, it has rarely been investigated what makes people perceive expert statements as being in disagreement. Here, we show that different ways of communicating numerical probabilities may lead to more or less perceived disagreement between expert statements, both stemming from different experts and from one expert at two points in time. First, we found that people perceived probability estimates framed to focus on different outcomes (45% probability that the smog will influence citizens’ health negatively vs. 45% probability that the smog will not influence citizens’ health negatively) to be more in disagreement than the same absolute probabilities expressed in the same frame (45% vs. 55% probability that the smog will influence citizens’ health negatively). Second, the frame of statement influenced the trust in research on smog (but only when statements were presented as given by two different experts). Moreover, when two statements were framed in the same way (both experts agree that smog will be harmful) lay people perceived risk as higher than when the same objective probabilities were differently framed (but only when statements were presented as given by two different experts).
Does mental number line training work? A randomized control trial with active control condition investigating the effects of cognitive training on real life arithmetic, numeracy and decision making

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ABSTRACT

We developed and validated the evidence-based intervention aiming at enhancing numeracy (the ability to understand and efficiently use the concept of probability and statistical information) and decision making. One hundred and twenty two participants were randomly assigned to Mental Number Line Training condition (MNLT) or Arithmetic Training Active Control condition (ATAC). They performed nine training sessions (20-30 minutes each) with increasing difficulty. The response mode (slider anchored within current response range vs. numerical keyboard) was the only difference between experimental conditions. After MNLT participants developed a more precise mapping of numbers onto the mental line. Moreover, this effect transferred into ability to quickly estimate the sum of numerical quantities (measured by precision in which participants estimated a total price of everyday products). Finally, we found an increase in subjective assessment of numerical abilities as well as normatively better financial decisions and valuation of risky prospects after both MNLT and ATAC.
Effects of environmental labels differ in time-limited decision-making

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ABSTRACT

Some products warrant high levels of consumer involvement because they are infrequent, expensive purchases—for example, cars, homes, and appliances—. Others, such as groceries, are purchased frequently, and alongside many other products. Consumers may nonetheless engage with these products, for example if they are seeking a reduced price, a healthier option, or an environmentally-friendly product. Labelling allows consumers to identify products satisfying these criteria, and, depending on label design, may capture consumer attention even if they are not deliberately seeking the information. However, if consumers are making multiple purchase decisions—for example, while completing a shopping list— their motivation or ability to process label information may be diminished.

Currently, environmental information on products takes diverse formats such as seals, colour-coded scales, or specific verbal information. It is often presented with an emphasis on positive attributes, such as recyclability or energy efficiency, but existing research suggests that labels with an emphasis on negatively valenced information may be more effective in changing consumer behaviour, particularly for consumers without strong environmental motivations.
Collaborative hierarchy maintains cooperation in asymmetric games

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ABSTRACT

The interplay of social structure and cooperative behavior is under much scrutiny lately as behavior in social contexts becomes increasingly relevant for everyday life. Earlier experimental work showed that the existence of a social hierarchy, earned through competition, was detrimental for the evolution of cooperative behaviors. Here, we study the case in which individuals are ranked in a hierarchical structure based on their performance in a collective effort by having them play a Public Goods Game. In the first treatment, participants are ranked according to group earnings while, in the second treatment, their rankings are based on individual earnings. Subsequently, participants play asymmetric Prisoner’s Dilemma games where higher-ranked players gain more than lower ones. Our experiments show that there are no detrimental effects of the hierarchy formed based on group performance, yet when ranking is assigned individually we observe a decrease in cooperation. Our results show that different levels of cooperation arise from the fact that subjects are interpreting rankings as a reputation which carries information about which subjects were cooperators in the previous phase. Our results demonstrate that noting the manner in which a hierarchy is established is essential for understanding its effects on cooperation.
Relative impact of amount and probability of loss on risk perception for multi-outcome investments

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ABSTRACT

The first aim of the study was to investigate the relative input of amount and probability of loss into risk perception, and the way in which these two components are combined, using two and three-outcome risky investments. Two different ways of combining information: multiplicativ and dimensional (additive) in risk judgment were tested. The difference in amounts of two losses (for three-outcome investments) was considered to impact the way, in which information is processed. The second aim was to check whether perceived risk is a criterion of choice, i.e. whether one may predict acceptance from risk rates.
The trauma hypothesis: Does personality change after negative life events?

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**ABSTRACT**

We shed light on the stability of personality issue by investigating the role of individual experiences of extremely adverse life events. By means of regression and structural equation analysis based on large-scale longitudinal survey data from the four 2006-2012 waves of the US Health and Retirement Study, we provide insight into the causal link between the occurrence of traumatic events out of individuals' control and their personality. In particular, we detect i) a reduction of Agreeableness after a child death; ii) an increase of Openness to Experience, Conscientiousness and Agreeableness after an illness of the respondent and iii) no effect on either Extraversion or Neuroticism. Our findings corroborate the idea that, even though one's personality is relatively stable, it is not set in stone, as very negative events can significantly alter one's personality traits through the life span.
Cheating in academia: The relevance of social factors

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ABSTRACT
We implemented an online anonymous survey targeted to current and former university students, where the interviewed are asked to indicate whether and to what extent they cheated during written exams. We want to learn if cheating is widespread, and if it correlates with social factors such as the beliefs about the peers’ dishonesty, the level of trust in others and the perceived level of opportunism in the society. We find that dishonest behavior in written exams is widespread: 61% of respondents have cheated once or more. Cheaters are more likely to report that their classmates and friends cheated, and that in general people can be trusted. In contrast, being aware of the sanction, earning top grades and thinking that people are willing to take advantage of others is negatively correlated with self-reported cheating. There is evidence of two different cheating styles: “social cheaters”, who self-report mostly that they have violated the rules interacting with others; “individualistic” cheaters, who self-report mostly that they have used prohibited materials. Only social cheaters seem affected by social factors: they exhibit higher levels of trust and lower levels of perceived opportunism compared to individualistic cheaters, while no difference between the two groups is found when looking at other dimensions.
Inducing tax compliance by nudging: Evidence from big Italian data

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**ABSTRACT**

Traditional economic theories view the threat to enforce the tax law as the main method to ensure tax compliance. In this perspective, deterrence of tax evasion can be obtained by increasing expected penalties and/or the probability of an audit, with the aim to increase the expected cost of evasion. The violations of the tax morale or of the social norm shared within a given social group may also be interpreted within this framework. However, revenue agencies are now adopting what could be defined as the nudging approach to deterrence. The idea is to inform the taxpayer that the Revenue Agency has obtained some information on her compliance and to gently push her to comply. The essential difference between deterrence-by-threat and deterrence-by-nudging is that in the latter case there is no immediate sanction, neither legal nor moral, associated to the choice by the taxpayer not to comply. In this paper we use a big dataset, comprising more than 600,000 self-employed and sole proprietorships observed for 5 tax years, between 2007 and 2011, to predict the taxpayer’s behaviour when deterrence-by-nudging is exerted.
Dynamic information-processing styles in the presence of abundant information: An experimental analysis

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ABSTRACT

Information processing is an important topic in theoretical and experimental economics. One of the questions that has not received much attention in the literature so far is how in the presence of abundance of information, people decide on which parts of the information to focus. To explore this issue, we developed a platform with an economy that involves twenty economic agents who interact by buying and selling five different goods. Each good had its own price. We conducted twenty experimental sessions. Each session involved ten to twenty subjects playing ten periods of the game. The subjects received full information about all previous periods, including prices, endowments of the goods and of money of all subjects, and all decisions made by themselves and other subjects in the previous rounds. The subjects made decisions about buying and selling the different goods in each of the ten periods. These decisions determined the supply and demand functions and the equilibrium prices in each period. Before session, the subjects were asked to write how they expect to make their decisions, what information they will considering, etc. After session, the subjects were asked to write how they made their decisions, what information they were considering, etc. We analyzed their responses to see what parts of the information they were focusing on, looking for example at which variables they focused on, how many previous periods they considered, etc. Besides, we analyzed their responses before and after the totality of actions in experiments. We observe heterogeneity in subjects’ information-processing styles and identify seven main types of information-processing styles. Some subjects were considering mostly the previous prices, others were focusing on the buying and selling decisions made by other subjects in previous rounds, etc. We identified the corrections in informational-processing types in process of decision making. Some subjects planned to focus on price information prior to the beginning of the experiment and, following the results of the actions, noted the main role of information on the budget in decision-making. Another group of subjects assumed to be guided by the actions of other agents, and on the basis of the results of the experiment noted that she acted on the basis of an analysis of her own results alone, etc.
**Inter-temporal choice in depressed individuals: An interdisciplinary approach**

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**ABSTRACT**

This study examines the differences in inter-temporal choice between patients diagnosed with depressive disorder and healthy subjects. Depression is related to biases in the decision-making process, impulsive behaviour, suicidal tendencies and lower receptivity to rewards (Takahashi, T., 2008; Leykin et al, 2011). The main objective of this study is gaining insight upon the differences in the decision making process between depressed individuals and healthy subjects. The hypothesis states that inpatients diagnosed with major depressive disorder are more impulsive concerning inter-temporal choices than healthy control subjects. However results show that there is no significant difference between the experimental group and the control group regarding their level of impulsivity.
Using behavioral insights to incentivize cycling: results from a field experiment

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ABSTRACT

This paper assesses the impact of different incentive schemes to motivate for active transport in urban areas. We employ innovative approaches drawn from the behavioral economics literature and behavioral change. Tax exemptions is a suitable measure to stimulate people to engage in active transport, and it has been applied in a number of European countries with reasonable success. The Norwegian socialist left party (SV) has suggested in 2015 to implement a measure for cyclist and pedestrians, where commuters could be able to deduct one Norwegian krone (about 9p) per kilometer cyclicled from their taxes. The suggestion is appealing for its simplicity, but can be quite costly. We believe behavioral economics can give us the right tool to approach this problem. From Kahneman and Tversky’s seminal paper on prospect theory, we learn that people tend to overweight small probabilities and that they are attracted to lotteries with low probabilities and high rewards. Hence, we hypothesize that a well-designed lottery could attract more people to cycling than a small incentive to all. Instead of giving tax deductions to all cyclists and pedestrians we could institute a lottery to get the same or even a stronger effect. Another advantage of the lottery is that it would be a much cheaper measure than tax deduction.

We test this hypothesis through a Randomized Controlled Trial (RCT) in the field, where we test the impact of different monetary incentives on cycling activity. In particular, we compare the effect of a riskless and flat rate incentive for all, with the possibility for few to win a large sum of money through a lottery. All treatments are compared to a control group who is only using the app without further incentive. Participants’ trips are monitored through a mobile app, which allows to quantify cycling activity during, before and after the experimental period. Our results show that the trend follows our hypothesis and that significant effects are found in some of the treatments. Generally, participants declared to have had a positive experience during the experiment and that they have tried to cycle more.
How success breeds success

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**ABSTRACT**

We investigate why a string of successes often seems triggered by an initial success. Using random variations in success in an experiment, we show that an early success has a positive effect on later performances. By alternatively eliminating strategic features of the game, we turn on and off the two competing explanations for this effect: strategic effect (rational behaviour) and psychological effect (behavioural explanation). We find no evidence that strategic thinking can explain the positive effect of winning. Increased performance seems instead driven by improved self-confidence after experiencing a success.
Cheating in the lab vs. cheating in the field

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**ABSTRACT**

This paper investigates to what extent a laboratory measure of cheating generalizes to the field. To this purpose, a laboratory experiment that employs a new mind game is conducted. In contrast with the existing literature, it allows for individual level observations of cheating. Behaviour in this laboratory task is then compared to cheating in the field. At the end of the experiment subjects are not paid immediately. Instead, after few days they have to self-report their experimental earnings, which are their private information, and are paid accordingly. Subjects can cheat in the field by claiming a different amount of money than their actual earnings. Despite the design ensures anonymity and minimizes any concern of being caught lying, no significant correlation is found. While 53% of subjects do cheat to some extent in the mind game, this fraction drops to less than 5% in the field.
Why labor supply is a substitute for saving and whether this explains precautionary behavior

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**ABSTRACT**

We uncover a novel behavioral strategy that makes intertemporal substitution possible even if saving is not possible: Starting from the standard model of intertemporal substitution in consumption and labor supply (e.g. Low 2005 or Flodén 2006), we relax the strong assumption that wage changes coincide with the periodicity of labor supply. In our extended model, if wage risk is time-varying and work-time allocation is endogenous, subjects may allocate time differentially to work-shifts as a form of intertemporal substitution. In order to test our model, we conduct laboratory experiments. In four treatments, subjects can either save, allocate time, engage in both, or do neither. The results show that subjects engage in both precautionary saving and precautionary labor supply, as predicted. Subjects also regard these behavioral strategies as substitutes, though substitution is not perfect. Why labor supply is a substitute for saving and whether this explains precautionary behavior
Overcoming time inconsistency with a matched bet-theory and evidence from exercising

Andrej Woerner
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ABSTRACT

This paper introduces the matched bet mechanism. Via theory and a field experiment on exercising, I show that the matched bet is a simple, cheap and effective incentive scheme to help people overcome their time inconsistency issues. The matched bet satisfies strict budget-balancedness. In a theoretical model I show that offering a matched bet helps both sophisticated and naive procrastinators reduce time inconsistent behavior. I conduct a field experiment to test the matched bet in a natural area of application: exercising. My experimental results confirm my theoretical predictions. Offering a matched bet has a significant positive effect on gym attendance. Self-reported procrastinators are significantly more likely to take up the matched bet. Overall, the matched bet proves a promising device to help people exercise more. I discuss how a matched bet could also be implemented in other areas such as studying, saving and smoking cessation.
Violence and the Formation of Hopelessness in Colombia

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**ABSTRACT**

We explore the impact of violence on beliefs about socioeconomic mobility. For this purpose, we bring together data on the severity of the household-level experience of violence, symptoms of psychological trauma, and subjective probabilities of future positions in a ladder of life for a sample of internally displaced persons in Colombia. After controlling for current socioeconomic circumstances and asset losses, we find that the experience of more severe violence dampens the beliefs about socioeconomic mobility. The estimated impacts are large: a one standard deviation increase in the number of violent events experienced by the household raises the perceived probability of extreme poverty in the following year by 54 percent relative to the mean. In the long run, the expected likelihood of extreme poverty is almost three times higher for victims at the 4th quartile of the distribution of the severity of violence than for victims at the 1st quartile. Additional evidence suggests that psychological trauma explains this result, identifying a channel by which these hopeless beliefs can become self-confirming. Together, the results point to the existence of a behavioral poverty trap and highlight the importance of rethinking the strategies to promote the socioeconomic recovery of victims of violence.
(Im)probable win. Relationships among individual differences in temperament, intolerance of uncertainty, gambler’s beliefs and gambling engagement.

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**ABSTRACT**

In this study we aimed to examine the relationship among individual differences in temperament, gambler’s beliefs and gambling engagement. The results of the psychological studies indicate that gambling is related to impulsivity and sensation seeking. Additionally the studies showed that regular players produce more irrational beliefs about the game. We assumed that personality features connected with impulsivity, reward sensivity, and sensivity to uncertainty are related to gambler’s beliefs. Furthermore, we aimed to examine if gambler’s beliefs and personality features predict gambling behaviours. The investigation was conducted on a popular fanpage among 353 gamblers aged 18 to 45 years old. All participants filled out Gambler Behaviour Questionnaire, created by us. To assess the relationships among impulsivity traits, intolerance of uncertainty and gambler’s beliefs, we used multiple linear regression. Impulsivity, reward sensitivity, goal-drive persistence and intolerance of uncertainty were set as predictors of gambler’s beliefs. This model significantly explained 15% gambler’s beliefs variance, with the strongest predictor of impulsivity. Our study sheds new light on the important topic of individual differences in gambling engagement. We demonstrated that gambler’s beliefs related to biases increasing subjective probability of winning was important predictor of gambling engagement even when controlled for temperamental traits and intolerance of uncertainty.
Emotional responses and a trustor perception when the trustor reveals some trust or no trust in the game framed as a trust game or an investment game

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ABSTRACT

The aim of the study was to examine differences in response to situations that differ very little from economic perspective - transferring nothing or very little (1/10 of the resources) but might be seen differently from social perspective. Participants (N = 166) read the description of the trust game. The description presented the game either as a trust game or an investment game. Depending on the group, Player 1 entrusted either nothing or 1/10 of his endowment. Next participants evaluated:

1) their feelings in the role of the trustee in that game
2) the Player 1 (his morality, sociability and competence)
3) their dissatisfaction from cooperating with Player 1 in the future
4) their preference of the Player 1 over another, unknown person for future task.

Sending nothing vs 1/10 of the endowment made a difference for the strength of negative affect, Player's 1 sociability and competence evaluations, independent of the game's frame. However, evaluations of anticipated dissatisfaction from cooperating with Player 1 and lesser preference for Player 1 in future task were observed only when the game was framed as trust game. Moreover, while there were no differences in responses depending on game's frame when Player 1 send 1/10 of his endowment, sending nothing in the game framed as trust game resulted in significantly higher anticipated dissatisfaction from cooperating with Player 1 and higher preference of unknown person (instead of Player 1) in future task, than sending nothing in the game framed as investment game.
Age stages in life cycle and investors

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ABSTRACT

The difficulty in determining the importance of age effect on individuals' risk behavior is mainly due to the type of data available. Most previous studies have used survey data where the questions used about individual's risk behavior are few and based on hypothetical decision making situations (e.g. financial lotteries). This study continue to examine the research questions about age stages and risk behavior that Dohmen et al. (2017) and de Ridder et al. (2018) explored in their papers - if age stages in the life cycle affect the risk behavior of investors. Registry data was used where multiple demographic factors and repeated measurement of the factors applied over a 10 year period were included. Preliminary results show that the age effect does not seem self-sufficient for the risk behavior of investors. Instead age combined with experience factors (e.g. first-time or more experienced investor) show more convincing results.
Exploiting uncertainty for the greater good

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ABSTRACT

Uncertainty about how our choices will affect others infuses social life. Past research suggests uncertainty has a negative effect on prosocial behaviour by enabling people to adopt self-serving narratives about their actions. We show that uncertainty does not always promote selfishness. We introduce a distinction between two types of uncertainty that have opposite effects on prosocial behaviour. Previous work focused on outcome uncertainty: uncertainty about whether or not a decision will lead to a particular outcome. But as soon as people’s decisions might have negative consequences for others, there is also impact uncertainty: uncertainty about how badly others’ well-being will be impacted by the negative outcome. Consistent with past research, we found decreased prosocial behaviour under outcome uncertainty. In contrast, prosocial behaviour was increased under impact uncertainty in incentivised economic decisions and hypothetical decisions about infectious disease threats. Perceptions of social norms paralleled the behavioural effects. The effect of impact uncertainty on prosocial behaviour did not depend on the individuation of others or the mere mention of harm, and was stronger when impact uncertainty was made more salient. Our findings offer insights into communicating uncertainty, especially in contexts where prosocial behaviour is paramount, such as responding to infectious disease threats.
Earning more tomorrow: Overconfident income expectations and consumer indebtedness

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**ABSTRACT**

This paper examines whether biased income expectations due to overconfidence lead to higher levels of debt-taking. In a lab experiment, we exogenously manipulate income expectations of participants by letting income depend on relative performance in hard and easy quiz tasks, thereby exploiting the so-called hard-easy gap. Before participants engage in the quiz task, they can purchase goods by borrowing against their future income. We successfully generate biased income expectations and are able to show that subjects with higher income expectations initially borrow more. Receiving feedback on their true income, overconfident participants scale back their consumption in following periods. However, at the end of the experiments they remain with higher debt levels.
The effect of information disclosure on credit choices: Experimental evidence

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ABSTRACT

For some groups, credit decisions are more common and have larger consequences than financial investment decisions. This is especially true for vulnerable people with low incomes. For these people choosing the best credit contract can have large and long term consequences. The wrong credit contract can lead repayments rates that are too high and may also cause people to fall into debt traps (Karlan et al., 2018).

Financial literacy has been linked to better financial decision making (Lusardi and Mitchell, 2014) and financial education programs have been shown to improve a number of different types of financial decisions (Kaiser and Menkhoff, 2017). However, financial literacy trainings tend to be more effective for financial decisions on the asset side and less effective for credit decisions.

This raises the question of how credit decisions that low income people have to take can be improved. An alternative way to improving financial literacy to achieve good credit decisions could be by making credit decision easier at the point when they are taken. It is possible that people are able to make better decisions when the information that they need is displayed in a format that is clearer and easier to understand.

In this paper we study how the display of information in different forms influence credit decision taken by individuals and whether found effects differ with regards to the level of financial literacy.

In order to do this, we conduct an experiment in rural Thailand. The experiment consists of three different treatment groups and one control group. In all groups respondents have to make a number of hypothetical credit decisions. Participants always have to choose the loan that they prefer out of two. The differences between the two loans is either a different interest rate, a different loans duration or both. The control group is only shown the interest rate and the duration of the loan and so receives the least information about the loan. The treatment groups are shown
the total cost of the loan, the annual interest rate or both. In addition to the experimental treatment we also measured financial literacy for all participants. The results show that giving people additional information about the two loans can help them make better credit decisions. However, not all types of information lead to better credit decisions. We find that showing the total cost of the loan, leads participants to choose the cheaper loan contract when the two loans had different loan durations. Interestingly, people with higher financial literacy chose the cheaper loan contract, but only when the interest rate is the only difference between the two loans. When the loan durations are different between loans or when both interest rates and loans durations change, people with higher financial literacy do not make better decisions. In this experiment we find that showing the annual interest rate has ambiguous effects when we alter both the interest rate and the interest rate. Being shown the annual interest rate has no effect when only the loan duration or the interest rate changes. We further test whether financial literacy and information disclosures act as complements and so include interaction terms into the regressions. These however are insignificant for all credit decisions, which indicates that there seems to be no heterogeneity in effect of information disclosure with regard to participant’s financial literacy levels.

To sum up these results indicate that displaying the total cost of a loan can lead to better decision making by individuals in a poor rural population with low levels of education when credit decisions are complex. However, for easier credit decisions, financial literacy is helpful in decision making. Interestingly, financial literacy and information disclosure do not seem to act as complements.
Born this way: fetal exposure to testosterone and conflict behavior

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**ABSTRACT**

It is documented that fetal exposure to sexual hormones has long lasting effects on human behavior. The second-to-fourth digit ratio is a putative marker for prenatal exposure to testosterone (compared to estrogens) while in uterus with higher relative exposure to testosterone resulting in a lower digit ratio (DR). Although the existing literature documents the correlation with DR and various decisions, little research has studied the same in competition or conflict. We investigate this question in the laboratory. Based on a previously obtained large sample of student subjects, we selectively invite subjects to the laboratory if their right-hand DR is in the top (High-type) or bottom (Low-type) tercile for their gender. Unbeknownst to the subjects, we perform a controlled match of High and Low-types as opponents in a 2-person Tullock contest. We find that Low-type males expend significantly higher conflict effort than their High-type counterparts, that is, they are more aggressive. However, they do not necessarily earn more than the High-type, but anybody while in conflict with a Low-type earns significantly less than while in conflict with a High-type. The results go mostly in the opposite direction for females: overall everyone is more aggressive against the High-type, and Low-types earn more than their High-type counterparts. These results can be partially explained through high joy of winning and/or spitefulness for Low-type males, and high spitefulness for Low-type females. This investigation sheds light on the importance of biological aspects in the ex-ante determinants of conflict, and on contest design.
**Social biking: Mobile app network interventions for increasing bike use**

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**ABSTRACT**

Network interventions can help achieve behavioural change by inducing peer-pressure in the network. The Social Biking project (S-b) wants to motivate European citizens to be more physically active and use more environmentally sustainable forms of transport. For the needs of S-b, we developed the BikePrints mobile tracking app to collect primary data related to biking and social networks and identify the most efficient social-based incentives for increasing the use of bicycles. The app allows bikers to form interactive groups and track their own and their friends’ rides in order to earn lottery tickets (LT) which increase their chance to win different prizes. After a one-week baseline period (stage1) in which LTs were earned based on individual performance (1km=1LT), bikers, were requested to form pairs (in stage 2) and groups (in stage 3) in order to collectively earn and share points with their partners for 4 consecutive weeks (2 weeks per stage). Every time two bikers were cycling from the same path they were gaining double (if not simultaneously) or triple (if side by side) LT. Social-based incentives increased significantly the use of bike by making people to cycle for more kilometres and expanded the bikers' social network by grouping people that they would never know each other. Network interventions may constitute a powerful tool for behavioural change.
A useful bias: the role of dominated strategies in coordination games

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ABSTRACT

In games with multiple Nash equilibria, coordination failure can lead to off-equilibria and (Pareto) dominated outcomes. I use the dominance effect, a commonly observed bias in individual choices, to facilitate coordination among players in games. Dominance effect predicts that the addition of a dominated alternative increases the psychological attractiveness of the dominating alternative. Whereas, dominated alternatives are irrelevant under the rationality assumption. A dominated strategy in games can affect both players’ strategy choices and facilitate coordination toward one of Nash equilibria of the games. Results from an experiment on the 2x2 Battle of Sexes games, with a dominated strategy for row players, is consistent with this prediction. Observed choices of row players differ depending on the presence of the dominated strategy. Column players anticipate row players’ choices when the dominated strategy presents. Column players coordinate on their strategy choices to reach to the relevant equilibrium. Further, I study if the dominance effect carries over from risky choices to games. That is players biased by a dominated lottery in risky choices are more likely to show the bias in games. This bias is shown to be present in risky choices. There is no correlation at individual level between games and lotteries regarding the dominated alternative and its effect.
The effect of cognitive load on risk-taking behavior

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**ABSTRACT**

The current study tests the effect of cognitive load on impulsive behavior, risk preferences and risk-taking behavior, as measured by risk premium for lottery and time preferences. Participants were 124 students, randomly assigned to two cognitive load groups (low and high), and then asked to bid for lottery tickets and answer questions regarding their time preferences. The results showed that under high cognitive load participants were more impulsive, as predicted. However, they were more present oriented than under a low load, and also asked for a higher risk premium (willing to pay less for a lottery), which are not impulsive actions. Impulsive behavior was not found to be a mediator between the two measures. The difference in the groups' risk preference was insignificant. Some possible explanations are discussed.
How much to donate, and to whom? The effects of framing of charitable solicitations on moral judgment

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**ABSTRACT**

We study how the framing of the charitable “ask” affects moral judgment and thus how much to donate and to whom. We develop a theoretical framework grounded in insights developed by Adam Smith in his *Theory of Moral Sentiments* (1759) and psychological construal level theory. The framework rests on the effects of variations in the salience of donors’ financial interest and in their distance/detachment from the targets of their generosity. We hypothesize that (1) increasing the salience of donors’ self-interest will act like an increase in the price of giving, and (2) increasing the distance or detachment of the donor from the charitable targets induces substitution in giving towards the poor and the needy, away from cultural and other ordinary purposes. We design four modified dictator game experiments with seven local charitable organizations. In a conventional model an individual will make equivalent choices of donations, but if moral judgment is activated by framing, the choices will differ. In an experiment with a mixed within- and between-subjects design with 157 participants, we find empirical support for our hypotheses.
Turning-on dimensional prominence in decision making: Experiments and a model

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ABSTRACT

We experimentally show how slightly modifying a single dimension of one alternative in a manner that makes the dimension more explicit and hence more salient, alters participants’ evaluation of the entire choice set. In one study, social preferences over two unequal allocations reverse, depending on whether a third available allocation is equal or unequal. We suggest that when all three options are unequal, the most prominent dimension for choice is efficiency. However, in the presence of a 50–50 split the inequality dimension stands out sharply. This raises egalitarian considerations that shift preferences toward equality even when expressed over unequal allocations. Such turning-on of a dimension in one’s mind is shown to play a similar role in two more studies conducted in different environments. Motivated by these findings we propose the Turned-on-Dimensions (ToD) procedure, which draws on ideas raised in models of focusing and salience by Koszegi and Szeidl (2012) and Bordalo et al. (2013), and modifies them in a manner which allows to accommodate our findings. We further support our suggested psychological procedure by analyzing participants’ explanations of their choices.
Multi-dimensional reasoning in competitive resource allocation games: Evidence from intra-team communication

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**ABSTRACT**

We experimentally investigate behavior and reasoning in various resource allocation games with large strategy spaces: Blotto games, multi-object auctions with budget constraints, and all-pay multi-object auctions. In the experiment, a team of two players plays as one entity against other teams and team members are allowed to communicate with one another before choosing a strategy. The analysis of their communication reveals that they think in terms of dimensions or characteristics of strategies rather than in terms of individual elements of the strategy space. Furthermore, we find that the main dimensions considered by players are common to the various games studied and we detect a linkage in terms of the reasoning across these games in the dimensions’ metric. We also identify commonly used decision rules within each dimension and study the effect of multi-dimensional reasoning on performance. Thus, we suggest that multi-dimensional reasoning is a frequently used decision procedure that connects the behavior observed in various resource allocation games.
Taxing decisions: The Interaction of ethics and law in tax decision making

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ABSTRACT

Attitudes to tax avoidance have changed substantially over time, from such behavior being seen as a sensible approach to take, through to a recent UK Chancellor describing some of this behavior as morally repugnant. The latter view is often echoed in the press, and companies like Amazon, Starbucks, Vodafone and Google have drawn public protest about their tax behavior, including demonstrations with banners such as “They’re our bucks not Starbucks – Close tax loopholes”. Although tax is now discussed in a moral light, moral aspects are not usually explicit in the wording of the law, and many behaviors that give rise to complaint are not illegal.

Many firms and individuals obtain advice on tax affairs from tax practitioners. While tax practitioners have responsibilities to comply with the law, they also act as agents with a professional obligation to their clients. Here we explore moral reasoning in tax practitioners building on work in Doyle et al. (2012) and look in more detail at the impact of the professional context on their judgment.
Job market chances of whistleblowers. Is there a penalty for whistleblowers on the labor market?

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ABSTRACT

Empirical evidence demonstrates that whistleblowers experience various types of organizational retaliation in the aftermath of whistleblowing. Although this retaliation forces the whistleblower in many cases to leave the organization, almost no research exists that clarifies to what extent future employers are willing to hire employees who blew the whistle in their former organization. Our study therefore examines how whistleblowing affect the employee’s reputation on the labor market. To empirically investigate our hypotheses we design a laboratory experiment in which student participants are paired up as employee-manager divisions and the employee can blow the whistle on a manager’s fraudulent decision to withhold money earmarked for charity. In a second stage all divisions are newly matched and managers can express preferences whether they want to hire an employee who formerly blew the whistle or remained silent in their past division. We expect that in environments in which managers have incentives to commit future fraud, managers will tend to choose employees who were shown to be loyal to their former manager. Contrary, in environments where the manager will financially benefit from the employee’s honesty, employees who blew the whistle in their former division will be preferred.
Behavioural game theory

Do people minimize regret in strategic situations? A level-k comparison

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ABSTRACT

Regret minimization and level-k reasoning have been proposed as alternative models for rationalizing non-equilibrium behavior in games. We provide a theoretical and experimental analysis of the relationship between these two models, a relationship that has been neglected by economists. Both theories predict the same behavior in a surprisingly large number of experimentally tested games. We identify conditions under which this happens, and use them to design a series of games to separate regret minimization from level-k thinking. Our results reveal that virtually no one systematically minimizes regret in our experiment, casting doubt on regret minimization as a relevant explanation of behavior in strategic situations.
Does risk information really inform companies’ current investors? An experimental study

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ABSTRACT

Our research goal is to investigate if risk information disclosed by companies does really inform statements users about risk factors which a company is subject to, considering that the financial disclosures poses an information overload environment with repetitive content across time periods, so its readers and investors may not assess its probability of occurrence adequately. Also, we want to observe how investors would react toward management in the case of the risk factor changing from a probability to an occurred event in a later moment, i.e., if they would attribute their misinterpretation as a company management fault and/or feel regret when the investment has been made without considering all risk information available. To test this prediction, we developed an 2X2 between-subjects experiment, at two time periods. At the first one, we disclose risk information about a hypothetical company and, to manipulate the individuals attention on risk factors, some newspaper headlines could be available just after the risk information. Next, we manipulate the risk occurrence and an already disclosed risk factor could turn into a real event to the company. As our main results, we identify that neither salience of risk factors nor the occurrence of a risk factor previously disclosed changes the company’s “return rates” and “risk perception”. However, for “management quality perception”, we identify statistically significant differences between management quality perception when the risk information is made salient by news titles and a risk factor turns out to be a real event.
Limited attention, the use of accounting information and its impacts on individual investment decision making

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ABSTRACT

We hypothesize that, by manipulating accounting information using a more general accessible format as the narrative one, individual investors will be able to better understand accounting information and, thus, make a more effective use of it versus the concurrent non-fundamental information available in a standard investment decision making setting. To achieve our research goal, we develop a mixed-method design. At the qualitative approach, our objective is to identify patterns in the usage of accounting/non-accounting information by analysts/professional investors versus individual investors. By doing so, we were able to use the results obtained in the interviews to base our experimental information choices regarding which accounting information pieces were most preferable to professional investors and the information presentation sequence to be followed in the experimental setting. Next, we develop a 2X2 between-subjects experimental design in which we manipulate the presentation format of a hypothetical company between the traditional ‘tabular and footnotes’ versus the narrative content-only design. We also vary the financial performance between ‘good’ and ‘bad’ to check if the variables of interest would impact investment propensity at the company’s shares and the amount of information retrieved from memory. As our main results, we find that the narrative format per se does not impact investment propensity and that the alternative presentation format benefits participants with less than 5 years of investment experience in capital markets at the financial distress condition, adjusting their investment propensity to the same level of more experienced investors.
Economic and psychological incentives in darts

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**ABSTRACT**

Incentives are at the core of economics. From labor supply to crime, and from consumption to education, incentives play a central role in economic theory. One of the most important predictions is that people exert more effort when they have greater incentives to do so. There is strong empirical evidence for this motivational role of incentives. For example, it has been found that workers produce more output when they are paid a piece rate rather than an hourly rate (Lazear, 2000; Shearer, 2004; Paarsch and Shearer, 1999) and when they participate in a contest (Hong et al., 2015; Kale et al., 2009).

Behavioral economics has shown that effort is also affected by psychological factors. Most notably, the framing of outcomes may affect effort provision if people are loss averse (Kahneman and Tversky, 1979). Hochman et al. (2014) demonstrate that subjects perform better when they are pre-paid rather than post-paid. Framing outcomes as losses rather than gains also led to higher relative performance in a Chinese manufacturing form (Hong et al., 2015; Hossain and List, 2012).

The present paper examines the effects of economic and psychological incentives on the performance of darts players, and closely relates to earlier work by Berger and Pope (2011) and Pope and Schweitzer (2011). Berger and Pope (2011) and that professional basketball teams are more likely to win a match when they are slightly behind at half-time compared to when they are slightly ahead. They attribute this finding to increased motivation derived from loss aversion. Pope and Schweitzer (2011) find that professional golf players are affected by the reference point of par,
the typical number of shots professional golfers take to complete a hole. Players put more accurately for par than under par.

More general, our paper connects to a broader literature that uses sports data to investigate economic hypotheses. Lab findings are often criticized for their lack of real-world generalizability because of low incentives and limited opportunities to learn (Levitt and List, 2007). Sports can be appealing to study behavior, because, like experiments, it has clearly defined rules and objectives. Moreover, players are mostly experienced and, for a variety of reasons, they often have a strong desire to win. Despite the lack of control, these features make sports an attractive real-life test bed for various behavioral regularities. Examples of the use of sports data in economic research are the study of discrimination in basketball (Price and Wolfers, 2010), principal-agent theory in cricket (Gauriot and Page, 2015), and mixed-strategy Nash equilibria in soccer penalty shootouts (Chiappori et al., 2002).

The game of darts has a number of particularly attractive features for research into the relationship between effort and performance. First, strategy plays a relatively minor role in darts. In many other sports, strategic considerations may obfuscate the effect of incentives on mental and physical effort. For example, teams may condition their strategy on the relative importance of a match, rendering it unclear whether observed changes in performance are due to changes in either strategy or effort. Second, each player’s effort influences one’s own performance only and does not directly affect the performance of the opponent. In other sports this is often not the case. For example, a baseball pitcher who exerts more effort likely negatively affects the opponent’s batting performance.

To investigate the effect of economic incentives on performance, we examine whether players perform better in situations where the benefits of throwing well or the costs of throwing badly are relatively high. To study the effect of psychological incentives on performance, we assess if players perform better when they are slightly behind, as predicted by loss aversion. We find evidence in favor of the performance enhancing effect of increased economic incentives. However, players who are slightly behind do not play better than those who are slightly ahead. This contrasts with earlier studies in basketball and golf where players are found to be driven by loss aversion (Berger and Pope, 2011; Pope and Schweitzer, 2011).
Does unlocking home equity increase satisfaction in older age?  
The relationship between reverse mortgage borrowing and domains of life satisfaction

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ABSTRACT

This study examines the relationship of reverse mortgage borrowing and older adults’ satisfaction with their financial situation, housing, health, and daily life/leisure as well as with their life as a whole. Controlling for socio-economic and financial factors, we find that older adults who obtained a reverse mortgage have higher financial and housing satisfaction compared to non-borrowers. Further, we find that financial, housing, daily life/leisure, and health satisfaction are positively related with general satisfaction, but the strength of the relationships vary for borrowers and non-borrowers. These findings provide support for the role of reverse mortgage borrowing in older age. Having access to home equity may be especially important in light of the low retirement savings among the baby boom generation in the U.S. and the decreasing retirement income replacement rate in European countries.
The role of attitudes toward debt for financial behaviors and psychological wellbeing

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ABSTRACT

We use data from a unique, online-representative national population sample of 1,001 German residents. The largest group of respondents, 54% indicated they carry debt in emergency situations. A total of 22% of respondents identified themselves as refuse to go into debt. A similarly-sized group, 24%, reported using debt regularly. Multinomial regression, comparing debt refusers and emergency debtors to debt pragmatists, showed that debt refusers and debt pragmatists differed mainly with regard to household net income. Emergency debtors differed from debt pragmatists in two aspects. Higher educational levels and lower income levels increased the odds of belonging to the emergency-debtor group, compared to debt pragmatists. Binary logistic regression results indicated that debt attitudes were significantly related to six selected financial behaviors. With regard to the direction of the relationships, moving from refusing to carry debt to using it pragmatically was positively associated with having debt, planning debt-based purchases, socializing with others in debt, approaching a wider range of financial institutions when in need for a loan, and spending for a wider range of goods online. Alternatively, saving was inversely related to an increasingly favorable attitude to debt. The present research provides evidence that debt attitudes can be closely related to spending, saving, and borrowing, and indirectly affect individuals’ life satisfaction. Such findings can help researchers as well as professionals working as financial advisors and counselors to design interventions that affect attitude formation and attitude change as up-stream tools for altering debt and credit use.
The effect of reference points on savings behaviour

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ABSTRACT

Life-cycle models with reference points have been used to explain a number of puzzles in the consumption and savings literature. However, the issue of what determines the reference point is plagued by theoretical and empirical problems. This paper proposes a new way of identifying the reference point by utilising individuals’ subjective reports of the financial changes they have experienced, a clear and intuitive conception of the reference point. Results show that reference points have a direct, quantitatively substantial effect on savings behaviour and that they do so in a manner consistent with ‘loss aversion’. Reviving a concept from the Relative Income Hypothesis, the effect of the reference point is interpreted as the ‘psychological effect’ of income changes on consumption and savings decisions.
Living in your parents’ shadow: Intergenerational transmission of earnings aspirations

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ABSTRACT

Children born into richer families will tend to have higher expectations for their future earnings than those born into poorer families. This paper proposes that this transmission mechanism can be modeled with an unobserved reference point which is dependent on parental income. Children are ‘loss averse’ and receive a utility penalty if they fall below their reference point. It is shown that this model yields predictions about intergenerational earnings functions which can be tested using a kinked quantile regression function. Data from the LSYPE, a contemporary UK cohort study which contains both parents’ and childrens’ income, are shown to be consistent with these predictions. This implies a psychological mechanism for the transmission of intergenerational earnings, contrary to the prevailing view which focuses on credit constraints. Furthermore, the unobserved reference point model may be readily applicable to a wide variety of topics in applied econometrics, such as consumption and savings models.
Loss Aversion, Performance and Cheating

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ABSTRACT

Sometimes people apply dishonest behavior in order to receive –or not lose– monetary rewards when not deserved. Prior research shows that people work harder to avoid a monetary loss than to acquire a corresponding gain and this behavioral pattern is also applied to moral domain, leading people cheat more to avoid possible losses than for acquire possible equivalent gains (i.e. Loss Aversion). However, no findings are provided about the role of reward magnitude and individual differences on consequent cheating level. Using a real effort task –rather than non-performance based cheating paradigm– and real monetary rewards –rather than hypothetical rewards–, we implemented a between subjects design to test the effects of framing (Loss vs Gain) and reward magnitude (Small vs Big) on individual real performance and cheating level. Results showed no significant differences in real performance, with participants performing quite similar regardless of the conditions, but on cheating level. Particularly group analysis revealed different frame effects on cheating level: participants cheat more in loss frame but just in the big magnitude reward condition while, on the other hand, when faced with small reward cheating level is surprisingly incremented in gain compared to loss frame. Thus, our results just partially replicate the finding of higher cheating level in loss compared to gain frame, suggesting that the relationship between framing and cheating behavior can be moderated by a third variable which is reward magnitude. On individual level, results support the hypotheses that best performers cheat less than others and that self-reported cognitive impulsiveness is related to cheating level. Implications for theory and practice are discussed.
The effect of social norm and formal norm on opportunistic behavior

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ABSTRACT

The objective of this article is to examine the effect of the social norm (group influence) and the formal norm in the agent opportunistic behavior. We consider that the social norm can work together with the formal norm, increasing or reducing the opportunistic behavior of group members, based on the group behavior. To analyze that, we conducted two experimental studies. The first study was a 3 (formal norm: strong, flexible and neutral) x 3 (social norm: cooperative, opportunistic and neutral) between-subjects design conducted with 356 Mechanical-Turk respondents. The second experiment was a 2 (formal norm: strong, flexible) x 2 (social norm: opportunistic, cooperative) x 2 (punishment: strong, weak) between-subjects design, conducted with 353 executive MBA students. In general, results demonstrate that the social norm, along with the formal norm, may affect individuals’ perception and behavior intentions about the willingness of acting in an opportunistic way. Moreover, punishment showed to play a role in these situations. In scenarios of strong formal norm and opportunistic behavior, strong punishment increased the willingness to act in an opportunistic way (based on a projective technique) in relation to weak punishment scenarios; on the other hand, in scenarios of strong formal norm and cooperative behavior, punishment provoked the opposite effect, and subjects exposed to strong punishment groups expected a lower willingness to act opportunistically than those exposed to a weak level of punishment.
The merits of happy consumption: Positive affect and psychological ownership

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ABSTRACT

The current research is the first to demonstrate that positive affect may instill possessive feelings for brands, in turn influencing people’s intention to engage with that brand long-term. Across multiple correlational and experimental studies with a total of 6 product categories, 2 brand types, imagined and real consumption, we consistently find that positive affect elicits PO for the consumed brand, which, in turn, predicts intended repeat consumption. We also find evidence that this process may be due to affect-attribution in the sense of “If it makes me happy, it should be mine”. Emotionally positioning brands may thus strengthen consumer-brand relationships in more ways than previously assumed. It turns happy consumers into possessive and eventually loyal ones.
Motivated sampling and corruptive information

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**ABSTRACT**

In decisions over actions that might do harm to others, how does a selfish incentive to favor one of the actions change decision makers’ information acquisition on the consequence of their actions for others? Backed up by a theoretical model, we predict that the presence of a selfishly incentivised action will cause acquisition of sequential imperfect information on the consequences of this action to be asymmetric: termination of information acquisition is more likely after evidence indicating no harm and less likely after one indicating harm. This way, individuals exploit information to justify their selfish action. Based on this insight, we further predict that access to imperfect information is corruptive and causes worse decision-making in terms of welfare. We test these predictions in a series of laboratory experiments. The experimental insights are relevant for the incentive design of physicians, the procedural design of the publication process of experimental studies, and to understand how information acquisition enables discrimination, for example in hiring decisions.
How do fund managers in pension funds make decisions about investments? A critical incident study

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ABSTRACT

This paper concerns the question what’s in the mind of a fund manager when making investments. More precisely, we want to better understand a fund manager’s investment thinking processes and the considerations s/he makes in challenging and uncertain investment decision of daily work situations. This issue is investigated by using the critical incident technique in interviews with Swedish pension fund managers. The theoretical question that we focus is how dual thinking processes in experts’ investment decision making emerges. This question has attracted interest in economic psychology, but is far from answered. Another reason for this study is that there are few empirical studies that rely on decision-makers own perceptions of their daily investment situations and even less on fund managers’ investment decision-making in pension funds. Participants were fund managers recruited by telephone to public pension funds and banks in the Stockholm and Gothenburg area. The sample entailed 22 participants, 16 from public pension funds, 6 from banks, 19 were men, 3 were women, their mean age was 44 years and their mean experience of pension fund management was 13.5 years. The critical incident interview technique means that we collected investment decisions that fund managers retrieved from recent memory (Flanagan, 1954). We asked participants to retrieve challenging and uncertain investment decisions that they recently had made and could retrieve in detail. Questions concerned the investment situation, the decision-making process, explanations of the challenges and uncertainties, and the investment decision outcome. Transcribed interviews were analyzed thematically. The analyzed 59 critical incidents of investment decision making frequently concerned challenging stock investments. These investment decisions were based on extensive deliberations (e.g., reliance of external analysts for advice, analysis of massive hard company and stock market information, scrutiny of company reports and personal meetings with CEOs). Fund managers were cautious and ready to be accountable in reporting their decision-making,
indicating a strict, rule-based and defensive organizational culture at public pension funds and banks. We suggest that the huge capital that pension funds and banks possess, the principal’s control mechanisms, management and the selection of staff contribute to impose a strong organizational culture, where there is limited space for initiatives and change in investments. However, fund managers were not infallible in their investment decision making, i.e., decision outcomes were not always favourable, despite this study’s method which allowed fund managers freedom to choose critical investment decisions. We found that both gut-feelings and biases (sunk-cost effect) occurred. The recurring perceived difficulties in making investment decisions referred to situations where social pressures were evident (e.g., feelings of being in a minority position, searching for control to back up decisions). A group of investment decisions were reported by using words such as "feelings" and "changes", indicating heuristic and intuitive processes. A proposal we make is that such processes occurred after a conscientious analysis when the final investment choice to buy, sell or retain stocks was to be made in the end of the decision-making process. In conclusion, this study shows that fund managers in pension fund investment work report critical investment decision making that is strictly rule-based subject to extensive deliberations and simultaneously leave room for guesses. In other words, there is no contradiction between fund managers’ dual thinking processes in investment decision making.
Challenging investment decision making in pension funds

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ABSTRACT

We want to better understand pension fund managers’ investment thinking when confronted with challenging investment decisions. We focus on the theoretical question of how dual thinking processes in experts’ investment decision making emerge. This question has attracted interest in economic psychology but has not yet been answered. Here, it is explored in the context of pension funds.

Methodology: The sample included 22 pension fund managers. We explored their decision making by applying the critical incident interview technique, which entailed collecting investment decisions that fund managers retrieved from recent memory (Flanagan, 1954). Questions concerned the investment situation, the decision-making process, and the challenges and uncertainties the fund managers faced.

Findings: Many of the 61 critical incidents examined concerned challenging (mostly stock) investments based on extensive analysis (e.g., reliance on external analysts for advice; analysis of massive amounts of hard company and stock market information; scrutiny of company reports and personal meetings with CEOs). However, fund managers to a high degree based their decisions on soft information judgments such as experience and qualitative judgements of teams. We found heuristics, intuitive thinking, biases (sunk cost effects) and social influences in investment decision making.

Research limitations/implications: The sample is small and not randomly selected.

Practical implications: We suggest anti-bias training and better acquaintance with human forecasting limitations for pension fund managers.

Originality/value: Pension fund managers’ investment thinking has not previously been investigated. We show the types of investment situations in which analytical and intuitive thinking and biases occur.
When accepting is more than just not rejecting: exploring the variable influence of upstream economic actors on different types of consumer decisions

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**ABSTRACT**

In spite of their potential benefits vis-à-vis sustainability and efficiency, public acceptance of genetically engineered (GE) products remains controversial. In fact, owing to the controversy surrounding food products and the resulting tendency to focus on this domain, there is limited attention to other promising applications such as bioenergy. This is problematic given that bioenergy is both highly relevant as a source of renewable energy and generally well-regarded by the public.

In this study, we therefore utilize the support and rejection of GE bioenergy to explore the key determinants of decision-making. Specifically using a framed field experiment with German consumers (N = 322), we disentangle three types of determinants from one another, notably, valence of information (i.e. positive, negative, neutral), emotional mood of participants, and the relevance of economic actors across the supply chain. By controlling for these distinct influences on decision-making, we first ascertain the extent to which people are indeed susceptible to their emotions when it comes to evaluating the riskiness of GE bioenergy. In fact, though mood affected decision-making before the experiment, it did not affect responses during the experiment itself. Moreover, by integrating the identity of supply-chain actors and their level of support, we can also establish how and why such upstream decisions are relevant. Indeed, while there is...
substantial interest in trust in scientists and regulatory officials, our findings demonstrate that economic actors also provide useful feedback to consumers. Finally, the distinction we make between decisions to support and decisions to reject offers initial evidence that their underlying determinants can vary substantially. Accordingly, not only does this suggest that rejection perhaps ought not be viewed as the inverse of support but, given the neuropsychological evidence for such a distinction, this underscores the need for further research in this vein.
Personality traits and household consumption choices

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**ABSTRACT**

In this paper, we analyze how consumption choices are related to individual's personality traits, both for individuals living in a one-person household and in a couple. We test the impact of personality on the preferences for different commodities in three different samples, i.e. the singles, the childless couples and the couples with children. To this aim, we use the GSOEP and we estimate both a logit model for non-zero consumption of each commodity and a system of Engel curves. Personality traits are included as demographic shifters and for the couples they are those of the husband and the wife together with an association index. If individual coefficients of personality traits are consistent between singles and individuals in couple, and the degree of association is shown to be significant, we will interpret these findings as a piece of evidence of consumption-based marital surplus. This is the case of the Openness trait and of the Conscientiousness trait. They have both a higher correlation coefficient in the couple, i.e. there is assortative mating. The Openness trait predicts consumption on education and culture for singles, as well as for people living as couples, while individuals who score high in the Conscientiousness trait are predicted to spend less money on leisure time, holidays and culture. In this case, the marital surplus is related with the couple's agreement on which items to reduce. On the contrary, the effects of the Neuroticism, Extraversion and Agreeableness traits on consumption are mixed across gender and family composition.
Assessing choice overload in a complex environment

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ABSTRACT

We study choice overload and subjects’ performance in a novel experimental paradigm and we manipulate candidate determinants of choice overload. The environment is designed to mimic aspects of consumer search. In a given round, subjects face a large array of multi-attribute objects and should select one. Attributes are initially hidden, and subjects have a fixed amount of time to investigate the objects and make their selection. We manipulate time pressure, the nature of the objects and whether or not subjects choose the size of their consideration sets. The payoff from an option is either the average of its attributes, or the attributes are lottery outcomes. In the latter case, we assess subjects’ performance by how well their chosen object matches their risk preferences, assessed via separate tasks. We show that performance is negatively related to the size of the choice set. This result is strong support for choice overload, and in contrast with the prediction of standard economic theory, where an expanding choice set would always (weakly) increase utility. In the treatments where we impose big choice sets, some subjects could perform significantly better by focussing on just a few options; in environments where subjects choose the size of the consideration set, some subjects would do better by picking smaller ones. We also show that choice overload is more pronounced when objects are lotteries, and require evaluation under preferences, compared to when objects have certain values. Objective performance correlates positively with subjective self-reports of choice satisfaction.
Taxes, donations, and framing effects: An experimental study

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ABSTRACT

In the wake of the global financial crisis, one of the biggest challenges to governments and institutions is to find arrangements that overcome the free-riding problem inherent in the financial provision for the common good. At a formal level, both paying taxes and making monetary donations can be seen as ways to give such financial contribution. An experimental study was conducted to test the effects of different frames on the intention to pay taxes and make charitable donations. A 2 (context of contribution: paying taxes vs. making donations) * 3 (framing condition: control, gain frame, and hedonic frame) mixed-factorial design was performed on 435 participants. It was found that a gain frame (i.e., material return) was only effective in increasing intended tax compliance, whereas a hedonic frame (i.e. emotional return) was only effective in increasing donation intention. Interestingly, such results only apply for a sub-sample of taxpayers (i.e., employees, self-employed, and entrepreneurs).

In addition, it was found that gain and hedonic frames worked differently according to the prevailing motivation behind tax compliance and charitable giving. When the intrinsic motivation was already high, frames were ineffective (in the tax context) or even counter-productive (in the charitable giving context). In the presence of extrinsic motivations, instead, frames are especially effective.

In addition to being valuable at the theoretical level, these findings can have pragmatic relevance as they can help policy-makers, administrators, and NGOs to understand how to develop policies and social communication campaigns. Limits and future research developments are also discussed.
Follow the crowd: Social information and crowdfunding donations in a large field experiment

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ABSTRACT

Guiding human decision making by a discrete suggestion, that is a nudge, is increasingly popular. One particular promising nudge is to provide decision makers with information about the decisions of others, also referred to as social information. Social information is frequently used by practitioners to increase charitable giving, despite the fact that the literature shows that the effects are mixed and context specific. In some cases the use of social information could even decrease donation amounts and, therefore, prove costly for practitioners. Our article, based on a large natural field experiment (n = 24,070), adds to the literature by researching if social information is an effective stimulant for crowdfunding, an online fundraising instrument. While the growing popularity of crowdfunding could be improved by understanding what makes people give online through crowdfunding platforms, previous research has spent limited to no attention to social information effects. The experiment we present shows that among 99% of all donors social information increases the amount donated by 16%. The major contribution of our study is that we show that the effect of social information varies over the project funding stage. Social information has a positive effect on the amount donated, and the effect is stronger at the beginning and end of the campaign. Social information cannot increase giving at any project funding moment, but it does not result in a negative effect. There was no information about the effectiveness of social information during the project funding period, while crowdfunding is a popular funding method.
Attentional correlates of third-party punishment and compensation

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ABSTRACT

People often act against their immediate self-interest to promote compliance with fairness norms. Spending resources to punish offenders or compensate victims are two alternative strategies to enforce compliance. Here, we investigate how attentional processes predict a preference for punishment or compensation. Two eye-tracking experiments were run, employing a Third-Party Justice Game: two players shared a sum of money until one (offender) stole from the other (victim). Witnesses (i.e., participants) could spend their money to either punish the offender or compensate the victim. In experiment 1, payoffs were presented as pictures of piles of coins; when the offender stole money, his payoff increased by one pile, making the representation of offender's payoff more visually salient. In experiment 2, the payoffs were represented by numbers rather than piles of coins. The hypothesis is that the amount of attention directed towards either the victim or the offender predicts compensation or punishment, respectively. Results support this hypothesis and show that when the representation of the offender’s payoff was more visually salient (experiment 1), the percentage of punishment was higher than compensation, suggesting a role of implicit attentional processes in complex socio-moral choices. These findings contribute to shed light on the basic cognitive mechanisms implicated in moral decision-making, supporting the idea that eye-gaze is indeed an indicator of social preferences; moreover, the implications are profound, as it is suggested that by manipulating visual information and implicit attentional processes it is possible to manipulate complex socio-moral choices. Further work is planned to explore these ideas.
Self-efficacy, locus of control and the medium-term entrepreneurial performance of start-ups

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ABSTRACT

Psychologists argue that locus of control—as the perceived control over one’s own life events—and self-efficacy—as one’s own belief in the capability of carrying out intended behaviors— together form a broader concept. While economic research on the role of personality traits in general and locus of control in particular for labor market outcomes and business creation has been growing, the strongly related concept of self-efficacy has largely been neglected in this context. In this paper, we use data on 871 start-ups in Germany to analyse the impact of general self-efficacy on medium- and long-term business outcomes. We do not only focus on survival and income but also on broader dimensions of entrepreneurial performance such as growth intentions, growth realization, and innovation activities. The data allows us to control for a large set of covariates including locus of control. For a period of roughly two years after business formation, we find higher self-efficacy to be associated with better business survival, higher net working income, higher numbers of employees as well as higher intentions to expand the business into new fields and regions, but not with innovation activities. In the long-term perspective up to four years after start-up, high self-efficacy beliefs are related to better business survival, higher income, higher intentions to expand into new fields of business as well as actual expansion into new fields and regions. Overall, results do not change much when locus of control is accounted for.
Nudging the poor and the rich: A field study on the distributional effects of green electricity defaults

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ABSTRACT

Choice defaults have become an increasingly popular public policy tool. Yet there is little knowledge of the distributional consequences of such nudges for different groups in society. We report results from a field study in the residential electricity market in which we contrast the choice of an electricity contract under a default regime with an active choice without any default. The default is successful at curbing greenhouse gas emissions, but it comes at the cost of distorting choices for poorer households as well as for pro-environmentally minded, but uninformed consumers. Our findings illustrate that the costs and benefits of nudging interventions applied in public policy need to be evaluated carefully.
Evaluation of tempting credit offers: The role of time pressure and self-control

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**ABSTRACT**

The current advertising landscape for consumer credits is complex: Not only well established financial institutions but also new online creditors advertise private credit as advantageous and convenient. These offers often appear tempting, since they allow easy access to money and thereby the immediate gratification of individual desires. However, they involve the risk of impulsive buying decisions and financial overextension. Hence, it is crucial to understand factors that drive the credit decision in order to facilitate responsible credit use. We propose that the credit decision process can be explained by dual process theory and trait self-control. In the current project, we examine whether participants who process information in a more automatic way are more attracted by tempting credit offers than participants who process information in a more controlled way. Furthermore, we examine whether this relation is moderated by trait self-control. A first study showed that four out of five credit offers were rated more positively under time pressure, indicating that more automatic processing indeed increased the temptation to consider a credit. However, trait self-control did not correlate with evaluations nor did it moderate the effect of time pressure. Two further studies are planned to explore the proposed hypotheses in more depth and to enrich the literature on credit decisions.
Fernweh. Conceptualizing the longing to travel the world

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**ABSTRACT**

Why are some people longing for unknown, foreign places whereas others prefer the proximity to their home? And which thoughts and behaviors result from experiencing the desire to go somewhere else? To shed light on these questions, the current project studies the concept of Fernweh from a psychological perspective.

The German term 'Fernweh', describes the longing and aching for distant places. Although other types of longing, such as homesickness or nostalgia have been addressed from a scientific point of view, also in the economic context Fernweh, as the longing for distant places, has mostly been neglected in past research.

In an online study, 197 German participants were asked to provide (1) a definition of what they consider Fernweh to be and to list (2) thoughts and feelings, (3) personality characteristics and (4) behaviors that they associate with this term. Coding these open-ended answers, the results indicate that mentioned exemplars can be grouped in thirty-eight distinct categories. Integrating these categories, Fernweh appears to be composed of two double-sided factors. For one, it represents an attraction to unknown places including anticipatory joy but also dissatisfaction with the current situation described by melancholy and helplessness. For another, resulting behavior can be characterized as following the desire to travel by engaging in holiday preparations and travelling itself, however Fernweh can also trigger compensatory behaviors.

The current study provides first insights into differential components as well as differential behavioral consequences associated with the desire to travel.
Risk attitudes and investment in training

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ABSTRACT

We analyse the effect of a worker’s risk attitude on her investment into training. We adapt human capital investment models under uncertainty to include the distinction between general and specific training. Based on our model we predict risk-seeking workers to have a higher probability to invest in general training than risk-averse workers, while we do not expect an effect of risk for specific training. We use data from an annual representative household panel survey in Germany, the German socioeconomic panel (SOEP), to empirically test the implications of our model. When analysing the effect of risk attitudes on the overall choice of investing in training, we find that risk-seeking workers have a significantly higher probability of investing into training compared to risk-averse workers. This effect is driven by investments into general training and we do not find a significant effect of risk attitudes on the investment into specific training. These results remain robust when utilising different risk-seeking indicators (and also controlling for a variety of other personality traits such as locus of control).
Search predicts and changes patience in intertemporal choice

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ABSTRACT

Intertemporal choice impacts many important outcomes, such as decisions about health, education, wealth, and the environment. However, the psychological processes underlying decisions involving outcomes at different points in time remain unclear, limiting opportunities to intervene and improve people’s patience. This research examines information-search strategies used during intertemporal choice and their impact on decisions. In experiment 1, we demonstrate that search strategies vary substantially across individuals. We subsequently identify two distinct search strategies across individuals. Comparative searchers, who compare features across options, discount future options less and are more susceptible to acceleration versus delay framing than integrative searchers, who integrate the features of an option. Experiment 2 manipulates search using an unobtrusive method to establish a causal relationship between strategy and choice, randomly assigning participants to conditions promoting either comparative or integrative search. Again, comparative search promotes greater patience than integrative search. Additionally, when participants adopt a comparative search strategy, they also exhibit greater effects of acceleration versus delay framing. Although most participants reported that the manipulation did not change their behavior, promoting comparative search decreased discounting of future rewards substantially and speeded patient choices. These findings highlight the central role that heterogeneity in psychological processes plays in shaping intertemporal choice. Importantly, these results indicate that theories that ignore variability in search strategies may be inadvertently aggregating over different subpopulations that use very different processes. The findings also inform interventions in choice architecture to increase patience and improve consumer welfare.
Does exposure to violence affect reciprocity? Experimental evidence from the West Bank

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**ABSTRACT**

This paper is concerned with how positive and negative reciprocity is affected by exposure to violence in early age. We focus on young Palestinians in the West Bank region of the Palestinian Territories. To measure reciprocity in the domain of cooperation, we implement a “public good game” eliciting unconditional and conditional contributions (Fischbacher et al, 2001). To measure reciprocity in the domain of aggression, we implement a decision task in which retaliatory behavior can, but need not, occur. This is a simplified form of the vendetta game developed by Bolle et al. (2014). We develop an identification strategy based on checkpoints near pre-1989 (First Intifada) settlements and on exposure to violence as proxied by being required to cross checkpoints. We find that exposure to violence leads to greater reciprocity, both in the domain of cooperation and in that of aggression.
Money illusion, financial literacy and numeracy: experimental evidence

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**ABSTRACT**

Money illusion is usually defined as the inability of individuals to take into account evolution of price in their nominal calculation. Individuals are no longer rational as defined by economic theory. Empirical evidence shows that money illusion matters in financial decisions particularly those made by households. In this article we analyse money illusion at the individual level and study its relation with numeracy and financial literacy. In order to do so we propose an original and precise measure via an experimental task and analyse the effects of financial literacy and numeracy via usual measures. This task consists in a series of choices between a pair of simple bonds which returns are influenced by inflation (deflation) rates. It provides a fine measure of money illusion which is correlated with usual measures of it (questionnaires). Moreover we show that money illusion depends on the context of the choices and on the participants’ skills. Individuals with financial knowledge, and to a lesser extent numeracy skills, are less sensitive to money illusion than others.
Choice architects reveal a bias toward positivity and certainty

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**ABSTRACT**

Biases influence important decisions, but little is known about whether and how individuals try to exploit others' biases in strategic interactions. Choice architects - that is, people who present choices to others - must often decide between presenting choice sets with positive or certain options (influencing others toward safer options) versus presenting choice sets with negative or risky options (influencing others toward riskier options). We show that choice architects’ influence strategies are distorted toward presenting choice sets with positive or certain options, across thirteen studies involving diverse samples (executives, law/business/medical students, adults) and contexts (public policy, business, medicine). These distortions appear to primarily reflect decision biases rather than social preferences, and they can cause choice architects to use influence strategies that backfire.
Causal reasoning about the risk of catastrophic events

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**ABSTRACT**

Human survival is governed to a large extent by the ability to reason about cause and effect. In this paper we will present results from over 2,000 participants investigating the effect of causal statements on probability judgements for catastrophic events. Such judgements are important for allocating resources to the mitigation of low probability high impact events. Data collection is ongoing and will finish in mid-February.
In-group favouritism vs. social efficiency concerns

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ABSTRACT

In-group favouritism is frequently observed in situations where there exists a high level of competition or even hostility in between groups, often accompanied by a stance that aims to inflict damage on other groups. Cases of segregation, wars and genocides constitute examples to said situations. What is more surprising is that similar observations can be made even in situations where competition or hostility between groups is non-existent. It has been established that, even in cases without definite opposition and rivalry between groups, in-group favouritism may be diminutive to social welfare. Especially, the negative effect of in-group favouritism in the allocation of social and human resources, on social efficiency is a frequently observed phenomenon. Therefore, analysis of the circumstances under which in-group favouritism would have such an effect on social welfare is crucial.

As far as we are aware, the one and only study that aims to analyse the relationship between in-group favouritism and social welfare, under the condition of no definite competition, opposition or hostility between groups is Çağlayan and Giritligil (2016). In this study, groups have been determined anonymously and exogenously according to the “minimal group” design. The main result of this study is that there is a high degree of in-group favouritism even though such behaviour is not beneficial to individuals and is detrimental to social welfare.

The project intends to analyse and model how individual concerns on own, own group or social welfare are shaped in accordance with varying conditions in a situation where the redistribution of individual assets is costly. In an experimental session where subjects are anonymously and randomly separated into groups and each subject is assigned an equal amount of initial endowment, a randomly designated “decision-maker” is commissioned with determining whether a predetermined amount of individual endowments is to be redistributed. The decision-maker receives a fixed bonus regardless of the decision she makes. There is a cost associated with redistribution: A fixed portion of the endowment that is assigned to be redistributed is destroyed.
The decisionmaker has three possible actions: Not to have any endowment transferred, having endowment transferred from her own group members to herself and having endowment transferred from each individual outside of her group to the members of her group, including herself. The resulting payoff of the decision-maker is always higher than the rest of the subjects because of the bonus she receives. Taking actions 2 or 3 yields her an equal and higher payoff than taking action 1. On the other hand, actions 2 and 3 are differentiated by the resulting social welfare: Under action 3, a higher amount endowment is to be redistributed and hence, destroyed. The relationship between the motivation for in-group favouritism and the concern for social welfare is parametrically analysed through controlled variations of the amount of bonus given to the decision-maker, the percentage of the initial endowments that can be redistributed and the cost of endowment transfer. Moreover, each treatment is backed with control runs that have the same parameter values and, in which the subjects from whom transfers are to be made and the ones to receive these transfers are randomly determined as subjects are not put in groups.
Anonymity and self-expression in online rating systems. An experimental analysis

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ABSTRACT

Reputation systems are of vital importance in today’s online commerce. However, there are growing concerns with respect to privacy and data security. One option to address those would be to implement anonymous reputation systems on online markets. In this paper we study how anonymity in reputation systems would impact the propensity of customers to leave reviews. Given that self-expression and self-confirmation are identified as the main drivers of reviewing products online (Dellarocas, 2010), it is questionable whether customers would leave reviews in anonymous reputation systems, where by design these aspects no longer play a role. Using a laboratory experiment, we vary the degree of anonymity in reputation systems and compare the propensity of customers to leave reviews.
Group decision-making under uncertainty: Understanding cross-cultural risk differences

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ABSTRACT

Since a balanced cross-cultural perspective needs to be taken in risk research, the present study examines intra- and inter-cultural differences in attitudes and decisions toward risk by comparing Chinese (collectivist), South Korean (collectivist), and Australian (individualist) individuals. In study 1, inter- as well as intra-cultural differences in risk choices, at both the individual and group levels, are examined comparing Australian, South Korean, and Chinese samples. When evaluated individually, Australians, South Koreans, and Chinese are reliably ranked in order in terms of favoring risk on their decisions. However, the group-induced shift toward risk (i.e., risky-shift) is not seen at all in Chinese male-only, female-only, and even mixed-gender groups. The results are different patterns from that observed in the South Korean and Australian samples in which the former shows a reliable effect of risky-shift regardless of gender composition while the latter (Australian samples) reveals the effect only among male-only groups. Study 2 explores a condition under which the Chinese may shift toward risk when making group decisions. We propose the condition, a peculiarly localized Chinese cultural norm labeled Guanxi, an intangible network of personal connections based on mutual trust to cope with threats from uncertain situations. The results show that the Chinese high-Guanxi group shifts their decisions toward a riskier position than the Chinese control group as well as a low-Guanxi group. Theoretical and practical implications of these findings will further be discussed.
Decision making under debt situation: Debt account aversive behavior and the effects of interventions on debt management competency

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ABSTRACT

A previous study found American undergraduates' decisions of repaying multiple debts to be non-optimal. When repeatedly asked to make repayment decisions on six debts that varied in amount and interest rate, the participants tended to repay small debts earlier than larger debts with higher interest rates, although the debt with highest interest rate should be repaid first to minimize total debt. This tendency is labeled debt account aversion (DAA), triggering an increase in total debt. In Study 1, we aim to testify DAA in Korean undergraduates: business-major and financial engineering-major (FE-major) students. A hypothetically defined financial optimal player (FOP) would finish the debt repayment task with $29,428 in total debt. The results show (a) mean total debts of both business-major ($38,103) and FE-major ($33,029) groups are greater than the total debt of FOP and (b) the business-major group is less optimal than FE-major in total debt. Study 2 explores how to improve debt management competency by presenting two different types of information (Prospective and Retrospective interest amount accumulated over time). The results show that business-major students' total debt is significantly improved when compared with those in control condition. However, FE-major students do not show any reliable improvement from the two interventions. The two studies show (a) the tendency to deviate from financial optimality on debt repayment decision is replicated in South Korean undergraduates and (b) a presentation of the actual dollar amounts of interest improves the debt management performance of those with low on financial literacy and numerical skills.
High Housing price promotes daughter preference in China

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ABSTRACT

Son preference existed for centuries in China. Buying houses for sons when they get married, meanwhile, is a prevailing concept and popular practice in Chinese society. Housing has become one of the main costs associated with son rearing in this vein. We assumed that rapidly increasing housing price would change this gender preference paradigm in China. In study 1, a cross-temporal meta-analysis showed that increasing housing price had a significant positive correlation with daughter preference. In study 2, macro evidence based on CGSS data also revealed that the wish for a daughter was significantly higher in cities with higher housing price than those with lower housing price. In study 3, a further experimental exploration revealed that the socio-cultural concept of buying houses for sons played a moderating role between housing price conditions and daughter preference, but this effect only existed in male groups. To be specific, male participators who held a stronger belief that they ought to buy houses for sons in high housing price condition were more willing to have daughters. These results implicate that the traditional birth choice pattern might be modified by the relevant economic factors.
The effect of photos and name change on discrimination against migrants in Austria

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ABSTRACT

In German speaking countries, it is common for applicants to include their photographs to their résumé when applying to a job. This experiment takes advantage of this procedure as it allows for two different indicators for migration background in an experimental setting: the name and the photograph of a candidate. In this study we examine the employment chances of migrants for whom these indicators diverge. Adopting a local name may be interpreted as a signal for higher levels of integration and help job applicants even if their photos reveal a non-white ethnicity and thereby a migration background. Another question we tackle concerns the effect of attaching a photo at all. In the public debate it is often argued that the attachment of photographs may hurt minorities as it makes their minority status more salient in an application. For this reason we examine whether migrants can better their relative employment chances by not attaching photographs. We find that when attaching photographs, African but not Asian applicants suffer from discrimination in our experimental setting. African candidates can better their chances by adopting a local name, but even then they remain discriminated in comparison to autochthonic Austrians. Interestingly, if candidates do not attach photos despite the convention to do so, we find discrimination not only against African, but also Chinese applicants.
Time-induced stress effect on financial decision making in real markets: The case of traffic congestion

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ABSTRACT

We study the role of stress induced by time constraints on investors’ decision making. Arguably, the immediacy of trading decisions thrusts floor traders to integrate both intuition and analytical thinking into their decision making tasks. Moreover, the need to perform contemporaneous tasks and external interference such as arriving unexpectedly late to work, might exacerbate acute stress and its impact on decision making. Accumulated laboratory research suggests that time stress may impact financial decisions, mainly in the loss domain. The goal of our research is to study this issue in real financial markets. We use data on traffic congestion, weather conditions and derivative prices in Moscow. The main dependent variable we employ is the slope of the implied volatility function (IVF) of options on RTS futures (cf. Bollen and Whaley, 2004) at the left-hand side of the volatility smile (corresponding to the loss domain). We find that, controlling for relevant factors, this slope at open of the main trading session is higher subsequent to morning traffic jams, suggesting that investors under stress assign higher weights to extreme loss scenarios. This behavioral pattern is pronounced enough to be economically exploitable, before transaction costs, by an intraday trading strategy which we devise and test.
Non-standard preferences in retail structured investment

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ABSTRACT

A computerised experiment is designed to characterise the valuation of retail-oriented structured deposits in light of Cumulative Prospect Theory under uncertainty (henceforth: CPT). Yearly framed-field deposits are individually tailored in a two-stage process where subjective expectations regarding FTSE’s performance between July 2017 and June 2018 are elicited first, and then used to design uncertain deposits building on FTSE as the underlying. At the first stage, the bisection algorithm is used to elicit the median, lower quartile, and upper quartile assessments of FTSE return in the investment period. At the second stage, each subject evaluates 20 structured deposits, where the exact terms of each deposit are derived from the forecast statistics elicited earlier. Again, a bisection algorithm is applied to elicit the certainty equivalent of each deposit. The 20 deposits are constructed in 10 pairs to open possibility for testing the main assumptions of CPT directly; e.g., testing loss aversion by comparing the certainty equivalents of a 8% or -2% deposit to the certainty equivalents of a paired 6% or 0% deposit. Beyond the paired comparisons, CPT is estimated on individual basis to characterise the demand for limited loss structured deposits formally. The analysis robustly reveals that standard assumptions of Prospect Theory such as risk-aversion for gains and loss aversion overturn in the valuation of retail-oriented deposits of the type explored in the experiment. The results are discussed in light of the literature on context-dependent preferences and recent accumulating evidence on violations of Prospect Theory assumptions.
The downside of being upbeat: Cognitive biases compel consumers to save less and borrow more

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**ABSTRACT**

We demonstrate that cognitive biases in expectations compel consumers to save less and borrow more. The four cognitive biases examined here are: confidence (the expectation of positive personal outcomes), optimism (the tendency to be positive about the future), illusion (the expectation of better personal outcomes compared to others) and the self-serving bias (the tendency to view good outcomes as endogenous and bad outcomes as exogenous). Confidence translates into higher borrowing for lower income households, and into lower savings for higher income households. Results are persistent over a person’s lifetime and we find little evidence of learning.
Green, yellow or red lemons? Framed field experiment on houses energy labels perception

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ABSTRACT

Labels are increasingly popular among policy-makers, companies and NGOs to improve consumers’ awareness, especially about environmental footprints. Yet, the efficiency of these informational tools is mostly looked as their ability to shift behaviors, whereas their first goal is to enable people to discriminate labelled goods. This paper studies how the complex information displayed by houses’ Energy Performance Certificates is processed by real economic agents. Through a randomized framed field experiment on 3,000 French subjects, we test the impact of these labels on people’s perception of a home energy performance. Results evidence that 24% of subjects did not take heed of the energy label. Unexpectedly, we find out that gender is the most differentiating characteristic in this changing sensitivity to energy performance certificates. We interpret this effect by the Selectivity Hypothesis: energy labels design engages more male subjects. Among sensitive subjects, energy labels’ efficiency to transmit information is mixed, as our results indicate a Bayesian reading of houses energy labels. Subjects identify separately each label’s grades, and their perception is not systematically biased by individual characteristics, but idiosyncratic features blur their judgment. Moreover, this perception exhibits strong asymmetries. While worsening grades induce decreasing judgments, upgrading label’s class do not strongly enhance people’s evaluation of energy quality: on the contrary, top level quality label seems to undergo skepticism and intensifies idiosyncratic noise.
Ransomware in the Lab: An experiment on cyber risk-taking

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**ABSTRACT**

Ransomware is relatively new form of cyber-attack in which a victim’s files are encrypted and a ransom is demanded for release of the key to decrypt the files. We develop a simple game-theoretical framework with which to study ransomware. In the first stage an individual can spend money to insure against cyber-attack. If attacked the individual then, in the second stage, can spend resource to try and recover her files. We then compare a loss and gain frame drawing on insights from prospect theory. In the gain frame a subject is predicted to spend on insurance and not on recovery. In the loss frame a subject is predicted to spend on recovery and not on insurance. We report the results of an experiment that supports our theoretical predictions. Our results suggest that the framing of cyber-awareness interventions (to gain rather than loss) may increase secure behaviour. It also suggests that criminals would do best to frame ransom demands in terms of a loss frame.
Stability of preferences and personality: New evidence from developed and developing countries

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ABSTRACT

The stability of preferences and personality traits is a crucial assumption in most economic models and underpin many empirical findings. Using an innovative method developed by Salamanca (2018), we provide new evidence on the stability of risk and time preferences, the Big Five personality traits and locus of control using multiple large and representative household panel datasets from seven countries around the world. We provide formal tests of their stability, the role of major life shocks for changing them, and we estimate their measurement error. We find that preferences and personality traits all have very strong autoregressive components in developed countries, but risk preference is not very stable in developing countries. This study provides the most detailed and comprehensive evidence that both preferences and personality traits are stable over time and across countries.
Guilt aversion and trust: An analysis of heterogeneous factors

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ABSTRACT

A large body of research in the social sciences suggests that expectations are important for decisions involving trust. A popular explanation of the influence of expectations on trust is guilt aversion. This paper explores potential sources of heterogeneity in guilt averse behavior using a novel experimental design. First, I study how people trade off their feeling of guilt with their material payoff in a trust game under different incentive schemes. Then, to single out the determinants of heterogeneity, I analyze the influence of personality traits and demographics on guilt aversion. The data reveal significant heterogeneity across incentive schemes and suggest that guilt aversion becomes more relevant when the stake in the game increases. Moreover, females and participants scoring high in Openness to experience are more likely to be driven by guilt aversion, even after controlling for standard measures of guilt proneness and compliance used in psychology.
Investigating the use of role models to improve attitudes to education among white ‘working-class’ boys

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ABSTRACT

White British boys from the poorest backgrounds are the worst performing students in English schools. There is an a rich vein of sociological research which describes how these students perceive academic education as incompatible with notions of ‘working-class identity’ and masculinity; however, there is little research on how counter these attitudes. One approach is to use university students as role models to inspire young people to invest in their schooling. However, despite the extensive use of so-called ‘student ambassadors’, there is limited evidence on their efficacy. We pilot a small-scale randomised controlled trial to test whether exposure to a video vignette of an inspirational male student ambassador can improve attitudes to education among low-income white British students. We observe a significant increase in identitification with school for male students but there is no effect for female students. Moreover, treatment is associated with a significant decrease in university aspirations for female students. We discuss how this contributes to our understanding of same-gender role models and outline plans build on these pilot results.
Gender differences in economic socialisation of Norwegian adolescents

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ABSTRACT

This study investigates if parents raise boys and girls differently when it comes to money management, saving and spending. Results from the OECD's international financial literacy surveys show that there are considerable gender differences in financial knowledge, where women, in most countries, are less knowledgeable than men. While the gender differences in financial knowledge in some countries may be attributed to traditional gender roles, this is not true for all countries where large gender gaps were identified. For example, the OECD-survey data from Norway show that the gender gap in financial literacy is large, despite a high degree of equal opportunities for men and women.

To explore if the observed gender differences in financial knowledge may be explained with gender differences in parental practices, data collected in 2005 for a study on economic socialization were analysed. Data were collected from 600 14-15 year old students and their parents. The results show that the ratios of boys and girls who report they receive regular pocket money are the same, but boys report receiving significantly lower amounts than girls do. Boys must to a larger degree than girls work for their money and are to a higher degree encouraged to do so. We found few gender differences in the frequency of how often parents try to influence, monitor or control their child's spending, except that boys were encouraged to save more often than girls. Implications of the findings will be discussed.
Status quo effect within PROMETHEE

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ABSTRACT

The Preference Ranking Organization Method for Enrichment Evaluation (PROMETHEE) is among the most known and widely applied outranking methods, it gives an outranking relation through the pairwise comparison of the examined alternatives in each separate criterion [Brans and Vincke (1985); Brans et al. (1986)]. By introducing several types of generalized criteria, PROMETHEE allows for an enrichment of preference structures which is better suited for handling uncertainty or imprecision characterizing ill-structured problems. It namely suggests six types of generalized criteria accepting indifference and/or preference thresholds for delimiting the indifference and preference area, as well as intermediate preference states. The parameters needed to specify criteria have a close correspondence with economic, technical or social considerations and can be elicited directly from the decision maker (DM).

The elements of reference dependency and loss aversion incorporated into the PROMETHEE method can be used to analyse status quo effect in multi-criteria decisions. It is illustrated by case of municipal companies MPO and KHK operating in Cracow, Poland. Modified PROMETHEE is used for the problem of selecting the optimal solution for cooperation of two municipal companies to optimally implement the city’s policy. As criteria affecting alternatives, formal and legal aspects, tax aspects, financial analysis, waste management, social aspects and the experience of analysed municipal companies were taken into account. The criteria proposed are both quantitative e.g. financial analysis and qualitative e.g. social acceptance.
Understanding how risk preferences and social capital affect farmers’ behavior to anticipatory and reactive adaptation options to climate change: the case of vineyard farmers in central Chile

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ABSTRACT

The effects of climate change on agriculture have been widely studied. However, it is necessary to keep studying the responses that farmers could have to climate change. One of these responses is the adaptation. We have used anticipatory and reactive adaptation because we wanted to know if farmers prefer options to avoid or to face negative effects. The objective of this research was to understand how risk preferences along with social capital affect the decision to implement anticipatory or reactive adaptation options to climate change. This study took place in central Chile, data were collected through a field experiment from September to December 2016 with 163 vineyard farmers; we used the structural and midpoint methods to estimate the Cumulative Prospect Theory (CPT) parameters. Finally, we identify 5 anticipatory and 4 reactive adaptation options. The parameters indicate vineyard farmers are strongly risk averse and sensitive to losses, and their determinants are grape area, membership and subjective norms for risk aversion, and age, household size, and education for loss aversion. The main drivers for anticipatory adaptation are network, trust, time to market and area, and the main drivers for reactive adaptation are risk aversion, institutional trust, age and time to market.
Losing a real-life lottery and dishonest behavior

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ABSTRACT
Dishonesty is abundant in modern economic life. Taxpayers cheat the government (Cowell, 1990), employees cheat their employers (Shapiro and Stiglitz, 1984) and producers systematically exploit consumers’ psychological weaknesses and ignorance through manipulation and deception (Akerlof and Shiller, 2015). Over the past two decades, behavioral economists and social psychologists have been designing numerous lab and field experiments with the purpose of deriving insights on people’s tendency to cheat. While the major experimental effort has been devoted to examining the effects of age, gender and background characteristics (e.g., field of study, academic achievement, professional identity, creativity, religiousness, criminal past, social circle) on dishonest behavior, a few recent studies have focused on the effects of temporary cognitive and emotional states. Arguing that honesty requires self-control to overcome selfish impulses and that self-control necessitates cognitive effort, Mead et al (2009) and Gino et al (2011) conducted a series of experiments to show that dishonest behavior increases when cognitive resources have been depleted by prior exertion. Following these findings, Kouchaki and Smith (2014) set up an experimental study to show that people cheat more in the afternoon, when their cognitive resources are too depleted to resist moral temptations, than in the morning. Vincent et al (2013) found that people experiencing positive affect (e.g., joy or cheerfulness) when facing temptation to misbehave, are more likely to do so than people experiencing neutral affect, suggesting that positive affect provides the cognitive flexibility necessary to reframe and to rationalize dishonest acts. Schurr and Ritov (2016) demonstrated that winners of a competition behaved more dishonestly in a subsequent unrelated task than competition losers, proposing that the experience of winning a competition enhances a sense of entitlement which provides a justification for moral disengagement.

Wondering whether winning a lottery has a similar effect to that of winning a competition, Schurr and Ritov (2016) conducted another experiment which revealed that lottery winners failed to exhibit significantly different behavior than losers. They thus conclude that the difference in
unethical behavior observed in the competition study is apparently related to the experience of beating a rival rather than to the mere experience of winning. Considering, however, the fact that lottery winners were promised a pair of earbuds and that lottery losers did not really lose anything aside from not getting those earbuds, the indistinctive performance of lottery winners and losers is not very surprising.

The present paper reports the results of an experiment destined to examine the effect of winning and losing a popular scratch-card lottery, operating in Israel by a public benefit agency, on subsequent dishonest behavior. Unlike Schurr and Ritov (2016) lottery, participation in the real-life lottery requires the purchase of a lottery ticket (i.e., a scratch card) and involves the risk of suffering a real loss. Furthermore, the lottery offers scratch cards at various prices with chances to win various amounts of money, thus winners and losers vary in the amounts of money they end up winning or losing. People who were observed purchasing scratch cards at selling kiosks were offered, upon completing scratching their cards and discovering whether (and how much) they have won or lost, to participate in a simple task with monetary payoffs and an opportunity to increase their pay by acting dishonestly. The results reveal that lottery losers behave significantly more dishonestly than lottery winners and that honesty monotonically increases with the net profit derived from the lottery (amount won minus lottery price). Put differently, the greater the net loss, the more dishonest the subsequent behavior.
Social status as a cue for tacit coordination in a repeated Battle-of-the-Sexes game

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ABSTRACT

In many everyday situations, people have to coordinate their decisions with those of others. However, such coordination is often hampered because communication is limited or absent. Yet, even in the complete absence of communication, people are often able to achieve successful coordination. But how do they do this? In the talk, I argue and demonstrate that players can use social status as a cue for tacit coordination when they have asymmetric preferences.

Earlier studies on this topic (De Kwaadsteniet & Van Dijk, 2010) investigated the influence social status in one-shot Battle-of-the-Sexes games (or BoS-games). In BoS-games, two players receive a certain payoff if they manage to both choose the same option (A or B), but they have asymmetric preferences (i.e., one player prefers option A and the other prefers option B). In such BoS-games, it is often quite hard to successfully coordinate, as both players tend to choose their own preferred option. In such cases, De Kwaadsteniet and Van Dijk showed that even a minimal cue of social status (manipulated by labelling one of the players as “leader” and the other as “subordinate”) can facilitate successful coordination. Specifically, they found that in one-shot BoS-games lower status players tend to defer to the preferences of the higher status players, thereby coordinating on the option preferred by the “leader”. In other words, players tend to use a rule of deference to coordinate their decisions. These findings corroborate the idea that people can use social status as an effective cue for tacit coordination in coordination games with asymmetric preferences.

However, it should be noted that the above results were all found using one-shot BoS-games. In this presentation, we will introduce a recent experiment investigating whether these effects generalize to multiple-trial coordination games. In a repeated BoS-game, it is usually easier to coordinate than in its one-shot version, as players can coordinate their decisions using history-contingent strategies, such as turn-taking/alternating. Such turn-taking patterns frequently appear in repeated BoS-games (e.g., Andalman & Kemp, 2004), which then leads to successful coordination and (fairly) equal outcomes. For such turn-taking patterns to emerge no social status cues are necessary, but it is essential that players play the game repeatedly with the same partner (fixed dyads).

But what if social status is introduced in such repeated BoS-games? Will the players then follow the norm of deference, just as in the one-shot version? In other words, will higher status players then stick to their own preferred option, and will lower status players then defer to the preferences of the higher status player? Or will they then start following the turn-taking rule instead? For the high status player, it is most attractive to follow the former strategy as this yields the highest

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payoff for him/herself. For the low status player, by contrast, turn-taking is more attractive as this yields higher payoffs than always deferring. As such, a conflict might occur between the strategies the high and the low status player prefer. This conflict might then hamper coordination in such a repeated BoS-game with social status differences. In other words, it might very well be that in a repeated BoS-game social status does not facilitate coordination, but actually hinders it.

To test this reasoning, we set up an experiment in which 49 dyads were presented with a 30 round BoS-game with fixed partners. There were two conditions, to which the dyads were randomly assigned: (a) a control condition, in which the players were simply called Person 1 and Person 2, and (b) a status condition, in which one player was called Leader and the other was called Subordinate.

The findings of this experiment were quite remarkable and very different from what we had expected. As it turned out, in both conditions dyads were remarkably successful at tacitly coordinating their decisions, and success rates increased over time (i.e., more than 80 % successful matches in the final round). However, how the dyads achieved such high levels of success differed per condition. In the status condition, dyads displayed a much higher occurrence of turn-taking than in the control condition. Specifically, in the status condition it appeared that 48.8 % of all rounds were part of a turn-taking sequence (as calculated using a turn-taking index; Diekmann & Przepiorka, 2016), whereas in the control condition this was the case in only 21.3 % of all rounds. By contrast, in the control condition there was a much higher occurrence of deference than in the status condition. Specifically, in the status condition only 10.8 % of all rounds were part of a deference sequence (where one player defers to the other player repeatedly), whereas in the control condition this was 34.3 % of all rounds. So, in the status condition dyads primarily used turn-taking to achieve coordination success, whereas in the control condition they primarily used deference to coordinate their decisions. Both strategies resulted in comparable levels of coordination success.

In the discussion of this presentation, we will elaborate on how these unexpected findings might be explained, and we present ideas for follow-up research.
The psychological price of trust repair

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ABSTRACT

Although the three main factors in trust repair have been studied; apology, transparency/explanation for violation, and monetary compensation, surprisingly no attention on personal and situational factors surrounding the trustor and the trustee. This study focused to see if perceived asymmetric status between the trust violator and the victim and level of violation will have an effect to trust repair. Other interesting variable is personality of the violator or victim such as culture of honor and happiness level was also measured. Modifying procedure from Desmet, et.al (2010), we designed this study as 2(level of violation: high vs low) x 3 (Status: high, equal, low), between subjects. Participants were undergraduate students (N=180) at State University of Makassar. We found statistically significant differences in level of trust between Round 1 (trust), Round 4 (trust building), Round 5 (trust repair), and round 7 (trust maintenance) (F=4.594, p = .03, η2= .03); differences in level of trust across treatments, (F=2.445, p = .036, η2 = .06). Differences across treatment was particularly found among high status-high violation level with equal status-low violation, and with low status-low violation, high status – low violation with equal status – low violation, and high status – low violation with low status – low violation (F=3.458, p = .04, η2 = 1.00). We also found that subjective well-being, perceived status and violation level were significant in predicting trust repair.
The dual process of persuasion regarding expiration dates and food waste

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ABSTRACT

In my research, I am looking at how consumers react to the expiration dates, before and after they were informed about the differences between them. For this purpose, I am using the eye-tracking method, which allows testing of the dual process model of persuasion, notably the elaboration likelihood model (Patty and Cacioppo, 1986). The process of persuasion occurs through two different ways of learning information. One requires a lot of attention and focus, while the other requires much less attention and cognitive effort.

In order to cover these two conditions, I designed four treatments. I test my cognitive effort and attention with the help of eye fixation, or how often the subjects look at product information, including expiration dates. I also analyze the pupil size, which indicates the attention of the subjects in the laboratory experiment. A similar study was conducted by Yang (2015) by applying eye tracking to the elaboration likelihood method in online shopping. In addition, I test the theory of the planned behavior of Ajzen and Fishbein (1977) and pro-savings and pro-environmental attitudes through a questionnaire. I am currently starting this experiment and would be delighted to present the preliminary findings at your conference.
Personal carbon allowances: Can a budget label do the trick?

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ABSTRACT

In this study, participants in a computerized experiment were asked to manage Personal Carbon Allowances (PCAs) and tokens (here an experimental currency) simultaneously and to spend their budget on either private or public transportation. They participated in four treatments, which differed with respect to the available budget. Treatments 1 and 2 served as a baseline and concerned the administration of tokens only. In treatment 3, PCAs encompassed an environmental label on the budget in favour of public transportation. This increased choices for public transportation by 12 percentage points, when comparing to treatment 2. In treatment 4, by labelling a part of the budget for public transportation, subjects increased their spending on that transport mode by 15 percentage points when comparing to treatment 2. These findings contribute to the academic and policy discussions on whether PCAs could provide an effective instrument to tackle increasing levels of pollution from transportation.
The effect of experience on context-dependent decisions

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Tomás Lejarraga

ABSTRACT

Does the well-documented “decoy effect” emerge in decisions from experience among risky options? We report a series of experiments where participants made choices between gambles and they could learn about the options from description, experience, or both. The results consistently showed no traces of the decoy effect when participants learned from experience. Even when participants read precise descriptions of the options, actually experiencing those options eliminated the decoy effect. Increasing the distance between the decoy and the target did not make the decoy effect emerge in decisions from experience, but seemed to reduce the decoy effect in decisions from description. Overall, the results show that the decoy effect in decisions under risk is not robust to situations that involve learning from experience.
Less is more and more is more? Paper versus digital in financial communication: An experimental study

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ABSTRACT

The need to ensure people are saving for retirement and reading their financial reports have prompted debate among regulators. Certain countries, such as Australia and Israel, are requiring a move to short-form reports and some countries, such as Germany, Austria, the Netherlands, the United Kingdom, Italy, Belgium, and Hungary are requiring digital reporting, instead of or in addition to delivering reports through the mail system. In a series of experiments, we investigated people’s ability to locate essential information in short versus long financial reports, in both paper and digital form. The ability to find information was sensitive to the length of the report with opposite effects in the different media (paper vs. digital). In the paper experiment, participants found information and answered questions better when provided with short reports, whereas in the digital experiments, participants responded better when provided with long financial reports. Our results indicate that in digital communication, “more is more”. These findings contribute to the current discussion regarding financial and pension information communication.
Revealing the economic consequences of group cohesion

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**ABSTRACT**

We introduce the concept of “group cohesion” to capture the economic consequences of ubiquitous social relationships in group production. We measure group cohesion, adapting the “oneness scale” from psychology. A comprehensive program of new experiments reveals the considerable economic impact of cohesion: higher cohesion groups are significantly more likely to achieve Pareto-superior outcomes in classic weak-link coordination games. We show that effects of cohesion are economically large, robust, and portable. We identify social preferences as a primary mechanism explaining the effects of cohesion. Our results provide proof of concept for group cohesion as a productive new tool of economic research.
The effects of feedback on lying

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ABSTRACT

This study investigates the effects of feedback on an individual’s decision to lie. Evidence from our experimental data indicates that the presence of feedback substantially reduces people’s propensity to lie. Moreover, negative and positive feedback has distinct effects on a person’s moral decision. Honest people who are being falsely punished with negative feedback are substantially (about two to three times) more likely to engage in lying in the future than honest people who are being correctly rewarded with positive feedback. In addition, liars who are being falsely rewarded are not substantially different from liars who are being correctly punished in their decision to lie in the future, which suggests that there are no differential effects between positive and negative feedback for those who lie. Perhaps because people who have decided to lie won’t care about how others think of them. Overall, our results imply that feedback is effective in preventing dishonesty but should be used with caution when lies cannot be perfectly detected.
Time –inconsistent generosity– present bias across individual and social contexts

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ABSTRACT

We extend the study of present bias from intertemporal choices for own consumption to altruistic behavior. In our longitudinal experiment, subjects make a series of intertemporal allocation decisions of real-effort tasks between themselves and another person. We find substantial time inconsistency in generosity: agents become disproportionately more selfish when decisions have immediate rather than delayed consequences. Using structural estimations, we show that this is due to agents exhibiting present bias in own but not in others’ consumption. At the individual level, we find that present bias is a stable behavioral trait which is correlated across individual and social contexts.
Regulatory focus, consumer values, and pro-environmental behaviors

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ABSTRACT

This study contributes to existing knowledge by relating regulatory focus (RF) with the adoption of pro-environmental behaviors (PEB), proposing that two consumer values, namely consumer innovativeness and consumer materialism, together with perceived consumer effectiveness (PCE) mediate such a relationship. Only a couple of studies have addressed the relationship between RF and pro-environmental issues, and these obtained contradictory findings. A self-report questionnaire was distributed in a Portuguese municipality with the collaboration of a group of schools. About 1,600 questionnaires were distributed and valid responses were received from 925 individuals. We found evidence that the measures are reliable and valid. The results indicate that Promotion is positively related to consumer innovativeness, materialism, and PCE, and this conforms to predictions. Prevention is positively related to materialism and PCE, and positively related to consumer innovativeness. The latter is an unexpected finding. As predicted, materialism is negatively related to PCE. Innovativeness is also negatively related to PCE, but this was unexpected, and PCE is strongly associated with PEB. Finally, we assessed the significance of the indirect effects. Promotion does not have an indirect effect on PEB. However, promotion has a negative indirect relationship with PCE. As to prevention, we determined that it has a negative indirect effect on PCE and a positive one on PEB. Finally, both consumer innovativeness and materialism have a negative indirect relationship with PEB. These results contain a number of novel findings, adding to existing knowledge in a substantive way.
Relational job characteristics and the creativity of service employees

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**ABSTRACT**

Service jobs are marked by several characteristics that make distinctive the antecedents of employee creativity. The high degree of interpersonal interaction as well as the heterogeneous nature of customers’ desires contribute to the unstructured nature of many service jobs, and this requires creativity from employees. Hence, we contribute to existing knowledge by investigating the role of the relational characteristics of jobs on the creativity of frontline service employees, an issue that, as far as we know, has not been investigated before. Based on Diefendorff et al. (2005), we consider the frequency, duration, and routineness of interpersonal interactions. Moreover, we also consider emotional display rules, which refer to the standards placed upon employees concerning the expression of appropriate emotions in interactions with customers. Our model predicts that the relational characteristics of jobs have a direct as well as indirect relationship with employee creativity, namely through intrinsic motivation. Data was collected through questionnaires, which were distributed through the employees of 18 retail organizations, and we asked supervisors to assess the creativity of their employees. We obtained 260 usable dyads. The results show that duration, frequency and positive display rules are positively related to intrinsic motivation and creativity; routineness is not significantly related to intrinsic motivation but is negatively related to employee creativity; and negative display rule is positively related to intrinsic motivation, which was unexpected, and negatively to employee creativity, as predicted. Apart from the theoretical contribution, these results yield significant practical insights.
People-centric solutions for organizations: no behavioral intervention without behavioral measurement

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**ABSTRACT**

Public and private organizations are increasingly applying behavioral economics methods to a variety of issues such as mechanism design and incentive architecture. Consulting companies with a behavioral economics focus are also rapidly increasing in number. However, there are very few that offer solutions in the world of human resources and even fewer that have focused on providing solutions to existing problems in the field of employee selection and promotion. Providing such solutions is even more difficult when the analysis involves team work and therefore not only individual characteristics but also how people fit with each other should be accounted for. Applying experimental tools used in behavioral economics can help companies learn more about their (current or prospective) workforce and, more specifically, about their employees’ tastes and inclinations. This has important implications for broader organizational performance since some designs/incentives are likely to affect only individuals with a particular disposition (e.g. risk averse or fairness oriented) but not others or can even have opposite effects on individuals with different sets of preferences. Furthermore, when people work in teams, team members’ characteristics may either crowd in or crowd out to increase performance. Thus, measuring employees’ behaviors and preferences is essential to understand both organizational performance and the impact of (behavioral) interventions in organizations. In this talk, we point out a number of promising avenues for the application of a behavioral economics lens to understand and manage people within organizations.
Can households with limited resources finance large investments? Repayment behavior of borrowers of an innovative flexible loan product in Tanzania

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**ABSTRACT**

People with little income, especially those living in developing countries, are usually not able to borrow in order to finance large investments. Lenders are less willing to lend to poor borrowers, due to asymmetric information, lack of collateral and the often weak legal system that makes contract enforcement difficult. Furthermore, low-income people are often self-employed, their income highly fluctuates and is more prone to shocks which makes lending to them more risky. Microfinance has offered one way for low-income people to borrow. Here small loans are given, often using joint liability and rigid repayment schedules. Social capital is used instead of physical capital to collateralize loans. However, more recently microcredit has come under criticism. It is argued that the fixed repayment schedules can hinder consumption smoothing, lead to overindebtedness and encourage sub-optimal investment decisions (Jain and Mansuri 2003; Pearlman 2010; Shoji 2010; Field et al. 2013). Furthermore, loan sizes are deemed too small to finance the large investments that are needed for long-term business growth (Banerjee et al. 2015). There has been a call for more flexible loan products to match the fluctuating cash flows of the self-employed (Field et al. 2013; Beaman et al. 2015; Banerjee, Karlan, and Zinman 2015). Yet, a common concern is that the highly unpredictable environment in which the poor often operate as well as behavioral biases such as inattention to income fluctuations (Karlan et al. 2016) and present bias (Fischer and Ghatak 2016) may limit the feasibility of such products.

In this paper, we examine these concerns by studying repayment behavior of borrowers of one of the few existing flexible loan products that target the low-income population and provide financing for large investments. In this particular context, the loan is tied to a solar home system, which can
be used for both business and home purposes. The lender operates in different countries in East-Africa, where the electrification rate in rural areas is just around 10%, and there is thus high demand for alternative electrification sources (World Bank 2017). Potential borrowers go through a detailed loan eligibility assessment. After being approved, they receive the solar home system, which also serves as collateral. Borrowers have three years to repay the loan. At the same time, they have considerable flexibility when and how much they pay. The interesting twist is that the loan repayment also charges the system similar to a pay-as-you-go device; the system switches off automatically if it is not sufficiently charged. There is thus immediate punishment of non-payment.
Theory-of-mind ability and cooperation

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**ABSTRACT**

The ability to accurately assess others’ intents, beliefs, and emotions—called Theory of Mind (ToM)—is conjectured to be important for social cooperation. We study the role of ToM ability in fostering cooperation in the simultaneous and sequential prisoners dilemma (PD) games. Our norm-based model predicts that high ToM ability individuals will believe in more cooperation and cooperate at higher rates than low ToM ability individuals in the sequential PD game relative to the simultaneous PD game. Experimental results match these predictions and reveal that ToM affects cooperation via beliefs about others’ cooperativeness rather than fixed preference traits.
Price of altruism in peer-to-peer markets AirBnb and CouchSurfing in the Philippines

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ABSTRACT

AirBnb and Couchsurfing are two of the second generation peer-to-peer markets or sharing economy which command lodging facilities for tourists and travelers. Second generation entails more trust and interaction among users and owners of the good or service provided. Lodging facilities hosted in AirBnb are rented for a fee, while facilities in Couchsurfing are provided for free. This paper estimates size and scope of altruistic behavior present in AirBnb and Couchsurfing hosts of lodging facilities in the Philippines. Under rational assumptions, homeowners would want a positive gain (net of pecuniary and non-pecuniary costs) from renting out their respective facilities. The measure of altruistic behavior would then come from the significant differences in each respective lodging facility’s implicit price as a function of each lodging facility’s characteristics.
Dissecting consumption patterns of Philippine households in armed and conflicted zones

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**ABSTRACT**

This paper is concerned with the consumption trend of households in conflicted areas compared with post-conflict areas and normal areas. The primary factors considered here are family size, and income affecting consumption of goods with respect to household’s zone whether conflicted or not. Regression analysis was implemented on panel data of Annual Poverty Indicator Survey of the Philippines (APIS), which shows the socio-economic profile of Filipino families and other information relating to their living conditions. The results generally follow intuition that necessary goods such as food remain to be at the foremost priority of households whether in conflict or post-conflict zones. This paper hopes to affect policy measures related to areas in conflict especially on rehabilitation measures for households in conflict and post-conflict zones especially on food supply must be always available for these households as per result have shown, they remain the top good most insensitive to change.
Does self-employment performance mediate the effect of mental budgeting on tax compliance?

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**ABSTRACT**

Does self-employment performance mediate the effect of mental budgeting on tax compliance? In the history of research on mental accounting, only recently experimental manipulations of mental budgeting have been replaced by mental accounting scales to study the effects of mental accounting (Antonides et al., 2008; Muehlbacher and Kirchler, 2013). Here we study the effects of mental budgeting by self-employed people without personnel (SWoP) on their reported tax compliance behavior. Since mental budgeting has been assumed to serve as a self-control device, limiting excess spending (Cheema and Soman, 2006), we expect better financial management of the company when the entrepreneur exercises mental budgeting. Hence, mental budgeting will enable the entrepreneur to meet tax obligations, which is societally important since especially starting entrepreneurs may relatively more often face tax payment arrears, resulting in costly measures taken by the tax department to collect the taxes due. Here, we assume and test if mental budgeting improves the company’s financial management, in turn leading to compliance with tax payment procedures.

We use data collected early 2015 from two independently drawn samples from the same population of SWoP in the Netherlands. The first sample served to construct the mental budgeting scale, financial management indicators and tax compliance scales, and consisted of 430 SWoP. The second sample served to validate the scales and to study the mediation processes associated with the effects of mental budgeting on financial management, and of financial management on tax compliance, and consisted of 762 SWoP. Both samples consisted of roughly 50% of companies existing for less than 3 years, and 50% of companies existing for 3 years or longer. An online questionnaire was presented to all participants, including 29 items on different aspects of mental budgeting, several items on having an overview of income and expenses, and
making ends meet, an item on how long the company would last without any income, a tax compliance scale taken from the OECD (2004), the sum of six measures taken against the company because of payment arrears, and a number of company and entrepreneurial background characteristics.

Analyses on the first sample shows the reliable construction of a mental budgeting scale (alpha=0.89), overview of income and expenses (alpha=0.71), a tax compliance measure taken from the OECD (alpha=0.84), and measures taken against the company (alpha=0.63).

We used the second sample to estimate the indirect effects of mediation using the PROCESS macro (Hayes, 2017). The indirect effects of mental budgeting, through the time a company would last without income, on both measures taken against the company and OECD compliance were marginally significant (p<0.10).

Mediation of having an overview of income and expenses was marginally significant on the OECD compliance measure (p<.10) but not on measures taken. Mediation of not making ends meet was marginally significant on measures taken, but not on OECD compliance.

The indirect effects of mental budgeting, through sometimes having a bank overdraft, on both OECD compliance and measures taken were not significant. In all cases where we found evidence of mediation, it was incomplete, i.e., the direct effect of mental budgeting on compliance was not completely wiped out by the mediator.

Our research shows why mental budgeting may affect the SWoP’s compliance with tax payment procedures. Since we find only incomplete mediation by the company’s financial management, a direct effect of mental budgeting on tax compliance cannot be ruled out. However, in addition tax compliance may result because mental budgeting leads to better financial management, in particular a financial buffer enabling the company to last for some time without income.
Does punishment improve international cooperation? Results from German and Russian online experiment

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**ABSTRACT**

The disciplining role of punishment in sustaining cooperation has been explored a long ago (Fehr and Gächter, 2000), although it has been questioned because of the endemic presence of antisocial punishment in some cultural areas — in particular, in Eastern Europe (Hermann et al., 2008, Gächter et al., 2010). In this study we explore the role of punishment, along with other institutional and cultural factors in an international experiment involving German and Russian subjects who convene online in real time in “collective risk social dilemma” (CRSD) (Milinski et al, 2006, 2008) games. Subjects in our experiment have to invest in a public fund to avoid the possibility of “catastrophic” losses, equal to 75% of their savings, at the end of a 10-round interaction. The loss is avoided with a probability proportional to the total amount of money that the group invests in the public fund, so that in noncooperative equilibrium, defection still dominates cooperation, but a socially efficient risk-neutral symmetric (socially optimal) contribution is strictly positive. In a cross-country experiment involving 768 subjects from Germany (Kiel and Bonn) and Russia (Moscow and Tomsk), we find that average contributions are quite in line with the social optimum, but German groups achieve higher probability of loss avoidance than Russian groups, especially under punishment treatment conditions. At the same time, cooperative behavior by Russian subjects converge to cooperative behavior by German subjects in international sessions. This suggests that there may be an overall “dividend” from international cooperation in comparison to national cooperation.
When “I pay for you, you pay for me” makes sense: A belief-dependent analysis of equality of opportunities in the dictator game

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ABSTRACT

Thanks to a reciprocal simultaneous dictator game with paired individuals who play between themselves and at the same time the dual role of dictators and recipients, we investigate whether distributional preferences or belief-dependent motivations have a better predictive power. Our results support that intention-based reciprocity has a better explanatory power compared to distributional preferences in this specific context. We suggest some policy and managerial implications.
Balls risk measurement task

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ABSTRACT

Risk preferences and behavior under risk constitute an important topic of economics research. Its applications vary from finance, insurance and mechanism design to a number of normative and positive theories (e.g Subjective Expected Utility (Savage, 1954) Prospect Theory (Kahneman and Tversky, 1979) Rank-Dependent Expected Utility (Quiggin, 1982) et.al.), and in experimental measurement in laboratory studies (Cox and Harrison, 2008; Charness, Gneezy and Imas, 2013). While generalization of normative and descriptive theories at risk remains an open question (Starmer, 2010), risk preferences are widely believed to be well-defined in laboratory contexts (Kahelmeier and Shehata, 1992; Harrless and Camerer, 1994; Hey and Orme, 1994) as well as in the field (Barseghyan e.a., 2013; Dohmen e.a., 2011). At the same time, there exists some evidence that accurate and unambiguous estimation of risk aversion may be difficult to obtain (Anderson and Mellor, 2009; Dave and Eckel, 2010) Possible reason of such inaccurate estimations of subject's behavior under risk is ignoring the fact of subject's possibility to influence on the environment. In contrast to most economics papers, we develop the concept of dynamic, or Bayesian risk preferences, which are not predetermined prior to the experiment (as typically and rather indiscriminately assumed in most of the literature), but are being formed in interactions with the decision environment. We use this concept (proposed first in Belianin, Petrovsky and Sharifullina, 2016) to build the framework of «Target risk measurement task». In this task, in order to earn money, experimental subjects need to catch moving balls moving from the center of concentric circles towards its edge. If any of the balls in the trial surpasses the outer edge, subject earns nothing, but if she catches all of them, her earnings are the larger the closer to the edge the balls were trapped. (Current beta version is available at http://guzey.com/balls_auto/) The main game dynamics is based on moving the balls from the center of the circle to the border. Circle is
divided into concentric sectors (as on the target in the dash) and before any ball cross the border of the last sector (the farthest from the center) you need click on ball to earn game points as depicted on Figure 1. During one iteration, three balls begin to move from the center simultaneously. As soon as the player has clicked on all balls, those balls disappear. Player receives the number of tokens corresponding to the sector, if she clicks all balls within the same sector. Number of sector is equal to 8 and the further the sector from the center the less its area, than less probability to click all the balls inside the sector. The player has five iterations in the game. Player for proper decision need to choose a sector, execute the balls catching and update her beliefs for the next attempt. Following Hoppe (1930) denote prior beliefs as aspirations level. Prior beliefs about her own abilities are updated in a Bayesian way following to with experience accumulated. Risk attitudes in such game are the difference between estimated aspirations level and chosen sector. We use this model to set up an empirical strategy of simultaneously revealed risk preferences and aspiration levels. These latter are estimated from the very first decision, which is taken to be optimal given the individual's prior beliefs about own abilities, which evolve under subsequently coming evidence. We postulate beta prior and binomial update information (success or failure) distributions, which pair is sufficiently flexible to capture a variety of patterns with binomial feedback, and use posterior betas as evolving estimates of subjective abilities. Differences between observed decisions and these posteriors are attributable to risk preferences. We use this model to estimate risk preferences of schoolchildren as well as of the adults. Preliminary resulting estimates suggest that static measures which fail to account for aspirations result in overestimation of risk tolerance, especially among the adults.
Experimental measures of time preferences predict small firms’ financial decisions: evidence from Brazil

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ABSTRACT

We test whether experimental measures of time preferences predict financial decision-making by small entrepreneurs. We selected a sample of small firms from a client database of a large payment acquirer in Brazil. Participants were randomly allocated to one of two groups. Entrepreneurs and financial managers from those small firms made multiple choices between smaller sooner and larger later options either on behalf of their firms (treatment group) or of themselves (control group). Responses to the time preferences questions were then linked to a dataset with the small firms’ usage of credit card receivables prepayment, a financial product in which small firms can anticipate delayed credit card transactions in exchange of a “discount”. The experimental design allows us also to test whether elicited time preferences differ when small entrepreneurs make time trade-off decisions either on behalf of their firms or of their own. We find no statistically significant difference between entrepreneurs’ discount rates elicited on behalf of their firms or of their own. The experimentally-elicited discount rates significantly predict the small firms’ take-up of credit card receivables prepayment. This effect is driven by the participants in the treatment group, for which the experimental measures of time preferences are a highly statistically (and economically) significant predictor of past use of credit card receivables prepayment.
A dynamic model on happiness and exogenous wealth shock: The case of lottery winners.

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ABSTRACT

The sudden acquisition of a large sum of money, known as “wealth shock,” can have unanticipated negative consequences, and actually cause greater unhappiness in its so-called beneficiaries. There is extensive economic literature describing these negative consequences on a macro-economic level, but there is no coherent theoretical model that describes the various consequences of wealth shock on a micro-economic level. To explain both the short- and long-term effects of an exogenous monetary shock (for example, winning a lottery) on individual happiness, this paper offers a novel dynamic equilibrium model of human happiness. A dynamic equilibrium model is best suited for this purpose, because happiness is a dynamic process. The proposed model captures both short- and long-term effects, and describes an equilibrium in which a person’s experienced utility and happiness is improved after the sudden wealth shock, and why at the saddle point, life can become sadder and more miserable. The conditions detrimental to winners’ happiness include reducing the amount of time and effort they allocate to preserving their stock of hedonic capital.
Social norms of allocation in the non-monetary domain

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**ABSTRACT**

Investigation of generosity in the non-monetary domain is important to design allocation and bargaining mechanisms that take people's preferences for generosity into account. Previous studies have shown that people are more generous when they allocate a non-monetary pie compared to allocating a monetary pie (Davis et al. (2015), Story et al. (2015)). This study explores why generosity levels differ between the monetary and the non-monetary domains. To answer this question, I consider differences in social norms of allocation between domains. Results show that distinct social norms of allocation can explain the greater levels of generosity in the non-monetary compared to the monetary domain.
Can visual nudge influence people’s financial decision making? Evidence from a discrete choice experiment

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ABSTRACT

Credit card is one of the most commonly used payment options today, but choosing a suitable one seems to be lacking enough attention from consumers. Nearly nine millions people in the UK are over-indebted and over half of them have difficulty in addressing their debt problems (Financial Conduct Authority, 2014). Various factors are causing this, including the lack of financial knowledge and literacy, and difficulty in understanding the financial costs and consequences of their choices. This research investigates how to best communicate financial costs to consumers. To do so, we developed three treatments where we presented financial costs of not paying credit card debts on time in different ways. The ways of explaining financial costs in the three treatments are numeric methods, APR (Annual Percentage Rate) and monthly costs/interests, and visual risk scale representing the level of APR. The visual risk scale can be considered as an educative nudge, which according to Sunstein (2016), could strengthen people’s capability of making judgements and better choices. In this research, the visual risk scale guides consumers to make better credit card choices (in this case low-cost). The research utilises discrete choice experiments to elicit preferences for credit cards where credit cards are presented with their characteristics, such as cost, interest-free term, and rewards. The web-based discrete choice survey also includes questions on financial literacy, attitudes and consumers’ preferences for repayment options of credit card debt. Our findings show that consumer perceives financial cost differently and how variation in their preferences.
Conservation adoption rates: A field experiment

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ABSTRACT

Due to rising environmental challenges and insufficient budgets, agencies in the US and the rest of the world must seek new ways to promote environmentally friendly behavior. This issue is of particular importance when it comes to farm operations, as modern, intensive agriculture practices are one of the primary causes of environmental degradation. To maximize the effectiveness of a policy design for a given social, economic, and geographic it is paramount to better understand the factors that affect the likelihood of environment related behaviors.

In this paper, we report the results of a field experiment on the conservation stewardship program (CSP) in Nebraska. In cooperation with the NRCS in Nebraska we observed the behavior of 18244 farm operators from low-enrollment counties. A randomly selected 75% of the farm operators received a letter reminding them of the upcoming enrollment period for the CSP. Different farmers got, randomly assigned, different versions of the letter. The first treatment provided factual information, including the financial incentives to sign up for CSP. For the second treatment, we included a statement nudging farmers for empathy with nature and fellow human beings. The third treatment contained the same nudge as in the second treatment, but it was written by hand, instead of copied. The remaining 25% of the population served as a control group. The results show that sending any type of letter leads to a significant increase in the sign-up rate. The most effective was the handwritten empathy nudge.

To further investigate the factors influencing the effectiveness of the various treatments we have used the geographic information systems (GIS) to match the address of farm operators that have received letters from the various treatments with several geographic and socio-economic variables. From a farming perspective, it stands to reason that the soil type and the availability of water are important factors for choices in the context of conservation. Similarly, it seems likely that average income, and education levels, and, perhaps, political affiliation play a role in the effectiveness of our treatments. We are currently in the process of analyzing this data. Farm operators and farms characteristics are heterogenous and as such there is no one silver bullet policy that will encourage all farm operators to shift to a more environmentally friendly style of operation. The results of this study will enable policy makers to better tailor their environmental policies to the target population and thus increase the efficiency at a relatively low cost.
Dishonesty in healthcare practice: A behavioral experiment on upcoding in neonatology

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ABSTRACT

Dishonest behavior significantly increases the cost of medical care provision. Upcoding of patients is a common form of fraud to attract higher reimbursements. Imposing audit mechanisms including fines to curtail upcoding is widely discussed among healthcare policy-makers. How audits and fines affect individual health care providers' behavior is empirically not well understood. To provide new evidence on fraudulent behavior in health care, we analyze the effect of a random audit including fines on individuals' honesty by means of a novel controlled behavioral experiment framed in a neonatal care context. Prevalent dishonest behavior declines significantly when audits and fines are introduced. The effect is driven by a reduction in upcoding when being detectable. Yet, upcoding increases when not being detectable as fraudulent. We find evidence that individual characteristics (gender, medical background, integrity) are related to dishonest behavior. Policy implications are discussed.
Subjective social class promotes prosocial behavior: A dual route model

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ABSTRACT

Social class or socioeconomic status (SES) refers to an individual’s rank relative to others in terms of income, education or occupational prestige. Previous studies repeatedly found a link between social class and prosocial behaviors but differ in terms of the direction of the effect. While some suggests that the lower class are more likely to behave prosocially, there were evidence showing that the upper class may be more disposed to be prosocial. Here we suggest a dual route model to reconcile the conflict by introducing the agency and communion orientations in adults’ spontaneous self-representations. For the upper class, people who are more efficient in the capacity to help others may show more prosocial behaviors; while for the lower class, people who perceive a more intimate relationship with others may be more prosocial. Especially, the subjective social class, that is a person’s conception of his or her position compared with that of others, may play a significant role as it is more related to one’s self-representation.

Three studies were conducted to test the model: Study 1 manipulated the subjective social class by presenting pictures related to the lives of either the upper class or the lower class to participants and measured the agency route using the interpersonal contact efficacy scale. Compared to the less efficacy group, the more efficacy group were more helping, but this effect was limited to the upper class. Study 2 manipulated the subjective social class in a same way and manipulated the communion route using a hypothetical friend or stranger partner. Compared to the stranger partner group, the friend partner group donated more money in a trusting game, but this effect was limited to the lower class. Study 3 measured the two routes at the same while manipulating the subjective social class. Measurement of the agency route is the same as in Study 1, and measurement of the communion route used the inclusion of others in self scale (IOS). The results support the findings of the two previous studies. The implications of the present findings and future directions of exploration were discussed.
Micropolitical leadership in a Taiwanese primary school

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ABSTRACT

Educational reforms in Taiwan during the decade have an increasing impact on the lives and roles of school principals. With recent educational reforms and global impact on educational changes, the nature of school leadership has faced significant transition. Principals in Taiwan have faced more and more challenges both from internal and external sources that often bring about hidden conflicts among teachers and lay participants. This research is based on a case-study approach, mainly via individual interviews in order to portray the “realistic” picture of school micropolitics in terms of leadership. More specially, the foci of the issue of school micropolitics will be on the relationships between the principal and teaching staff to delve into the daily, explicit and implicit, practice of school life. With the introduction of school-based management, principals are expected to meet stronger expectations from internal members, empowering more involvement of decision-making and democratic leadership. The research findings have highlighted the complexity and challenges of the leadership role at the investigated school. Encountering the internal and external expectations and demands, the principal believed that nothing but learning could lead the school to conquer possible difficulties and to achieve better outcomes. After his awareness of educational change, the principal proposed a coping strategy, ‘role-redefining’ to overcome social constraints upon him. Such a coping strategy consists of employing ways to reduce teachers’ resistance to the curriculum reform, trying to act as a mediator to weaken the tensions between teachers and parents.
Financial incentives beat social norms: A field study on retirement information search

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ABSTRACT

A lack of pension knowledge undermines adequate savings decisions. To understand what motivates individuals to inform themselves about their pension situation, we conducted a field experiment with 245,712 pension fund participants. We find that a small financial incentive is cost-effective and increases the rate at which individuals visit their personal pension website by 52%. Our experiment directly compares the effect of financial incentives to different social norms, which turn out to be ineffective in the pension domain. Financial incentives are effective regardless of gender, age and income, while nudges are ineffective for each subgroup.
Are credit-screening contracts designed for men?

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**ABSTRACT**

In theoretical models of credit screening under asymmetric information, banks typically offer incentive compatible contracts (with collateral) to induce borrowers to disclose their private information. However, if women are particularly averse to financial risk in downside risk settings, low risk female borrowers may be classified as high risk borrowers. In consequence, low risk women borrowers may receive the loan designed for the bad borrowers (higher cost in collateral and/or interest rate), or even fail to receive credit. Given that getting credit is key to start or succeed in business, this may represent a glass ceiling in women entrepreneurship propensity. We conduct, in three different European countries, a laboratory experiment to study systematic gender differences in self selection. Do women self-select as "theoretical" good borrowers? Our results show that incentive compatible contracts with collateral fail to disclose women private information, while they disclose men private information. Thus, low risk women borrowers do not self select as "theoretical" good borrowers. Our results show that gender differences arise when subjects face downside risk, i.e. low failure probabilities. As women represent half of the world’s population, we suggest theoretical models dealing with downside risk should incorporate the gender differences in risk attitudes.
Choice process under uncertainty: an eye-tracking analysis

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ABSTRACT

This work explores the features of the choice process under uncertainty through an eye tracking experiment. The research questions on which the experiment focuses are 1) the process model that fits better the process data both in small and large choice sets; 2) the differences in the choice process of fast and slow subjects, and the relation between the response time and the final choice. Subjects are sequentially presented with 14 choices between 2 gambles and 14 choices between 10 gambles. The data both in small and large sets fit the predictions of automatic integration models as Decision Field Theory and Parallel Constraint Satisfaction. Instead, data do not support Priority Heuristic and the standard maximization process assumed by the Expected Utility theory and Cumulative Prospect theory. In small and large sets there are similar eye movements, but in large sets subjects seem to simplify the choice process restricting the consideration set. In two gamble sets, the slow responders do not rely on a deeper cognitive process than fast subjects according to the fixation duration analysis, but the two groups use different search strategies: slow subjects search information in a more systematic manner than fast ones. This evidence is against Rubinstein (2007,2013,2016) classification of slow subjects as deliberative and fast subjects as intuitive because they both rely on the automatic integration of information.
Integral fear increases search effort in more numerate people: An experimental study investigating information acquisition in a decision from experience task

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**ABSTRACT**

The aim of this study was to investigate the effect of numeracy and the emotion of fear on the decision-making process. We hypothesized that more numerate people would sample more information about a decision problem and that the effect of fear would depend on the source of this emotion: whether it is integral (i.e., relevant) or incidental (i.e., irrelevant) to a decision problem. Additionally, we tested how these factors predict choices. In two experiments, we used a sampling paradigm to measure search effort, search policy and choice in nine binary problems included in a decision from experience task. In Experiment 1, we elicited incidental fear by asking participants to recall fearful events from their life. In Experiment 2, integral fear was elicited by asking participants to make choices concerning medical treatment. Decision problems and their payoff distributions were the same in the two experiments and across each condition. We found that more numerate
people sampled more information about a decision problem and switched less frequently between alternatives. Incidental fear marginally predicted search effort. Integral fear led to larger sample sizes, but only among more numerate people. Neither numeracy nor fear were related to the number of choices that maximized expected values. However, across two experiments sample sizes predicted the number of choices that maximized experienced mean returns. The findings suggest that people with higher numeracy may be more sensitive to integral emotions; this may result in more effortful sampling of relevant information leading to choices maximizing experienced returns.
Distributive preferences and effort provision: What determines what?

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**ABSTRACT**

This paper analyzes the link between effort and distributive preferences in an environment, in which effort does not affect the amount to be distributed. We propose a model that suggest that such a link is bidirectional. People adapt their distributional choices to their performance in a self-serving way, but they also exert effort in line with their distributive preferences. We provide evidence of the reverse relationship: individuals who make egalitarian choices later make less effort than people who behave selfishly. Our results thus provide one explanation for self-serving assessments of fairness documented in the literature and place distributive preferences among the determinants of effort and productivity.
Impact of wealth distribution systems on individual trust

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ABSTRACT

The presence of trust ensures social interactions to run smoothly even without the existence of formal contracts (Sutter & Kocher, 2007). Without trust, all kinds of dealings are problematic since everyone eyes each other with doubt. Therefore, trust is essential for efficient economic transactions and serves as a major driver of economic growth and development (Algan & Cahuc, 2010; Holm & Nystedt, 2008). While the link between trust and growth has been established, the underlying reason for variances in trust at the national are not clear.

While some research in social psychology and economics have identified factors that affect an individual's trusting behavior, these studies have focused on exogenous factors and the individual's socio-demographic characteristics. Thus far only a limited number of studies have explored the context of institutions or social mechanisms, even though social mechanisms play a major role in shaping social economic behavior (Hedström & Swedberg, 1998). One of the ongoing issues in social mechanisms is how a nation's wealth 'should' be distributed among its citizens. The exploration of how social mechanisms influence human actions, particularly trusting behavior, can offer new insights and extend the research on trust. Thus, the purpose of this research is to investigate how differing wealth distribution systems impact individual trust by exploring the role of social systems and mechanisms on trust elicitation in the conduct of day-to-day economic transactions.

The study will implement a laboratory experiment with two treatments that will compare the impact of an Equity and Equality based wealth distribution system. A major point of interest is that these two distribution systems have conflicting social agendas that may lead to subjective value judgements of participants, i.e. an individual's reference point may alter the perception of fairness that could impact, or even alter, the level of trust (Höchtl, Sausgruber, & Tyran, 2012).

The experiment has two stages: Firstly, whether or not an equal or equitable wealth distribution affects an individual's perception of fairness, and; secondly, whether or not this impacts the individuals level of trust, elicited via a standard trust game (Berg, Dickhaut, & McCabe, 1995).

It is the aim of this experiment to add to the limited literature on social systems and mechanisms and their role in shaping or restricting an individual's level of trust. Furthermore, by understanding how social systems can influence people's value judgment (e.g., perception of fairness) we can better inform policy-makers in solving social inequalities and inequities by managing people's fairness perception and achieving better welfare outcomes.
Sending out an SMS: The impact of automatically enrolling consumers into overdraft alerts

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ABSTRACT

Incidental charges incurred by UK consumers on their Personal Current Account (PCA) are steep, especially for small amounts of unplanned borrowing and unpaid items. A recent policy mandates major UK banks to send consumers a text message alert of impending charges, allowing them to act before they incur a charge. Using a unique, large and detailed dataset covering the transactions of 1.5 million consumers across 6 banks, and by looking at large-scale automatic enrolment exercises carried out by two major banks, we estimate the effect of automatically enrolling consumers into these alerts. We find that automatic enrolment into alerts has large effects on charges: (i) automatic enrolment into unpaid item alerts (that inform customers of retry periods) reduces charges by 21-24% and (ii) automatic enrolment into unarranged overdraft alerts reduces charges by 25%. We also estimate average treatment effects for different types of consumers, grouped by their pre-alerts level of incidental charges (rare, occasional or heavy), and find that the benefits of automatic enrolment differ markedly between types of consumers. Those who rarely incur charges can avoid as much as half of charges thanks to alerts, whereas heavy users still incur substantial charges after automatic enrolment. We find strikingly similar patterns across the two banks, for both unpaid item and unarranged overdraft charges, providing reassurance that these findings are not specific to a particular customer base or firm implementation.
Empathy, a sense of fairness and dyadic cooperation

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ABSTRACT

Human cooperation is fundamental for society to maintain and for genes to survive. Does empathy-induced altruism promote dyadic cooperation with strangers when individuals were obsessed with equal resources and unequal resources? How does inequality of initial endowments influence the contribution to two-players common goods? To address this question, two laboratory experiments are designed to examine whether empathy induction promotes dyadic cooperation with strangers when a sense of fairness, represented as disadvantageous inequity aversion, was taken into consideration.

Experiment 1 adopted a 2 (Empathy [no-empathy, high-empathy]) × 2 (Endowment [2020, 1020]) between-subject experimental design and a 2-player simultaneous public goods game (PGG). Eighty pairs (N = 160) participants were recruited and randomly assigned into four conditions. The results in Experiment 1 showed that empathy failed to drive an increase in contribution in 2-player PGG, F(1, 76) = 0.015, p = .903, ηp2 < .0001, which places a challenge on the positive empathy-cooperation link and empathy-altruism hypothesis. Moreover, the inequality of initial endowments, 1020 condition compared to 2020 condition, was found to increase the proportion of contributions in PGG, which suggested that increasing inequality that is to stimulate a sense of unfairness was proved to increase cooperation, which is contradict to our research hypothesis that inequality decreases cooperation. A generalized tit-for-tat strategy was the major strategy used for both players from 3rd rounds of PGG and empathy induction did not reduce the likelihood of players using such strategy as expected (Player A: χ2(6) = 8.00, p = .238; Player B: χ2(9) = 12.00, p = .213).

Experiment 1 found that inequality of initial endowments increased proportion of contribution across 10 rounds, which is inconsistent with our research hypothesis. We explained that it is possible for the inequality of endowments does not drive a sense of unfairness, therefore such
inequality does not reflect in their behaviour. But they found the reverse effect that inequality of endowments increase cooperation, maybe it is because the unfairness perception occurs in the 10 rounds interaction, which leads to discrepancy of cooperative behavior. To address this possibility, Experiment 2 was designed to adopt a 2 (Endowment: 2020, 4020) between-subject experimental design and a 2-player simultaneous 10-round PGG. One hundred and twenty-eight pairs (N = 256) participants were recruited randomly assigned to 2020 condition and 4020 condition. This experiment is still in the process of data collection. We predict that in the 2020 condition, in which both players were given 20 tokens in each round, both players will be more likely to reach the mutual cooperation in the later rounds compared to 4020 condition. The generalized tit-for-tat strategy will be more likely to be used in the players’ interaction in the 2020 condition, compared to 4020 condition. Therefore, the relationship amongst empathy, a sense of fairness and cooperation is that as psychological mechanism for inequity aversion, a sense of fairness functions to stabilizer and empathy promotes cooperation directly.
Do consumers think that purchasing bio-based products matter? The role of systems thinking and connectedness to nature

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ABSTRACT

Several consumer products such as cosmetics, detergents or plastic packaging are produced on the basis of fossil fuels contributing to the increase of GHG emissions and climate change (Besi, McCormick 2015). In order to alleviate negative consequences for the environment, these products can also be produced sustainably without fossil ingredients using biomass as raw materials (Bugge et al. 2016). However, Onwezen et al. (2017) found that consumers associate positive as well as negative feelings with bio-based products. One reason for this ambivalence could be that consumers’ beliefs about the environmental benefits of these products differ. Indeed, a crucial determinant for pro-environmental consumption behavior has been found to be the extent to which people believe that their individual efforts make a difference in solving environmental problems (Ellen et al. 1991, Coelho et al. 2017; Ghvanidze et al. 2016; He, Zhan 2018). The concept of perceived consumer effectiveness (PCE) is in line with psychological theories stating that the decision to perform an action depends on the expected results (Ajzen 1991; Bandura 1982). In order to promote pro-environmental behavior, it is therefore crucial to understand the determinants of consumers’ beliefs that their behavior contributes to alleviate negative consequences for the environment (Cojuharenco et al. 2016). However, very little research examined the factors shaping PCE. For example, Vermeir and Verbeke (2006) found that PCE cannot be induced by short term manipulations (e.g. by giving examples how consumption behavior affects the environment) indicating that PCE might be strongly inherent to a person (like worldviews or values). Based on this assumption, we suggest that PCE can be rather described as a worldview encompassing values, beliefs or general assumptions about reality such as a systems-thinking mindset and a sense of connectedness to nature. More specifically, we argue
that people who believe that the ecosystem is a complex whole with several interdependencies and feel connected to nature have a stronger PCE because they recognise that their actions and ecological phenomena are interrelated (Davis, Stroink 2016; Davis et al. 2009). The objectives of this study are twofold. First, we want to move a step further towards understanding the antecedents of perceived consumer effectiveness. Therefore, we look at systems-thinking and connectedness to nature as potential determinants. Second, we aim to examine if consumers’ PCE, systems-thinking and connectedness to nature help to explain consumers’ intention to purchase bio-based products.
Improving food safety in the UK: Influencing consumers and business

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ABSTRACT

The Food Standards Agency (FSA) is the government department with responsibility for ensuring food is safe to eat. This session will use case studies to explore how the FSA has engaged with food businesses and consumers to encourage good food safety practices, and how the FSA has utilised behavioural insights and randomised control trials to increase businesses compliance with food safety regulation. The session will cover the behavioural insights we have used, how the studies have been conducted and in some cases the unexpected results.
Judgments of extent in the economics laboratory: Are there brains in choice?

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**ABSTRACT**

We design a choice experiment where the objects are attribute-free and we can observe the true preferences of the subject. Subjects are given a choice set involving several lines of various lengths and are told to select one of them. Subjects can only view one line at a time. This design simulates the feature that deliberation about the desirability of an object compared to another object crucially involves the memory of the assessment of the objects. Subjects attempt to select the longest line because they are paid an amount that is increasing in the length of their selection. Subjects also make their choices while they are required to remember either a 6-digit number (high cognitive load) or a 1-digit number (low cognitive load). We find that subjects in the high load treatment make inferior line selections: the longest line is less likely to be selected and the difference between the length of the selected line and length of the longest line is larger in the high load treatment. We also find that subjects in the high load treatment conduct worse searches in that they have fewer unique line views, fewer overall line views, and they spend less time viewing the longest line. Our results suggest that, even in our idealized setting, choice is affected by the availability of cognitive resources.
Why consumers are not sovereign: The socio-economic causes of market failure

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ABSTRACT

According to mainstream economics, it is the self-interest motive (the invisible hand) that leads firms in competitive markets to supply what consumers want (consumer sovereignty). When markets function ideally, the result is said to maximize the net benefits to society. The purpose of this paper is to explain why, contrary to mainstream economics, competitive markets, for important noneconomic reasons, often fail to serve the best interests of society. Akerlof and Shiller (A&S) in Phishing for Phools (2015) have given considerable thought to why markets too often fail. They fail when business people behaving in a purely self-serving way utilize manipulation, deception, and trickery to take advantage of their customers. This happens when buyers act foolishly for psychological reasons, for lack of information, and because they do not know what they want. Businesses learn about these unsophisticated buyers, prime them, and set a trap for them. The result is behavioral market failure: consumers wind up paying too much for products they do not need.

The A&S perspective needs integration with dual motive theory (DMT). According to DMT, self-interest derives from humans’ reptilian brain. Empathy derives from humans’ mammalian brain. According to a recent, important interpretation, self-interest is primal, and a person’s empathic capacity plays a restraining or conditioning role with respect to self-interest, especially when self-interest is excessive. Too often business people act out of excessive self-interest leading them to take unfair advantage of customers. The DMT perspective suggests this is not inevitable as humans can develop their empathic capacities and become less self-interested. If so, a business might develop a socially responsible orientation and overcome its negatively opportunistic orientation. Integrating the A&S and DMT perspectives improves greatly understanding of why markets often fail for behavioral reasons and what can be done about it.
The link between poverty and environmental degradation. An experimental analysis

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ABSTRACT

This paper experimentally explores the link between poverty and decisions that lead environmental degradation. In the experiment, individuals with different wealth levels play a game that describes environmental degradation as a contribution to an activity that generates a negative externality. The experimental data show that wealth levels not related to the environment (exogenous poverty) play no significant role in environmental decisions. However, the variation in wealth as a consequence of the contribution to environmental degradation (endogenous poverty) affects the behavior of individuals, that enter a spiral of poverty and environmental degradation. These results suggest the existence of a poverty-environment trap.
Does pro-environmental behaviour at home spillover at work?
An empirical analysis

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ABSTRACT

In this study, we analyse spillovers in environmental behaviour, by looking at whether a wide range of pro-environmental activities at home are linked with similar actions at the workplace. We utilise survey data from a sample of 420 respondents from the University of Malta, including academic, administrative and support staff, as well as students. The survey includes questions related to various environmental behaviours both at home and on campus, including recycling activities, purchasing eco-labelled products, energy and water conservation. In turn, we express these behaviours as a function of a set of variables related to attitudes and self-image, self-efficacy and the perception of behavioural control, and social norms, as promulgated by the spillovers literature, based on the theory of planned behaviour. We also consider respondents’ level of knowledge and engagement in environmental issues, perceptions of the quality of the environment at home and at work, and any barriers to environmentally-sustainable behaviour. We then analyse whether environmental behaviour at home mirrors that reported on campus, both in terms of positive and negative spillovers, controlling for the above factors as well as basic socio-demographic characteristics. Preliminary results suggest that attitudes and self-image are the key determinants of pro-environmental behaviours both at home and on campus. In addition, we find that behaviour on campus generally lags behind behaviour at home across most domains, particularly when it comes to energy-saving initiatives and recycling, although this gap is smaller among those with high pro-environmental sentiment and an environmentalist self-image, among other things.
How independence shapes individualism, cooperation and the provision of public goods

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ABSTRACT

Human welfare depends on cooperation and coordinated actions. However, the reliance on cooperation and public goods and the degree of social interdependence can differ across social situations and changed considerably across human history. For example, technical advancement, social welfare increases, and the emergence of property rights enabled reciprocal interactions in networks that are contract- and rule-based, rather than based on personal interactions (Kranton, 1996; Scheffer, van Bavel, van de Leemput, & van Nes, 2017). These changes allow agents to solve problems independent of specific groups, a strategy we coin ‘individualism’, which also resonates with evidence suggesting that individualism is world-wide on the rise due to socioeconomic developments (Santos, Varnum, & Grossmann, 2017).

Although it has been recognized that human behavior is critically influenced by social interdependence (Balliet & Tybur, 2017; Kelley et al., 2003; Leibbrandt, Gneezy, & List, 2013; Rusbult & van Lange, 2003; 2008; van Lange & Balliet, 2015), how contextual changes in (in)dependence influence cooperation and public goods provision has received little attention. To investigate the role of (in)dependence in social dilemmas, we experimentally investigate a novel step-level public goods game in which we can systematically manipulate public goods (in)dependence and disentangle selfishness from individualism.

An example may illustrate this game: Imagine a group of people that need to protect their community from a flood. Without preparations, the flood will reduce welfare of all group members. Each group member can, however, take precautions. One option is to build a dam around their house. If completed in time, it will save the house owner, but not the fellow group members. Alternatively, each member can invest their resources into building a dam around the village. While costlier in absolute terms, it will save all group members, if completed in time. Thus, each group member has two options: To solve the problem on their own (individual solution) or work together to solve the problem as a group (collective solution). However, there is a third alternative: To not invest any resources and instead rely on others to provide for their safety. Therefore, the collective solution shares the property of a public good; it is exploitable by free-riding. The individual solution, instead, is safe against exploitation. The degree of social dependence in this game can be defined by the ratio between the cost ci of the individual solution, and the cost cc of the collective solution; i=ci/cc. The higher the relative cost of solving the problem individually, the more a group member depends on group-efforts to solve the problem as a collective.
Contrary to the classic PGG, this game allows to investigate how (in)dependence shapes cooperation. In real-life social dilemmas, some members of society may be able to solve problems individually, while others heavily depend on public safety nets and collective action. Analogously, in the investigated game, the failure of public goods provision may only affect some, but not all group members. Further, our setup allows to reveal two psychological motives that the PGG cannot disentangle: selfishness and individualism (a preference for independence).

In total, 160 participants interacted in groups of four across multiple rounds and multiple interdependence levels i.e. Specifically, in each block, participants received 10 monetary units (MU) in each round and had to repeatedly decide whether to invest their resources to a public pool, their private pool, or keep the resources. After 10 rounds, they received any MU they kept in cash, but only if either their private or the public threshold was reached. Across blocks, the public threshold was fixed to 160 MU, while the private threshold was either 40, 50, 60, 70, or 80 MU. Half of the groups further could use peer punishment as a coordination device.

We observe a strong preference for solving the problem independent of the group, i.e. individualism, even when the cost of doing so widely exceeds the costs of the public solution, if everybody would contribute equally. We further show that those who use an individualistic strategy under low dependence are as likely to switch to a cooperative strategy as to a free-rider strategy, showing that individualism and selfishness is not the same, as sometimes suggested in the cooperation literature. Peer punishment increased the likelihood of groups to solve the problem together instead of individually. Interestingly, this was driven by those who contributed more than the fair share to the public pool (‘altruists’) punishing those who exhibit an individualistic strategy (‘individualists’). Further, individualists also engaged in counter-punishment of altruists, leading to an overall loss of group welfare. Interestingly, in this conflict between altruists and individualists, free-riders were punished much less and could reap the benefits of this conflict between individualism and collectivism.

Our results highlight how the introduction of an individual solution can alter public goods provision. Further, the results demonstrate how peer punishment, while it steers groups to the collective solution, can lead to punishment feuds between those who prefer to be independent of the group and those who prefer that all work together.
Region, nation, and redistribution: Experimental evidence on social identity and policy preferences among Belgian local politicians

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**ABSTRACT**

Determinants of redistributive public policies are fundamental to public economics. One prospective determinant receiving increasing attention is individuals’ senses of social identity, encompassing altruism targeted toward other ingroup members. When social groups include nested federal jurisdictions of unequal wealth, striking predictions emerge regarding public policy support. Recent work shows that federal (rather than regional) identification is associated with stronger support for federal-level redistribution in richer regions, but with weaker support in poorer regions. However, work to date has emphasized correlational survey results. This paper advances the literature by attempting causal inference via a survey experimental intervention. Randomly determined respondents are exposed to priming questions designed to heighten the salience of country- or regional identity before being assessed for redistributive support; as a control, others are not primed. Belgium a rds an informative test setting, and our unique sample of local elected officials is immediately relevant to policy. As hypothesized, in wealthier Flanders we find that priming Belgium leads to increased support for cross-regional financial flows and policy projects. This effect appears strongly concentrated among respondents reporting low affective attachments to Belgium.
Increasing work performance and tax compliance through perceived fairness of different tax systems and potential underlying mechanisms

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**ABSTRACT**

Perceived fairness is found to be important in increasing tax compliance, however, less empirical attention is devoted to the effect of fairness on work performance in the field of taxation. Two laboratory experiments are presented examining the effect of perceived fairness on real-effort task performance and tax compliance conjointly. In Experiment 1 participants worked either in a flat or progressive tax system, and their tax system preferences as well as their dispositional achievement motivation were controlled for. Perceived fairness was manipulated by arguing for or against the applied system. Results showed that a fair argument increased, while an unfair argument decreased perceived fairness of a tax system. Perceived fairness was higher when preferences were in line with the applied tax system, and fairness was beneficial to both performance (an effect moderated by achievement motivation) and compliance. In Experiment 2 participants worked in a flat system, and a similar fairness manipulation was used as in Experiment 1. Personal preferences towards tax progressivity and potential mediators (i.e., social exchange quality and affect) between fairness and behaviors were measured. Results indicated that a progressive preference lowered, while a fair (unfair) argumentation increased (decreased) the perceived fairness of a flat system. Perceived fairness increased the perceived quality of social exchange experienced in the experiment, which in turn induced positive affect, that stimulated performance and compliance. Results imply that perceived fairness is a prerequisite of efficient tax designs. The work was supported by the UNKP-17-4 New National Excellence Program of the Ministry of Human Capacities.
A unified approach to the understanding of decision-making under risk: Implications for diversity management

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ABSTRACT

Three studies on the utility of jointly using explicit and implicit measures of risk were conducted using a variety of samples from different nations and age levels and in relation to psychological risk attributes and behavioral risk-taking outcomes. Study 1 demonstrated a cross-national validity of construct divergence between explicit and implicit measures of risk attitude among Korean and Chinese younger adults and found the two groups, from collectivist cultures, to be different in implicitly assessed attitudes toward risk. Study 2 replicated the explicit – implicit divergence in risk attitudes found in older Korean adults, providing further evidence for the age differences within the implicit measurement of risk-attitudes. Study 3 established a newly developed implicit measurement of financial risk attitudes, the Implicit Stock Investment (ISI), to demonstrate the predictive power of students majoring in financial engineering on the rate of return of stock when the ISI interacted complementarily with explicitly assessed personality traits in relation to risk control. The implications of all the findings are discussed.
A cross-national comparison of debt management competency: South Korea and the United States

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ABSTRACT

We aimed to identify an individual’s debt management competency, by asking whether South Korean and US college students can make financially optimal decisions on debt repayment. We recruited 198 Korean and 168 US undergraduates and asked them to play a debt management game where participants were given a fixed-income and occasional bonuses that could be used to pay off six debts differing in interest rates and amounts across 25 rounds. Results showed that regardless of country, participants tended to close small debts more quickly than those with higher interest rates (i.e., debt account aversion). This strategy led to mean total debts of both Korean ($37,362) and US ($41,516) groups that were significantly greater than the mean total debt of a normatively defined financial optimal player ($29,428) who would instead prioritize the repayment of debt with the highest interest first. The observed differences may be attributed to a lack of financial knowledge that was found to be negatively correlated with total debt among college students in both countries. We predict that improved financial literacy may help prevent individuals from making non-optimal decisions related to cognitive biases such as DAA on financial matters.
Be consistent if you can’t maximize: Consistency in probability processing as a function of decision context and numeracy

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ABSTRACT

Standard approach for investigation of decision making under risk is to provide participants with set of sequentially presented lotteries and ask them to price them or to make choices between two or more alternatives. Data gather with this paradigm are then analyzed in variety of ways from comparing aggregated choices between experimental groups to advance modeling of cognitive mechanisms such as probability weighting (e.g. Tversky and Kahneman, 1992; Gonzalez & Wu, 1999).

In this paper we focus on how consistently people process probabilities, meaning how variable their behavior is when making decision solely based on a probability of an event. We used task inspired by simple bets that people sometimes make. For example, imagine you are watching a football game with a friend who roots for the other team and he asks ‘I will bet you $100 that my team wins, do you accept?’. If you agree, you are accepting a lottery that gives +$100 with probability P and -$100 with probability 1-P, where P is probability that the team you root for wins.

We turned this kind of a bet into an experimental method. In a single trial, participant is provided only with probability of win P and have to place a bet X, thus constructing lottery +X, P; -X, 1-P. Each constructed bet is played out by the program and the outcome (either +X or -X) is added to the account. The goal is to win as much points as possible in the whole game. With repeated presentation of P values ranging from zero to one and maximum bet value fixed, this method allows to investigate the shape and consistency (i.e., how variable bet values are for the same P) of relationship between P and bet values.

In order to maximize expected return, the optimal strategy in the task is to place zero points whenever P(win) < .5 and maximum stake when P(win) > .5. The deviations from rational behavior are well documented in the literature, thus we predicted that participants will not implement the optimal strategy. Rather, we expected that relationship between P(win) and bet value will be monotonic and well captured with two-parameter probability weighting function (PWF; Goldstein & Einhorn, 1981) which has separate parameters for elevation (here reflecting average bet value) and curvature (here capturing how close to optimal given strategy was). We also expected people to differ in terms of consistency. Basing on the literature regarding probability weighting (e.g., Pachur, Hertwig, & Wolkowitz, 2013; Suter et al., 2015) we expected lower consistency among people with lower numeracy and in more affect-laden experimental contexts, that is when attention is focused on possibility of loss (Hochman & Yechiam, 2011) or when immediate feedback is expected (Figner et al., 2009).
Does talking about your illness pay? Impact of information about the other player’s depression on behavior towards her in the Trust game

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ABSTRACT

Depression is one of the most common mental disorders and is considered as a huge social problem. Although there are plenty of studies on depression and there is a vast scientific knowledge about this disorder, little is known about public knowledge about it, and even less is known about lay-people’s behavior toward depressed individuals. The results of research on social perception of mental disorders indicate that while the social awareness about mental disorders has increased, the attitudes toward people diagnosed with it does not change and is still negative. Most of these studies however are conducted with using only declarative measures and therefore in this project we used the economic game called the Trust Game which allowed to verify the actual behavior toward a person with depression, not only a declaration of such behavior. In our study (N = 205) we verified whether the information about co-player’s disease (her depression or diabetes) will affect the amount of money participants will offer her while playing the Trust Game. Participants sent the lowest amounts of money, thus showing the lowest levels of trust when they were informed about playing with a person who suffers from depression than in other experimental conditions. We also demonstrated significant sequential mediation: participants who were informed about playing with a person who suffers from depression sent lower amount of money and therefore they were less satisfied with their decision, and further they were less satisfied with the fact that the other player did not reciprocate the trust.
The experience of inequality and the propensity for financial choices carrying the risk of loss

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ABSTRACT

The experience of suffering unfair treatment or witnessing it is widespread. Rising income inequality (i.e. lack of distributive justice) is a global trend (Saez & Zucman, 2016, Wolff, 2010) and examples of unfair treatment of innocent people can be found in every TV news or newspaper. Meanwhile, people are strongly inequity averse (e.g. Norton and Ariely 2011, Johansson & Svedsäter, 2009). Fairness norms are enforced by treating the same person unfairly as well (Falk, Fischbacher, 2006). If that is not possible, an experience of suffering unfair treatment spills over and alters subsequent behavior (Houser Vetter, & Winter, 2012; Axt & Oishi, 2016). However, it is unclear how suffering unfairness impacts decisions concerning personal finances and especially the choices bearing the risk of financial loss. There is some evidence that a feeling of inequality or personal relative deprivation (both are the consequences of a lack of a distributive justice) make people more likely to gamble and more likely to choose risky options in lottery and gambling tasks (Mishra, Son Hing & Lalumiere, 2015; Payne, Brown-lannuzzi & Hannay, 2017; Callan, Shead, & Olson, 2011;Haisley, Mostafa & Loewenstein, 2008). Therefore we predict that suffering unfair treatment would enhance the propensity to take financial and investment risk.

Three experimental studies were conducted to investigate the influence of unfair treatment on the propensity to make financial choices bearing the risk of financial loss. The propensity to take investment and the propensity to take gambling risk were the DV’s in all the Studies. A between-subject IV was an experimentally induced experience of (in)justice (fair, unfair-victim, unfair-beneficiary condition). In the study 1 and 2, participants experienced an (in)justice that had financial consequences for them. In the study, 3 participants experienced an (in)justice that had nonfinancial consequences for them.

The studies were conducted online on a nationwide research panel. In each of them, Polish working adults diverse in terms of psycho-demography took part (N1=345, N2=324; N3=339). The
Experimental manipulation tools were created for the purposes of this study and their effectiveness was checked in a pilot study. In an experimental manipulation task, all the participants were informed that they had been paired with another panelist. Participants of the studies 1 and 2 were then informed that as a result of the decision of the other panelist they will receive the same/ lower/ higher amount of points than the decision-maker as an award for completing the survey. Participants of the study 3 were informed that as a result of the decision of the other panelist they will have access to the same/ lower/higher number of interesting surveys than the decision-maker. Individual financial choices were assessed using a set of proprietary tools (see: Sekścińska, 2016, Sekścińska, Rudzińska-Wojciechowska, Maison, 2018) and two subscales (financial/investing and financial/gambling) of DOSPERT scale (Blais & Weber, 2006). The results indicated the important role of the experience of injustice in explaining people’s propensity to make risky financial choices. The experience of being a victim of financial injustice makes them more prone to take investment risk, build riskier investing portfolios with more stocks and fewer bonds compared to beneficiaries of injustice or just conditions. Moreover, being the beneficiary of injustice makes people less prone to choose sure option in lottery tasks (choice between sure or probable option). However, the abovementioned relationships are exactly the opposite when the experience comes from the task in non-financial context. People who are the victim of unfair treatment in nonfinancial context, prefer a lower level of investment risk, prefer to build safer investment portfolios with more bonds and fewer stocks than the beneficiaries of injustice or those who experienced justice.
Individual differences in time perspectives and risky financial choices

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ABSTRACT

The factors that determine people’s preferences for financial risks have been a subject of interest to researchers in the field of psychology in recent decades. They have identified numerous variables that influence risky financial decisions. However, numerous individual characteristics are still to be investigated. The present studies focus on one psychological factor which, based on a theoretical framework, as well as on a few studies conducted to date in this field, seems to be highly relevant in explaining people’s financial risk preferences, namely temporal framing, which is also referred to as Time Perspective (TP; Zimbardo & Boyd, 1999; Zimbardo & Boyd, 2008).

Time perspective (TP) is a psychological construct that represents an individual’s relation with time. The authors of Time Perspective Theory (Zimbardo & Boyd, 1999; Zimbardo & Boyd, 2008) posit that one’s perception of time influences decision making by locating the primary set of psychological influences within the temporal frames of either the present, the past, or the future (Zimbardo, Keough, & Boyd, 1997). They distinguish five TPs, namely: Past Negative, Past Positive, Present Hedonistic, Present Fatalistic, and Future. The Time Perspective was found to be a relatively stable individual difference trait, although there are suggestions that it might also be situationally (Zimbardo & Boyd, 1999) and intentionally modified (Zimbardo & Boyd, 2008).

Individual differences in TPs have been associated with affective, cognitive, and behavioral outcomes and were shown to impact a wide range of behaviors and decisions. However, their role in financial choices is severely understudied. Although Zimbardo and Boyd (2008) predicted numerous associations between TPs and financial behaviors, such as saving and spending money, there has not been much research in this area. Little is also known about the role of Time Perspectives in explaining risky financial decisions.
Importantly, the link between the propensity to take risk and TPs has been confirmed in numerous research. They indicate that more future-oriented and less present-oriented individuals display fewer risky behaviors. Nevertheless, risky decisions made in different domains (e.g. social, financial, health) should be analyzed separately, as an individual might be risk-averse in one domain and risk-seeking in another (Slovic, 1972; Weber, Blais, & Betz, 2002). Moreover, even within a single domain (e.g. financial), people might not be consistent in the extent to which they prefer risk. The question arises whether the results linking TP with the propensity to take a risk in areas previously investigated (for example risky driving or drugs abuse), is maintained in decisions concerning the financial domain.

The aim of the present research was to examine the relationship between people’s TPs (chronic and induced) and their propensity to invest and undertake investment risks. In order to explore this issue, three correlational studies on Polish national representative samples (N1= 1093; N2= 1081, N3= 1563) and one experimental study on a sample of Polish adults (N4= 246) were conducted. TPs were either treated as chronic individual characteristics or were experimentally induced. The results showed that chronic Future and Present Hedonistic TPs are the most important in the context of risky financial choices. Higher Future TP is related to a propensity to invest and make safe investment choices. Higher Present Hedonistic TP is related to a low propensity to invest and risky investment. It is also worth mentioning that the work presents the first experimental attempt to activate particular TPs and shows that this kind of experimental manipulation of a given TP often leads to a similar pattern of results to those presented by participants who score high on the relevant scale.
How to buy less but better? The influence of product lifetime labelling on purchase decisions

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ABSTRACT
The study develops and empirical tests a conceptual model for purchasing longer lasting electrical appliances. The research questions are “What are the determinants of purchasing longer lasting electrical appliances?” and “How does a product lifetime label influence purchase decisions towards electrical appliances?” This paper follows an interdisciplinary approach by combining theories from economics and social psychology. The model is tested by using choice-based conjoint analysis, a multivariate method measuring consumer preferences for product attributes. Thus, the influence of a product lifetime label on consumer preferences for durability and other product attributes such price, brand or energy efficiency is examined. By means of an online questionnaire, discrete choice experiments based on washing machines were administered to a sample of German consumers. Overall, the study helps to better understand the main factors influencing purchase decisions with regard to product longevity in the context of electrical appliances. Furthermore, consumers who are willing to buy longer lasting products are identified and characterized. With the aim of stimulating demand for longer lasting electrical appliances, marketers and policy makers can learn from the study how to strengthen enablers of and reduce barriers to purchase behaviour. For instance, marketers should improve their durability marketing by offering enhanced product lifetime information. Policy makers should introduce a product lifetime labelling scheme as well as educational campaigns emphasizing the relevance of product longevity for a sustainable development.
Neutrality by aggregation: An experimental approach

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ABSTRACT

Neutrality of money is a widely accepted proposition among economists. But even when people in reality understand that money is neutral, neutrality may only be a realized outcome when people coordinate their actions well. We design a price-posting game in which money facilitates transactions to test whether people may be able to coordinate well in lab to obtain neutrality of money. We introduce a parameter, namely, waiting costs that permit us to compare the situation in which coordination is an issue with the situation in which it is not. When the cost is positive (but small), there are more than 60 symmetric mixed-strategy equilibria. When the cost is zero, there is a unique equilibrium. With or without the waiting costs, there is little nominal rigidity on the average price in the long run. But the waiting costs do play a substantial role. With the costs, behaviors of subjects depart a lot from any theoretical equilibrium and in particular, there is a substantial proportion of sellers who systematically over-respond to the nominal change and a substantial proportion of sellers who under-respond. On the aggregation level, neutrality obtains not because of that random errors offset each other but because of that systematic errors offset each other.
The impact of role models on women's self-selection in competitive environments

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**ABSTRACT**

We show that female role models increase women's willingness to compete. As in Niederle and Vesterlund (2007), we find that women are less willing to enter a tournament than men, although there are no gender differences in performance. However, the gender gap in tournament entry disappears if subjects are exposed to a competitive female role model. Results are stronger for the best performing women who seem to be particularly encouraged by female role models. Female role models also mitigate gender stereotype threats and lead to higher self-confidence among women. By contrast, we find that competitive male role models seem to intimidate female subjects and increase the gender gap in tournament entry even further. Our results have implications for the socio-political debate on how the fraction of women in top management positions can be increased.
Two-stage moral behaviors: evidence from lab experiment

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ABSTRACT

Moral behavior is an integral part of economic interactions. We conducted a series of experiments about intertemporal moral behavior to analyze and compare different courses of moral choices. Our experimental findings indicate that “moral consistency” dominates “moral balancing”, and that “moral licensing”, rather than “moral cleansing”, plays a more prominent role in intertemporal moral decision making. Moreover, “moral licensing” is evident in both immediate and delayed moral choices, but “moral cleansing” is only observed in immediate moral behavior treatment. Our experimental results has provided new empirical evidence to the discussion about moral behaviors over time.
Is it what you say or how you say it? Framing information on aid impact and its effect on donation behavior

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ABSTRACT

Research in behavioral economics and social psychology has demonstrated that individual decision making is subject to framing effects: choices on the same decision problem can dramatically vary depending on the way in which the problem is presented. Framing effects can have important welfare implications, if some choices result in better outcomes than others. We apply the framing question to the context of international charitable giving. Previous studies have shown that donors reluctantly respond (or do not respond at all) to information about the impact of development interventions, potentially forgoing welfare benefits for the recipients of such interventions. Following-up on these findings, we conduct an online experiment and analyze to what extent framing information about an NGO’s aid impact influences donation behavior and, hence, people’s willingness to help the poor in a meaningful way. In order to do this, we frame the same information on aid effectiveness in (2x2=) four different ways. First, we use positive or negative language, either emphasizing the positive consequence of helping the poor or the negative consequences of not helping the poor. Second, we relate an anecdotal story about a child named Marta one the hand, or a fact and number based story about an unidentified group of recipients on the other hand. Moreover, in order to be able to separate the framing effect from the effect of information about the development intervention’s impact, we introduce a second set of flyers. Like the first set of flyers, this second set of flyers is framed in the four different ways that we just described. However, it is considerably shorter than the first set and does not provide any information about the development intervention and its impact. It only describes the development problem. We have three main results. First, donations are significantly higher on average when information about aid impact is framed as a negative anecdotal story about a single identified recipient (child Marta). Second, we identify heterogeneous treatment effects: women and parents respond particularly strongly to a negative anecdotal framing. Third, adding information on a development project’s welfare impact in addition to just stating the development problem does not result in larger donations.
Producer and Organizational Decision Making: Is Behavioral Economics Losing Its Way?

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ABSTRACT

Behavioral Economics takes note of the fact that in the real world economic behavior reflects many attitudes, not merely, and not generally an inclination toward optimization, the underlying assumption of traditional economic analysis. There are several reasons for this, and Behavioral Economics has accomplished a great deal in explaining how economic activity occurs and in taking account of the inclinations of individuals. Unfortunately, it has focused almost exclusively on the inclinations of the individual and consumer behavior. The findings of the admirable work of Behavioral Economics have been applied generally, but there is a serious question as to whether the decision-making they indicate applies to producers and other organizations. Indeed, Behavioral Economics has been relatively unhelpful in explaining much organizational behavior, as well as the overall behavior of economies-macroeconomics.

It is notable that most of the findings of the empirical studies of Behavioral Economics do not seem to apply to several of the producers who have most triumphed in recent years, nor does it seem that behavioral economists have much concerned themselves with examining that behavior. This paper, based on a larger manuscript, summarizes recent empirical work in the field, reviews the efforts to apply those findings to economic behavior generally, and considers what might be required to apply Behavioral Economics to producers and organizational decision-making.
Endogenous attention to costs

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**ABSTRACT**

Studies show that consumers are often unaware of the price of their purchases. We examine if such ignorance may be willful. We develop a model entailing consumers who may feel conflicted about spending – some people have an inherent preference for overspending (“spendthrifts”). We show that if overspending causes regret, spendthrifts are better off in the short-term from ignoring costs to their consumption (i.e., prices), when ignorance reduces anticipated regret. In the long-term, ignorance of costs may, however, be harmful, since it acts to exacerbate spendthrifts’ overconsumption. Further, our model shows consumers who are unconflicted about their spending, or have an inherent preference to underspend (“tightwads”), do not benefit from ignoring costs to their consumption in the short-term. We test the implications of our model against two datasets – a field dataset from a supermarket and data from a websurvey entailing a hypothetical experiment. We find support for our model implications that spendthrifts pay less attention to prices, and that their inattention may be endogenous (i.e., willful or strategic). Our results may help explain previous puzzling findings of low consumer price knowledge.
Cash on hand and savings decisions of the poor

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ABSTRACT

Savings accounts are a promising tool to reduce poverty, but savings rates of the poor are usually puzzlingly low. In many developing countries, poor households receive their income in cash. Yet, holding on to cash that needs to be physically deposited into a savings account might increase the psychological costs of saving. I experimentally study the causal effect of cash on hand on savings deposits of microfinance clients, using a simple, high-stakes natural decision with ecological validity and controlling for potential confounds such as transaction costs and time preferences. Holding on to cash and handing it over to save leads to the same savings decisions as without the physical transaction. However, participants randomized into higher experimental earnings save more and participants with cash on hand feel richer. The absence of higher savings with cash on hand provides suggestive evidence for two mechanisms of cash in hand: an income effect (leading to higher savings by feeling richer) and a salience effect (leading to lower savings due to the salience of the transaction).
Effect of money exposure, reward size and loss aversion on cheating

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ABSTRACT

Sometimes people apply dishonest behavior in order to receive – or not lose - undeserved monetary rewards. Prior research shows that people work harder to avoid a monetary loss than to acquire a corresponding gain and this behavioral pattern is also applied to moral domain, leading people cheat more to avoid possible losses than for acquiring possible equivalent gains (i.e. Loss Aversion). However, no findings are provided about the role of reward size and money exposure on consequent cheating level. Using a real effort task we implemented a between subjects design to test the effects of framing (Loss vs Gain), reward size (Small vs Big) and Money Exposure (Money vs No money) on individual real performance and cheating level. Results showed no significant differences in real performance but on cheating level with all two-way interaction effects significant (frame and size - frame and exposure - size and exposure). To disentangle the effects of Loss frame on cheating level, a double moderated model were tested assuming reward size and exposure to the money as moderators. The model was significant with conditional effects revealing that loss aversion always increases cheating level saving when participants were told about big reward they have not been exposed to and when they were told and were exposed to small reward. Thus, our results just partially replicate the finding of higher cheating level in loss compared to gain frame, suggesting that the relationship between framing and cheating behavior can be moderated by other variables as reward size and exposure to the reward.
Objection-dependent expected utility: A theory of framing, probability transformation, and decision under risk

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ABSTRACT
This paper presents a descriptive theory of expected utility which explains how lotteries are framed and processed, and how the frame and decision process impact the revealed preference. All the anomalies of decision under risk exhibited by Kahneman and Tversky (1979) and a few more are predicted with a single parameter in excess of risk aversion. I consider decisions among independent prospects by intuitively-rational DMs who rely on evidence to decide and have a sequential perception of the objects of choice. If DMs perceive sequentially dissonant evidence, they may be led to reverse their prior EU-preference within the decision process. Whenever dominance cannot be observed, choosing the EU-preferred option always raises an objection, i.e. doubt. I develop a Bayesian description of the decision process based on the sequential perception of the prior EU preference and a visible objection to the latter. Individuals with doubt overweight the prior probability of the objection state and maximize an objection-dependent expected utility (ODU) conditional on their prior EU preference. All pairwise comparisons without dominance can be framed in just two patterns to make the objection visible and test one’s prior: nested lotteries and overlapping lotteries. Consequently, objections and the revealed preference are frame-dependent. The Allais paradox results from the use of a nested-lotteries frame in presence of a sure outcome and an overlapping-lotteries frame exhibiting “quasi-stochastic dominance” in presence of two similar risky lotteries. Finally, a crucial test of this analysis and of the relevance of framing in the decision process is presented.
The effect of being an only-child on preferences structure and strategic behaviours

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ABSTRACT

In the psychological and economic literature there is considerable evidence supporting the fact that being an only-child has an impact on social preferences, however results are fragmented and sometimes contrasting. Our research develops a comprehensive experimental model that, by an interdisciplinary approach studies the effect that growing up as an only-child has on social preferences, risk preferences, trust and behaviours in interaction in a coherent framework. We set up an experiment where 276 participants sequentially participate in four different simple games: a public goods game, a response games, an investment game and a game for eliciting risk preferences. We find evidence of consistent difference in social preferences of only children and non only-children, with negative reciprocity and social-welfare actions in particular. Only-children are less likely to punish for misbehaviour and more likely to choose social-welfare actions in response games. Results about differences in social-welfare actions, though, are not unequivocal. In fact, we observe that only-children's higher likelihood of choosing social welfare actions depends on the specific structure of the game. Furthermore, only-children show to cooperate significantly less in the one shot public goods game, albeit the difference disappears when the game is repeated. Finally, we confirm earlier results that only-children are less trusting than subjects with siblings.
Factors determining cheating behavior

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ABSTRACT

We extend Becker’s (1968) model to incorporate moral considerations into an equation alongside purely economic factors (temptation, punishment, and probability). Based on the assumed shape of a proposed disutility of immoral behavior function, and the familiar shape of a decision maker’s (DM’s) monetary value function, we show that people cheat more when temptation is greater (H1), and when given a loss frame rather than a gain frame (H2). Cheating also increased in situations involving lower sensitivity to moral aspects, such as task ambiguity (H3).
Sensitivity to incentive structure and loss/gain framing in repeated ethical decision making in the “Cheating at Die Rolling Task” (DIRT)

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ABSTRACT

The standard economic model of crime (Becker, 1968) assumes that willingness to engage in unethical action depends on the perceived utility of the action and the utility of alternative legal activities. Thus, decision makers consider: incentive size (I), the probability of being caught (P) and the possible penalty (L). Previous studies provide little support for this hypothesis, showing no sensitivity for I. We hypothesize that all above factors should influence subject decisions and additionally – cheating decision should be sensitive to gain/loss frame.

To verify the hypotheses we conducted an online study. The procedure was Columbia Card Task (Figner, Mackinlay, Wilkening, & Weber, 2009) implementation into “roll a die” paradigm (Fischbacher & Föllmi-Heusi, 2013). The results showed that decision makers were sensitive to game parameters and cheated more (both more frequently and to a greater extent) with higher G, and lower L and P. Thus support (Yaniv & Siniver, 2016) notion, that previously describe insensitivity was probably strategic decision to (1) not cheat to the maximum level (2) not cheat more with higher incentives as it expose DM for audit.

DMs cheated also more in loss frame as compared to gain frame (Grolleau, Kocher, & Sutan, 2016). We also isolate morals aspect of situation by comparison of risk preference in cheating context vs. puree lottery context choices.
Eliciting consumers’ choices of effective risk communication strategies: a discrete choice experiment

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**ABSTRACT**

The communication of food safety and risk information to consumers plays an important role in public health policies. Studying how best to design effective communication strategies has been central to the policy-makers.

A considerable amount of literature has investigated how effective public communication strategies should be. These studies showed that, when designing communication strategies, it is critical to consider consumers’ risk perceptions, risk attitudes, intentions and behaviours.

However, the majority of the previous food safety interventions highlighted that risk communication strategies were designed around the findings of technical risk assessments without addressing factors that might influence consumers’ risk perceptions. Some of these factors include consumers’ choices for how to be informed about risks, their understanding of risks and consequences of not mitigating such risks.

This study investigates consumers’ choices for communication campaigns regarding food safety risks and issues and how their choices vary given different risk behaviors and attitudes towards food safety matters, as well as, different socio-demographic characteristics. The data used for this research was collected via a web-based discrete choice survey. Employing probabilistic choice models, we analysed consumers’ choices, risk behaviors, food safety attitudes and decision-making processes. The results showed heterogeneity in consumers’ choices and highlighted the need for designing targeted communication strategies for effective health outcomes.
Psychological determinants of self-image congruity: A study of young consumers

Magdalena Kolanska

ABSTRACT

Background: Self-image congruity theory is important in explaining consumer behaviour (Sirgy, 1982, 1986). Literature assumes self-image congruity is based on self-evaluation motives, but it hasn't been empirically proven. The aim of the study was to reveal (1) main dimensions of comparisons with typical brand-users and (2) to identify psychological determinants of self-image congruity.

Method: The total number of 415 adolescents aged between 13 and 17 were examined using interviews based on 60 product brands. A list of brand-user descriptors for the study self-image congruity was developed based on interviews with 100 teenagers. Self-motives were measured with a modified scale Gregg, Hepper, Sedikides (2011).

Results: The results showed that teenagers compare with typical brand users on six dimensions (Stylishness, Gregariousness, Aloofness, Self-responsibility, Originality, Financial intelligence) via three perspective of congruence (desired self, actual self, undesired self), which are strictly connected with self-motives (self-improvement, self-verification and self-protection).

Conclusion: In comparison with users of brands among teenagers are important not only personality traits, but also other aspects. The study showed that adolescents buy a brand - not just for improve themselves or confirm this their own characteristics, but also to avoid undesirable image.

Impact: Research has established ecologically valid scales to measure comparisons with typical brand-users. The results allow to identify the dimensions of comparisons that are important for teenagers and its determinants, pointing to their wider aspect than previously thought.
Inducing cooperation. Who is affected?

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**ABSTRACT**

Cooperation is essential for the provision of public goods. Campaigns by government institutions and non-profit organizations frequently aim to affect contributions to public goods by appealing to reason or emotions. Appeals to reason typically describe the benefits of cooperation, while appeals to emotion illustrate compassion towards others. However, little is known about whether such interventions treat specific groups of society. This paper investigates potential interaction effects between states and individual traits of decision processing on cooperation rates. We conducted an incentivized experiment that was sent to a representative sample of the Swedish population (N = 1,832). The experiment elicits the individual willingness to cooperate in a series of prisoner’s dilemma games as well as a four-player public goods game. In a between-subject design we varied whether subjects are instructed to rely on their intuitive-emotional decision making processes or their analytical-deliberate decision making processes when choosing whether to cooperate (Horstmann et al. 2010, Levine et al. 2017). In a questionnaire we elicit a set of individual in decision making traits (USID; Pachur and Spaar 2015), as well as socio-economic characteristics, political preferences and self-reported contributions to real-world public goods. First results will be presented at the conference.
Can the market divide and multiply? A case of 807 percent mispricing in absence of arbitrage risk

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ABSTRACT

This paper documents a strong violation of the law of one price surrounding a large-size rights issue. If prices are right, the relation between the prices of shares and rights follows the outcome of a simple calculation. In the case of Royal Imtech N.V. prices deviated sharply from the theoretical prediction. Throughout the term of the rights, investors were buying shares at prices that were up to nine times what they should have been given the price of the rights. The most likely explanation for the sizeable and persistent mispricing is the limited availability of shares for short selling.
Foreign language context and the use of heuristics

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ABSTRACT

Language context (native vs. foreign) affects people’s choices and preferences in a wide variety of situations. However, emotional reactions are a key component driving people’s choices in those situations. In six studies, we test whether foreign language context modifies biases and the use of heuristics not directly caused by emotional reactions. We fail to find evidence that foreign language context modifies the extent to which people suffer from outcome bias (Experiment 1a & 1b) and the use of the representativeness heuristic (Experiment 2a & 2b). Furthermore, foreign language context does not modulate decision-making in those scenarios even when emotion is brought into the context (Experiment 1c & 2c). Foreign language context shapes decision-making, but the scope of its effects might be limited to decision-making tendencies in which emotion plays a causal role.
Responsibility and voice in public goods games with peer punishment. An experimental study

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**ABSTRACT**

We investigate how choosing (also) for others affects the decision of subjects involved in a public goods experiment. Subjects are matched in pairs and are randomly assigned either the role of decision maker or that of passive player. Decision makers take part in a public good game and decide the contribution of the pair and/or the amount of punishment points to assign to other pairs, being aware that every decision they make has a direct effect on their dependants’ payoff. We also explore how decision makers’ choices are influenced by the introduction of the possibility for passive players to express their voice.

With respect to the case in which subjects decide only for themselves, choosing for others increases the effectiveness of punishment, but not enough to induce a significant increase in the level of contribution. In addition, decision makers with responsibility for others tend to overuse punishment, imposing large monetary losses to their groups. Finally, the majority of decision makers follow passive players’ suggestions regarding both contribution and punishment, and this results in a reduction of punishment activity.
Heads I win, tails we lose. An experimental investigation of state-contingent trust and trustworthiness

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ABSTRACT

We report results from an experiment devised to study the impact of exogenously induced inequality on behavioral trust and trustworthiness in different growth scenarios. In the control, individuals play a one-shot anonymous trust game with no inequality in the endowment. Three treatments are devised, where individuals play the same trust game but inequality is exogenously induced through a random variation of their endowment. In treatment 1 (“growth”) the effect of induced inequality on behavior is measured in an environment where aggregate wealth is larger than in the control. In treatment 2 (“steady state”) the effect of induced inequality is measured in an environment where aggregate wealth is the same as in the control. In treatment 3 (“decline”) the effect of induced inequality is measured in an environment where aggregate wealth is lower than in the control. In treatment 2 (steady state), we find that inequality reduces the average level of trust (−10%) and trustworthiness (−18%). Most of the reduction is measured in the behavior by those whose endowment is decreased. Interestingly, in treatment 1, economic growth enhances the average level of trust, particularly by those whose endowment is augmented, so as to offset the negative effect of inequality compared to treatment 2. Overall, to our knowledge, the above results record for the first time in the lab the average effect of induced inequality on trust and trustworthiness, in agreement with theory and other results found with observational data.
Ethical free-riding: When honest people find dishonest partners

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**ABSTRACT**

Corruption is often the product of coordinated rule-violations. We investigate how such corrupt collaboration emerges and spreads when people can choose their partners (vs. not). Participants were assigned a partner and could increase their payoff by coordinated lying. After several interactions, they were either free to choose whether to stay or switch partners, or forced to stay with (or switch) their partner. Results reveal both dishonest and honest people exploit the freedom to choose a partner. Dishonest people seek and find a partner that will also lie—a “partner in crime.” Honest people, by contrast, engage in ethical free-riding: they refrain from lying but also from leaving dishonest partners, taking advantage of their partners’ lies. We conclude that to curb collaborative corruption, relying on people’s honesty is insufficient. Encouraging honest individuals not to engage in ethical free-riding is essential.
Fear and anxiety in the evaluation of Temporary Health States

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**ABSTRACT**

This article presents the monetary value of the utility of avoiding THS, estimating mean WTP to avoid coronary angioplasty to implant a DES. The emotional burden is included in our study: individuals WTP is estimated according to their stated level of fear and anxiety related to angioplasty. The aim is twofold; first, to prove whether the monetary value of avoiding an operation reflects the lost in utility. And second, to test the influence of emotions in the perception of health benefits and, consequently, its contribution to changes in WTP values.
Does trust in government foster pro-environmental behaviour?

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**ABSTRACT**

Within the burgeoning literature on the determinants of pro-environmental behaviour, there is a growing recognition of the importance of voluntary action by private citizens. Motives like environmentalism, altruism and conformity to social norms have received considerable attention as determinants of pro-environmental choices. Such moral determinants, contextual factors and nudges have also come to play an increasingly important role in policy making, not least because of the perennial unpopularity of green taxes. More recently, however, political preferences have also started to be examined for their role in stimulating or hindering pro-environmental behaviours, given the effect that such preferences may have on important enablers like efficacy belief, policy salience and reciprocity. This paper examines the relationship between political preferences, including political interest and trust in governance (at European, National and Municipality level), and a range of pro-environmental behaviours (in the domains of waste, energy, biodiversity and transport), while controlling for other motives and barriers. Data is drawn from a survey conducted among a representative sample of households within a European Union country (Malta). The paper is one of the first to formally assess whether political preferences, including trust in the European Union and Government can help explain the variation in voluntary pro-environmental behaviour within a country.
Different nominal value presentations, individual numeracy differences and their consequences on money illusion: A use case of Bayesian statistical inference with MCMC sampling

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ABSTRACT

Financial instruments have multiplied over the years, driven by the continuous diversification of the investment environment, and as a result the information that investors have to consider increased exponentially. It is therefore urgent to improve the regulation of financial markets, especially in the field of risk communication, for investors to accurately understand information and make correct investment decisions. Risk communication indicates the act of conveying or transmitting information on the various risks of society among stakeholders. Under the current financial environment, risk communication in a financial situation may play an important role to prevent crucial investment mistakes. In the present paper, we focused on one of the most famous investors’ decision failure, money illusion. In previous decades, money illusion has been defined as the confusion between the nominal and the real value of an asset and understood as one of the examples of cognitive biases. We have investigated whether money illusion would be alleviated or become more serious depending on how information is presented to investors, and whether the degree of the effect depends on individuals’ differences in numeracy abilities. Concretely we have investigated the two following points:

1) whether different conditions of information presentation affect the frequency of occurrence of money illusion; and
2) whether the difference in individuals’ ability affects the frequency of occurrence of money illusion.
Little lies. Cheating and school performance in primary school children in Congo (RDC): Results from a Lab-in-the-Field Experiment

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**ABSTRACT**

In everyday life we often observe dishonesty: people evade taxes, park in forbidden spaces, illegally download video and audio content from the Internet, copy from another’s paper in Colleges, use public transportation without buying a ticket. In an effort to limit dishonesty, governments apply fiscal inspections, city councils hire parking inspectors, movie studios implement technological innovation to hinder copyright infringements, Ph.D. students acts as invigilators at B.Sc. exams, and bus companies hire ticket checkers. Cheating and lying are generally seen as anti-social behaviors since being unable to trust others’ behavior bears substantial economic and social costs and destroy the social fabric of human coexistence. In this perspective, cheaters are perceived as social outcasts which try to compensate their lack of talent and or effort with unfair behaviors, and therefore cheating and lying can be better understood within a cost-benefit framework (Gibson, Tanner & Wagner 2012; Gneezy 2005).

However, there are also plenty of counterexamples: on the one hand, there are situations and microcultures in which cheating is sometimes seen as a proxy of smartness, such as gang and street culture (Burke 2013) or even business culture (Cohn et al. 2014); on the other hand, psychological empirical research (Vasek, 1986; Evans & Lee 2013, Evans et al. 2011) shows that lying is correlated with the development of cognitive skills and it is a good forecaster of future school achievements.

An extensive experimental literature studies dishonesty in Psychology (see, among others, Glätzle-Rützler & Lergetporer 2015; Wilson, Smith, & Ross 2003; Polak & Harris, 1999) and Economics (see, among others, Kajackaite & Gneezy 2017; Fischbacher & Föllmi-Heusi 2013; Mazar, Amir, & Ariely 2008; Gneezy, 2005).

Our paper delves within this debate by providing a novel contribution on the relation existing between cheating, school performance and pro-social attitude among children.
Absolute scarcity and cooperation

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ABSTRACT

We call a resource absolutely scarce if a certain level of the resource is required for meeting a person’s needs. Do people cooperate more in a prisoner’s dilemma when the resource is scarcer in order to help each other meet their needs?

We model games of absolute scarcity by threshold games, which consist of finitely repeated play of a stage game and a threshold that determines whether the final payoff equals the accumulated stage payoffs (if the threshold is met) or equals zero. In an experiment, we investigate threshold games with a prisoner’s dilemma as the base game and four threshold levels with partner and stranger matching. The unique symmetric equilibrium payoffs are zero. With sufficiently tough thresholds, asymmetric equilibria arise in which only one player meets the threshold.

Among strangers, we find higher cooperation rates when the threshold is tough than with a zero or low threshold, but among partners, cooperation is lower when the threshold is tough. A difference between cooperation in partner and stranger treatments occurs only for zero and low thresholds. Interestingly, in the stranger treatment with the toughest threshold, cooperation rates increase towards the final period and reach their maximum in the last period.

We conclude that threshold games are an appropriate means to investigate effects of scarcity. Scarcity affects cooperation. The results with stranger matching are better in line with the strategic analysis. Increases in cooperation can mainly be attributed to participants who give up on reaching the threshold themselves.
An experimental study on complex choices: Social influence and order effects

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**ABSTRACT**

Online search companies such as Amazon, Bing or Yahoo use order lists (or rankings) to present products to consumers. The underlying reason for observing a specific order is somewhat opaque. Moreover constructing relevant rankings requires understanding their causal effect on consumer choices. In addition to such framing effect most products advertised through the Internet provide information about their "popularity". This introduces another feature relevant for predicting consumer behavior. Although in reality these two issues are inter-connected (i.e., typically consumers assume that products that are ranked first are those more approved by others), understanding their independent and combined implications in a stylized and controlled environment could be enlightening. For this purpose, we perform a lab experiment focusing on a framework where the alternatives have an objective value and where, due mainly to time constraints, the decision is complex. Alternatives are presented in a certain order and, in some treatments, also information about the behavior of other participants is provided. We find that both order and social influence effects exist, although the second is stronger than the first. We also observe that the effect of social influence is more relevant when the decision is more complex. At the individual level, we show that risk aversion and high confidence reduces the sensibility to social influence. Finally, men are more sensible to social influence than women.
Communication and hidden action

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ABSTRACT

Recent findings in behavioral economics document that communication improves efficiency when strategic interaction is plagued by contractual incompleteness. However, little is known about the effect of communication when actors can hide their opportunist behavior behind uncertainty in the economic environment. We investigate the effect of communication under economic uncertainty by studying a stochastic trust game framed in a credit context. In this game the investment income of borrowers (second-mover) and thus their ability to repay the lenders (first-mover) is random. We implement a treatment in which the borrower can send text messages to the lender and compare it to a treatment without communication. We benchmark our findings against the effect of communication in two similar trust games in which i) borrower investment income is deterministic and ii) borrower investment income is stochastic but borrower behavior is revealed to the paired lender. When opportunistic behavior is revealed to the lender communication has a significant positive effect on credit volumes and repayment rates even when the economic environment is risky. In addition, the impossibility to hide opportunistic behavior behind economic uncertainty increases the average payoffs for both lenders and borrowers. By contrast, when borrowers can hide strategic defaults behind the surrounding uncertainty in the stochastic trust game communication does not improve repayment rates or payoff. When the borrowers income and ability to repay is stochastic and opportunistic behavior is private information, they are more likely to renege on promises to repay than when their income is deterministic.
Spin doctors: Vague messages in disclosure games

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ABSTRACT

Unfavourable news are often delivered under the disguise of vagueness. But are people sufficiently naive to be fooled by such positive spin? We use a theoretical model and a laboratory experiment to study the strategic use of vagueness in a voluntary disclosure game with heterogeneous strategic sophistication. Consider a sender who aims at inflating a receiver’s estimate of her type and who may disclose any interval that contains her actual type. Theory predicts that, in equilibrium, the sender discloses an interval that separates her from worse types but is upwardly vague. Senders in the experiment adopt this strategy and some (naive) receivers are systematically mislead by it. Imposing precise disclosure leads to less, but more easily interpretable, disclosure. Both theory and experimental data further suggest that imposing precision hurts sophisticated receivers, but benefits naive receivers and improves overall information transmission. Our results have implications for the rules that govern the disclosure of quality-relevant information by firms, the disclosure of research findings by scientists, and testimonies in a court of law.
The gender gap in chess performance across countries: Commanding queens in command-economies

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ABSTRACT

There are considerable performance and representation gaps in competitive chess between men and women. For instance, the November 2017 report of the World Chess Federation (FIDE) lists 1,559 male Grandmasters against only 35 females. The present paper examines the patterns and the determinants of gender performance gap in chess, across countries. FIDE reports the official Elo ratings of the players by country of flag, and its 2012 to 2016 data contain more than 1 million individual observations. These data are complemented by other sources, such as the World Development Indicators, to construct a cross-country panel. Several metrics of gender gap are computed. The gender gaps, pervasive across all measures, are much larger in the number of players than in the mean Elo ratings. Moreover, these gaps vary widely across countries. For instance, for every 100 male players rated at 1700 Elo and above, there are about 40, 30, 29, 8, 5 and 3 female players in Vietnam, Georgia, China, Japan, the United States, and Sweden, respectively. Hybrid, within-between effects estimation methodology is used to examine whether these gaps are impervious to the inclusion of socioeconomic controls. Controlling for indicators such as the GDP, female labour market attainment and global gender gap indices, having a history of command-economy is found to be the most significant predictor of a smaller gender gap in competitive chess across countries.
Sexual orientation and intra-household specialization before and after the legal recognition of same-sex marriage in Canada

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**ABSTRACT**

Using the Canadians Censuses of 2001, 2006 and 2011, this paper compares household specialization patterns of heterosexual married and cohabiting couples with their homosexual counterparts. Both gay males and lesbians are considered. Household specialization is operationalized as earnings differential between spouses. In line with a few previous studies using Swedish and American data, we find smaller intra-household earnings differentials for both gay males and lesbians compared with their heterosexual counterparts. The smallest intra-household earnings differentials are found in cohabiting gay male households. The 2005 legal recognition of same-sex marriage in Canada, appears to have weakly increased the earnings differentials between gay and lesbian spouses who are married. The data show that the presence of children increases the intra-household earning differentials, but to a considerably lesser extent for gay male households. Various implications are examined.
Sequentially increasing and decreasing trends in data and relative judgment: Considering people’s interest in the target

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ABSTRACT

The present study examined the influences of sequentially increasing and decreasing data on relative judgment considering people’s interest in the target. Participants (N = 247) were shown one of two tables. One table showed a monthly sequence of grain prices increasing, while another showed prices decreasing. The participants were asked to evaluate the price either the increasing or decreasing price trend. The results showed a significant interaction (F(1, 246) = 222.62 p < .001). The same average price of barley was evaluated as more expensive under the increasing condition than the decreasing condition.
Coupled lotteries. A new method to analyze inequality aversion

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ABSTRACT

We develop and implement a new method to analyze inequality aversion: two peers are endowed with two identical binary lotteries and the only choice they make is whether they want to play out the lotteries independently or with perfect positive correlation. The choice has no other effect than (dis)allowing for possible inequality. We implement the method in a survey in rural Thailand. Choosing positive correlation is related to being more risk averse, having social status concerns and -opposing previous literature- being male. We conclude that our method facilitates a simple and incentive-compatible measurement of inequality aversion in experiments and surveys.
Field experiments on tipping in restaurants and for home deliveries: The effects of gifts and music

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ABSTRACT

In Israel tipping in restaurants is not enforceable by law, but it forms a major part of servers’ income. Worldwide tipping is a huge economic phenomenon involving every year dozens of billions of dollars in the food industry alone, and being a major source of income for millions of workers. This research will analyze the impact of different gifts, as well as additional control variables, on tip size.

The research will involve several field experiments, examining the effect of gifts given by the restaurant on tip size. The manipulations in this field experiment will take place in a restaurant as well as incorporate courier delivery.

The study involves giving a complimentary dish or beverage, either served at the beginning or at the end of the meal, and examining the effect of this free gift on tips. In a pre-test of this research, it was shown that the average tip is higher when a beverage is served at the beginning of the meal in comparison to it being served at the end of the meal or not being served at all.

Additionally, the restaurant courier will give the customers free gifts of one of three types: a free extra dish, a dish ordered without charge, or a free non-food gift. The effect of the three types of gifts on tips will be analyzed, also in comparison to a control treatment without gifts. In addition, the effect of the time between ordering the delivery and the actual arrival will be analyzed to infer whether quicker deliveries result in higher tips. Additional factors that will be analyzed include weather, existence of an elevator, the distance from the restaurant to the customer, etc. These aspects affect the effort made by the courier and therefore it is particularly interesting to understand if they affect the tip size.

The research will contribute to the literature by providing a better understanding of the motivations for tipping, and in particular of the role of reciprocity and of showing gratitude, which may be affected by free gifts. In addition, the analysis will reveal whether a gift has a different effect when it is given at the beginning versus the end of the meal.
Improving consumer credit decisions: How implementation intentions counteract misleading cues

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ABSTRACT

Taking up a credit is becoming increasingly easy. However, literature emphasizes that consumers are prone to neglect important information in a credit decision situation. Instead they rely on cues and heuristics (e.g. "take-the-best-APR", or matching credit duration with usage duration of a financed product). When consumers are exposed to useless cues and other distracting information, a heuristic approach may lead to unsatisfying results. Implementation intentions (II; if-then-plans) could prevent credit customers from being misled by distracting information. The present study examines the influence of misleading cues and implementation intentions in credit decision-making. In a 2 (matching vs. no matching) x 2 (II vs. no II) design, 169 students completed 10 rounds of a credit decision task. In each round, participants were presented a financed product and had to select the financially cheapest credit offer out of three options. Offers consisted of credit duration, monthly rate and interest rate. In the matching (vs. no matching) condition, the duration of one of the offers was identical to the usage duration of the respective product. Moreover, participants were either reminded of their goal to find the cheapest offer (no II condition) or additionally had to formulate an implementation intention (II condition). Results indicate a significant interaction effect: Without formulating implementation intentions, participants were more likely to make errors in the matching condition. With formulating implementation intentions, however, the effect of matching disappeared. Consequently, implementation intentions might help consumers to neglect useless cues and to focus more on crucial information in credit decision-making.
Values, attitudes and economic behavior

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ABSTRACT

In this paper, I propose a simple model in which behavior is determined by the individual's attitude towards the behavior and the attitude depends on the individual's values. The model is based on the Schwartz theory of human values, which is very prominent in social psychology. Values are desirable, transsituational, abstract goals. In the model, they fix aspiration levels for specific targets that are related to an object. The distance between the properties of an object and the aspiration levels determines the degree of the agent's satisfaction or dissatisfaction with the properties of the object. Attitude is the importance-weighted sum of the degrees of (dis-)satisfaction. The model highlights the importance of systematic and measurable heterogeneity among individuals and shows how values can predict differences in tastes and sensitivity to income and prices. The model also explains when Veblen effects occur.
Behavior prediction is necessary for behavior change

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ABSTRACT

Behavior change is one of the most important problems faced by people and researchers today. Previous attempts to change and maintain human behavior often achieved limited success. Nowadays, researchers can turn to technology, which can help predict and change human behavior better than ever before due to novel data sources, data collection tools and machine learning methods. We follow by proposing the design of research studies that study people in the context of natural life, objectively measuring behavior and implementing digital interventions. We discuss two primary examples to highlight this approach in the areas of wellbeing and self-control. Additionally, we present two novel exploratory studies that explore interventions for digital addiction and learning. We explore exciting future directions for research in psychological and behavioral sciences as we, and other researchers, try to improve human behavior using technology.
Shortened lives and socio-economic decision-making: A behavioural study of Huntington's Disease

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ABSTRACT

Huntington's Disease (HD) is a genetic disease associated with significant reductions in life expectancy and life quality. Once manifested, it leads to rapidly declining cognitive and social functioning, excessive risk-taking and poor financial management. Previous economic analyses of HD have drawn on Brunnermeier and Parker's (2005) insights about expectations and optimism bias, linking shortened life expectancy with limited human capital accumulation, for example via reduced investments in education and training (Oster et al. 2013a,b). Other economic analyses have explored genetic adverse selection and genetic discrimination in health insurance markets— for HD as well as for neurodegenerative disorders generally (Oster et al. 2010, Tabbarrok 1994). These analyses have been based within a standard economic framework of utility-maximisation, largely neglecting recent insights from behavioural economics and economic psychology about behavioural bias and social influence. We fill this gap by using insights and methods from behavioural experimental economics, economic psychology and social economics, as well as connecting with insights from clinical research into HD (e.g. Barker and Mason 2014).
Episodic future interaction: How does it affect current food consumption?

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ABSTRACT
It is commonly believed among economists and psychologists that an individual’s sense—or lack thereof—of psychological connection with his future self plays a key role in shaping his decisions today. Charles Dickens’ A Christmas Carol serves as motivation for our work in the present paper. In the story, Ebenezer Scrooge is given a chance to redeem himself through the intervention of ghosts from his past, present and future. The visits from ghosts of the past and present make him melancholic, but cause no change in his behavior. It is not until he is visited by the Ghost of Christmas Yet-to-Come that he decides to change his present behavior. Related to this story is the notion that the degree of connectedness of an individual with his self-image and future self might affect his decision-making processes given that a future self might present challenges to his imagination. A new, but emerging literature documents the effects of evoking thoughts about the future on current consumption and decisions (for a review see Atance and O’Neill 2005). On that basis, we presented subjects with digital images representing a “healthier” and an “unhealthier” version of themselves in order to facilitate “reward/punishment” self-imagination and evaluate their self-control on an immediate task. The objectives of the present study are to 1) examine the effects of episodic prospection and thought inducement on current food choices, 2) analyze how food choices relate to bmi status, and 3) investigate the role of temporal discounting in the association between health-related thoughts inducement and food choices.
Strengthening financial decision making in the field: Saving for a rainy day

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ABSTRACT

The Dutch seem peculiar in their financial saving behaviour. When it concerns long term investments in their houses and pension funds, they are prudent and forward-looking. When it concerns saving for unexpected expenses that might occur on the short term, however, the Dutch are slacking: 15% of Dutch households do not have any savings and 30% has less than €5,000. The Dutch thus appear to be well-prepared for the more distant future, but not for tomorrow’s rainy day. On the contrary, they do seem to understand the importance of saving for a rainy day. In an experimental field study we tested whether we could bridge this gap between wanting to save and actually saving. Concretely, we examined whether reminder-based interventions increase participants’ financial saving behaviour. Participants (N = 429) were randomly assigned the control, reminder, or visualized reminder condition. From June to November 2016, they completed monthly questionnaires about their savings and, three months later, they completed an additional questionnaire to address possible longer lasting effects of the interventions. Participants in the experimental conditions received an reminder of their progress in August, September, and October 2017. Results showed that from June to November 2016 the increase in savings was not significantly different for the three conditions. Results, however, did show effects on the longer term. Although participants did not receive any reminder between October 2016 and the follow-up questionnaire in February 2017, results showed differences in savings between the control and experimental conditions. During the conference, results and implications will be discussed more extensively.
Well-appreciated but (too) difficult pensions choices? Insights from the Swedish premium pension system

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Elisabeth Brüggen  
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ABSTRACT

We analyze experiences of savers in a DC pension scheme from Sweden – a country that was among the first to launch choice-based funded individual pension accounts. Based on a survey among 2,646 savers, we find that the average saver feels unknowledgeable about the scheme and experiences choice overload. Pension savers with a high degree of choice overload are likely to be influenced in their investment decisions by peers and advisors. Low knowledgeable and risk-averse savers tend to invest in the default fund – a fund that is, however, one of the most risky funds. On top of this mismatch between savers’ risk-aversion and investment choices we also find that risk-averse savers and savers with low subjective knowledge are more likely to feel pessimistic about their future financial well-being. Those who appreciate choice in pensions are more optimistic. However, the actual act of choosing has barely an effect on the perception of financial well-being. Interestingly, most pension savers do not tend to remember the funds they chose, but rather the fund provider, which they paradoxically consider as the least important decision criterion to make a fund choice. Based on our results we derive suggestions for reforming choice-based pension schemes.
Risk attitudes, sample selection and attrition in a longitudinal field experiment

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**ABSTRACT**

Longitudinal experiments allow one to evaluate the temporal stability of latent preferences, but raise concerns about sample selection and attrition that may confound inferences about temporal stability. We evaluate the hypothesis of temporal stability in risk preferences using a remarkable data set that combines socio-demographic information from the Danish Civil Registry with information on risk attitudes from a longitudinal field experiment. Our experimental design builds in explicit randomization on the incentives for participation. The results show that the use of different participation incentives can affect sample response rates and help one identify the effects of selection. Correcting for endogenous sample selection and panel attrition changes inferences about risk preferences in an economically and statistically significant manner. We draw mixed conclusions on temporal stability of risk preferences that depend on which aspect of temporal stability one is interested in.
Using choice architecture to encourage healthier food purchases

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Public Health England

ABSTRACT
In 2016, the Childhood Obesity Plan outlined the need to make healthy options available in the public sector. Public Health England Behavioural Insights (PHEBI), in collaboration with National Health Service (NHS) England and the Department of Health, worked with three NHS hospitals in 2015/16 and 2016/17 to implement interventions to increase healthy food and drink purchasing amongst staff and visitors, by supporting the implementation of the Government Buying Standards for Food (GBSF) and applying behavioural insights within the hospital food environment (cafes and vending machines). PHEBI ran randomized controlled trials, with interventions that altered product sizing (implementing GBSF), availability (removing sugar sweetened beverages from sale), and positioning (making healthy products more visible and unhealthy products less visible). Retrospective analyses were also used to evaluate changes to the food environments that some hospitals had already made. Both hospital case-studies that used availability interventions showed significant positive changes whereas the other interventions produced mixed results or only weak evidence of a positive effect. The financial impact of implementing choice architecture interventions appears negligible.
Psychological distance and financial derivatives’ endowment

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ABSTRACT

Individuals are often having a dilemma about how to allocate their funds in financial assets. Commonly they construct their portfolio mostly with direct financial assets (e.g. Stocks, Bonds) and less with financial derivatives (e.g. Options, Futures) due to lack of knowledge in derivatives and their aversion from risk encapsulated in them. Options are defined as the right (but not the obligation) to buy/sell an underlying asset (e.g. Stock) at a pre-defined price and point of time in the future.

The literature showed how the real financial behavior of individuals could be simulated within experiment settings by pricing tasks of lotteries. For each lottery decision, individuals are instructed to indicate their willingness to pay (WTP) for buying the lottery and their willingness to accept (WTA) for selling a lottery they own. Over the years, the differences between the bids and asks of the exact same lotteries have been accounted to a cognitive bias called ‘The Endowment Effect’ (Thaler, 1980).

The endowment effect has been also investigated from the perception of Construal Level Theory (CLT) Trope and Liberman (2010). The relation between CLT and endowment effect has been discussed by Irmak, Wakslak, and Trope (2013) who showed that the price discrepancy between buying and selling prices is influenced by the value that individuals give to low (i.e. peripheral aspects) and high (i.e. central aspects) features of the product.

The present article is intended to suggest a novel implication of psychological distance on direct and derived financial assets. More specifically, we aim to show that psychological distance affect the endowment effect differently when comparing between direct and derived financial assets. In addition, we strive to show that differences in WTP/WTA separately between these types of
lotteries regardless of psychological distance. The main contribution of the present article is to further explain irrational pricing differences between direct and derived asset and to extend the literature on financial derivatives on the individual level, and to apply CLT on complex financial realms.

To investigate the different phenomena, an online experiment has been distributed to the participants. The participants were presented randomly ten different lotteries. The participants were asked to price (i.e. Buy/Sell) the lotteries in New Israeli Shekels (NIS). The random order of lotteries presentation was intended to avoid anchoring bias.
Unequal before the law: Asymmetric monitoring in a public goods game

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ABSTRACT

Equality before the law is one of the fundamental bases of fairness for the rule of law. In line with classical economic theory, the theory of deterrence assumes that individuals consider only their own obligations and they do not care about how the same obligations are enforced on other individuals. However, it is well documented in the literature that the concerns for fairness have a major effect on how people behave in various settings. This paper aims to contribute to the deterrence literature by testing the effect of fairness considerations on the decision to follow the law using experimental economics methodology. In particular, the unfair environment is created by assigning asymmetric obligations to otherwise identical subjects in a public goods game with a punishment setting. The punishment regime is defined by the punishment severity and the probability that infringement of the law will be detected. Asymmetry of the obligations is implemented through heterogeneous monitoring probabilities with a between-subject design. Average contributions and deterrence rates in treatments with low, high and asymmetric enforcement are compared in order to understand how unfair implementation of the law affects behavior. In addition, within this framework, we aim to study how existing norms regarding the law enforcement affect the way people perceive unfairness and react to it by introducing consecutive rounds of symmetric and asymmetric environments in a multiple round public goods game.
Warning messages framing and the effect on online security behaviour

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**ABSTRACT**

Online security is influenced by natural events, technical failures and malicious threats, but human mistakes also play an important role. Policy actions are devoted to reinforcing the adoption of standards that lead consumers to increase their security while online. Hence, it is important to approach security-by-design principles. The present research contributes to this goal. It tests several warning messages that may persuade consumers to behave more securely while online, thus diminishing their chances of suffering a cyber-attack.

We conducted a lab experiment (n=600) where participants had to make some online shopping decisions, and were assigned a quantity of money. The incentive for participating in the experiment depended on how secure their behaviour was during the purchasing process as regards: choosing a safe connection, providing less information during the sign-up process, choosing a strong password, choosing a trusted vendor, and logging-out. Each decision they made could increase their chances of suffering a cyber-attack at the end of the experiment and losing part of the incentive if it was less safe. We measured other factors that may affect secure behaviour through a pre-purchase and a post-purchase questionnaire. Results show that a long warning message and a loss-framed security message will make subjects to behave more secure while shopping online and will decrease their probability of suffering a cyberattack.

The design of security messages has an effect on consumer behaviour. The policy implications are that security awareness messages should be carefully designed and piloted before they are implemented.
Does relative thinking exist in mixed compensation schemes?

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ABSTRACT

Several earlier studies have shown that people exhibit "relative thinking": they consider relative price differences even when only absolute price differences are relevant. The article examines whether relative thinking exists when people face mixed compensation schemes that include both fixed and pay-for-performance components. Such compensation schemes are prevalent in many occupations (e.g., salespeople and managers) and therefore are an important practical issue. Surprisingly, the ratio between the pay-for-performance and the fixed compensation does not affect effort, meaning that no relative thinking is found. Another experiment shows that this is not due to reciprocity that cancels out relative thinking. In a third experiment subjects make similar decisions without incentives and the results suggest that the different context (compensation schemes instead of price comparisons) and not the introduction of financial incentives (which were not used in previous studies) is the reason that relative thinking disappears. The results have implications for designing incentive schemes in firms and for designing experiments.
The relationship between motivation and responding to nudge: Case study of sending written letters that aim to increase the labour supply of people with disabilities

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ABSTRACT

Recently, the concept of “Nudge” actions have been increasingly cited in existing literature. However, scholarship has not sufficiently discussed the influence of personal characteristics on these ideas. This study uniquely deals with the relationship between achievement orientation (according to Schwartz’s theory of basic human values) and response to written letters that aimed to increase the labor supply of people with disabilities who received allowances from the social security institution.

In this study we used two types of written letters. The first type was designed as a “pay-slip” that included details of the allowance calculation, the average income of working allowance recipients and a chart of the total incomes for every possible wage level. The second type was designed as an official “certificate” and included a personal address and general information about the allowance requirements for working recipients.

Our study indicated a causal correlation between responding to written letters and individual values. We found that only individuals with a high level of achievement orientation responded to written letters. Individuals with a high level of achievement orientation who received our first letter (“pay-slip”) exhibited a greater intention to work and engage in occupational rehabilitation. Sending written letters to individuals with a low level of achievement orientation did not yield a significant effect on the tested outcomes, except regarding trust in the social security institution.
When accepting is more than just not rejecting: Exploring the variable influence of upstream economic actors on different types of consumer decisions

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ABSTRACT

This presentation draws on three recent studies exploring consumer acceptance of biotechnology, and in specific one study elucidating the role of information framing in the context of the use of bioenergy from GM crops. Herein, we investigated and distinguished among three key determinants of decision-making in designing the experimental manipulation. First, we manipulated the valence of information in messages about risks and benefits of using GE crops for bioenergy production, that is, whether information about this application was generally positive or negative. Second, we included information about the decisions of other supply-chain actors, e.g. to support or reject broader use of GE in bioenergy production. While many studies have explored the general influence of trust or trust in scientists (Frewer et al., 1996; Siegrist and Cvetkovich, 2000; Siegrist, 2000), the relevance of more economic actors on decision-making is broadly neglected. Owing to the limited information to which consumers have access, upstream decisions to support and sell (instead of reject) new technologies could prove deeply influential. Third and finally, we controlled for emotional mood to explore its impact on information processing. While the relevance of emotional factors is widely acknowledged (Roeser, 2012), it is less clear what exact role they might play. Accordingly, we traced the moods of participants at three distinct points in the experiment (i.e. before, during, and after) to control for their influence on decision-making. Our ability to thereby control for the distinct streams of decision-making thus established the basis for a comprehensive analysis of the extent to which individuals are indeed susceptible to their emotions when it comes to risk perceptions of GM.
The effect of housing conditions on preferences and cognitive function

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ABSTRACT

This paper studies the causal effect of improved housing conditions on people's risk and time preferences and cognitive function. Understanding the effects of improved housing quality is important for evaluating public housing policies as well as for understanding the impact of bad housing conditions on the choices of poor people and their ability to improve their economic situation. The data will be collected from adult participants of a unique randomized controlled trial "Rapid Re-Housing" that is currently running in Brno in the Czech Republic. In this trial, a randomly selected group of 50 homeless families were moved to municipal flats, while the 100 control families were not helped by the city and, in the majority of cases, remained in bad housing conditions. The question about the relationship between wealth or income and risk or time preferences has been studied by many authors (e.g. Guiso and Paiella, 2008, Tanaka et al, 2010) and surveyed by Haushofer and Fehr (Science, 2014). The effect of wealth or income on cognitive abilities has been studied e.g. by Mani et al. (2013). In comparison to these studies, our treatment increases only consumption of housing services while keeping wealth or income constant. Therefore, the design of the RCT allows us to isolate the effect of one channel, better housing, through which higher wealth or income can influence preferences or cognitive abilities. There are several possible mechanisms through which better housing could affect the risk and time preferences of people. The first mechanism is that better housing reduces people's stress, which in turn leads to different risk and time preferences (Haushofer and Fehr, 2014). Another possible mechanism is that people in better housing conditions sleep better which leads to better decisions. Some studies, for instance, find that sleep deprivation reduces the propensity to take risk (e.g. Killgore, 2007). The mechanism behind the relationship between bad housing and cognitive function is similar to the explanation proposed by Mani et al (2013). Bad housing
conditions may make claims on limited cognitive resources, which might reduce the capacity of homeless parents to address other problems as well as people in decent housing conditions manage. We will conduct a lab-in-the-field experiment with each adult member of the treatment and control group (roughly 200 subjects) in March and April 2018. Risk and time preferences and cognitive function will be measured using standard incentivized questionnaires. For measuring risk aversion we will use bomb risk elicitation task by Crosetto and Filippin (2013). Time preferences and present bias will be measured with a standard multiple price lists adapted from Sutter et al. (2013). For measuring cognitive function, we selected the D2 test of attention by Brickenkamp and Zillmer (1998).
Come together. Trust, sociability and individual investors’ financial decisions

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ABSTRACT

Previous studies have found trusting and social individuals to be more likely to participate in the stock market and to hold risky assets but why is this and does individuals that already participate in the stock market benefit from being more trusting and social? In this paper, I try to answer these questions by combining survey and registry data for a random sample of individual investors in Sweden. More specifically, I test whether trust and sociability are associated with the financial information investors use when making their financial decisions and with the returns of their stock portfolios. I find that investors who trust information from media and financial advisors use these two sources of information more frequently when making their financial decisions compared to less trusting investors. Similarly, social investors use information from friends, family, and financial forums more frequently than less social investors. More importantly, I find that trusting and social investors acquire higher simple and risk-adjusted stock-portfolio returns suggesting that an increase in both trust and sociability can help investors to make better financial decisions.
Overconfidence and bubbles in experimenta asset markets

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ABSTRACT

The purpose of this study is to search for the overconfidence bias of U.K. subjects, investigate the effect of overconfidence in creating stock market bubbles in experimental setting. Mainly two economic experiments are conducted to deal with the role of overconfidence in forming bubbles and the effects of overconfidence on economic behavior of individual traders. Results indicate that subjects are generally overconfident. Most of them see themselves above average and overestimate precision of their knowledge. Highly overconfident traders trade more frequently. Results also indicate overconfidence results in bubbles in markets and bubbles are mainly driven by overconfidence in the domain of finance more than overconfidence in the domain of general knowledge.
Persuasive messages and attitude change towards genetically modified food

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ABSTRACT

Genetically modified food (GMF) evokes strong attitudes which tend to be mostly negative (Honkanen & Verplanken, 2004) but not only (Magnusson and Hursti, 2002). The study addresses the effectiveness of strong (informative) vs. weak (uninformative) arguments for changing attitudes, level of acceptance and willingness to buy GMF. Previously this was examined based on the dual process model approach of persuasive messages and the Elaboration Likelihood Model (ELM) by Petty and Cacioppo (1986). ELM describes the change in attitudes in based on two information processing systems emphasizing two routes of persuasion: central route – involves a high level of cognition, careful analysis of information; and peripheral route – relying on general impressions, based on heuristics, unrelated to logical reasoning.

In the context of GMF, two presumptions are important: (1) this hazard could be either seen as acceptable and positive or hardly to accept and negative with the strong perception of riskiness. A general remark is that it is usually easier to increase the perceived benefits than to decrease the perceived dangerousness. However, both impacts are needed. Therefore, in the present study we applied personalized treatment (with positive vs. negative framing) with respect to pre-determined attitude towards GMF.

In the phase 1 participants declared their attitude, perceived risks and benefits towards GMF and faced a choice experiment. After 2-week period each of the treatment group was faced with different framing of messages about a specific product (using a 2 (argument strength) x 2 (pre-determined attitude) design) followed by choice experiment and general attitude question.
Differences in financial risk tolerance between white and hispanic households

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ABSTRACT

The purpose of this research is to explore differences in financial risk tolerance between Hispanic and non-Hispanic white households in the United States. The Hispanic population in the United States reached 57.5 million in 2016, or about 18% of the total population (US Census Bureau Fact Finder, 2016). As the Hispanic population continues to expand, the importance of this group to the U.S. economy increases (de Bassa Scheresberg et al., 2015). The unique characteristics of Hispanic households affect their financial practices, and there is a need for researchers to continue investigating this group’s financial behaviors (Fisher & Hsu, 2012).
Switching savings accounts. A field trial to encourage competition?

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ABSTRACT
Consumer disclosure – the practice of providing information to support consumer decision making – has obvious potential benefits and has been widely mandated in public policy. While most evidence on the effectiveness of consumer financial disclosure design stems from lab experiments or post-implementation analysis, we provide direct field evidence from randomized-controlled trials with 130,000 savings account holders from five major UK providers. Groups of treated consumers received various salient information about an available better product. Motivated by theoretical research on market frictions and consumer mistakes, our experimental variation is designed to allow us to examine the relative importance of (i) simplifying search and comparison within and across providers, (ii) making the switching process easier, and (iii) increasing attention to the task. We find that explicit rules around disclosure design are a necessary element of effective consumer protection regulation. Despite the switching process taking 15 minutes on average and the moderate size of average potential gains (£123 in the first year), we find that overall attention to disclosure is low, significantly limiting its potential effectiveness and shedding light on the nature of the stickiness of deposits.
Need for closure, the affect heuristic, and the structure of stock portfolios

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ABSTRACT

One of the general predictions of theory on need for cognitive closure (NFC) is that individuals with high NFC should rely more heavily than others on heuristics, as this helps them quickly achieve closure. We investigate whether high-NFC individuals are more prone to use the affect heuristic, a heuristic in which individuals use their attitude towards something (e.g., a country) when thinking about its properties (e.g., its perceived riskiness or benefit), which in turn guides their decisions.

We focus on investment decisions, which have been previously shown to be (at least to some extent) affect-driven. Need for closure is treated both as an individual difference and induced via time pressure. Our data supports the existence of the affect heuristic, but does not show evidence that people with NFC –due to either their general tendency or time pressure– use this heuristic more intensively. In fact, when high-NFC individuals are subject to time pressure they behave less heuristically. Our findings are in line with recent research, arguing that under certain circumstances individuals with high need for closure process information less heuristically.
The anchoring heuristic: the role of information generated when answering the comparative question

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ABSTRACT

The anchoring effect is a robust psychological effect that is well documented within the scientific research. This effect refers to phenomena when an arbitrary number affects subsequent numerical estimations. Latest research suggests a certain relation between knowledge and magnitude of the anchoring bias. Referring to numerical values (i.e. metric knowledge) associated with the estimation task leads to lower anchoring effects than non-numerical information (i.e. mapping knowledge) or no knowledge at all.

However, those findings pertain to anchoring mechanisms in which information of certain type is explicitly provided. As for this moment it has not been investigated whether any information is actually generated during the anchoring task. Two Experiments were conducted in order to test this notion.

In both Experiments participants were asked to answer a comparative question: "Is the Vistula river shorter or longer than 50 km (low-anchor condition) / 3000 km (high-anchor condition)?". Next, participants were required to provide an absolute estimate regarding the length of the Vistula river and indicate confidence in the estimate.

In Experiment 1 the verbal-protocols method was employed, showing that participants who were able to generate information were less prone to anchoring effects and more confident in the provided estimates. Experiment 2 replicated those findings using different verbalized data acquiring method, additionally showing that it is only the metric knowledge that allows to alleviate the susceptibility to anchoring effects and leads to higher confidence in the provided estimate.
Magical contagion, blue plaques and property prices

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ABSTRACT

The idea that celebrities confer value on objects they once owned or merely touched is confirmed by regular reports of celebrity artifacts sold at auctions. For example a guitar once owned by John Lennon sold for $2.4m (£1.6m) at auction in 2015. An online search for the same model and year guitar indicates that the current market price for the same model and vintage of guitar – albeit one not owned by John Lennon – is about £3,000.

One possible way of explaining the way by which objects acquire exceptional value purely as a result of being owned by or in some way associated with a noted individual is "magical contagion" - a concept elaborated by psychologist Paul Rozin in a large number of publications. The law of contagion can be summarized as once in contact, always in contact. Rozin cites the Scottish anthropologist James Frazer (1890/1959) who described belief in contagion to account for a wide variety of magical practices and beliefs in traditional cultures. According to Frazer, "things which have once been in contact with each other continue ever afterwards to act on each other" (p. 35). However most of the examples of contagion cited by Rozin and his coworkers have involved negative effects – for example may people are reluctant to try on a sweater they are told was once worn by Adolf Hitler – despite the fact it has been freshly laundered. Negative effects of contagion appear more potent than positive effects. A positive-negative asymmetry seems to be part of a more general tendency in humans and other animals to learn more rapidly and respond more strongly to negative events. Although disgust is generally considered a basic "negative" emotion, there is no basic "positive" emotion as its opposite.

Rozin, Millman & Nemeroff (1986) point out that while positive contagion is prevalent in some cultures, such as the Hua of New Guinea where the personal history of objects, in terms of contact with people with positive or negative relations to an individual, powerfully influences behavior. For example, the value of a food for a particular person is enhanced if it is spat on by someone in a
positive relation to that person. However, even among the Hua, negative effects seem more potent. One clue for the asymmetry is offered by Rozin & Fallon (1987) citing the words of a Nebraska car mechanic, "A drop of sewage spoils a barrel of wine, but a drop of wine does nothing for a barrel of sewage".

A further obstacle for positive contamination is reported by Rozin, Grant, Weinberg & Parker (2007) who found that people are substantially less likely to acknowledge magical effects when the judgments involve money (amount willing to pay to avoid an "unpleasant" magical contact) than they are when using preference or rating measures. While survey respondents indicated were less willing to rent a condominium if they discovered it had previously been rented by a murderer for one week, the proportion of respondents not demonstrating any "magical effect" was reduced when they were asked to indicate the highest rental price they would be willing to pay. Rozin et al concluded that money makes the mind less magical.

In this context we investigated the effect of commemorative blue plaques on the value of properties. The London blue plaques scheme was started in 1866 and is thought to be the oldest of its kind in the world. According to English Heritage –the organization who run the scheme: "Across the capital over 900 plaques, on buildings humble and grand, honour the notable men and women who have lived or worked in them". Note that Blue plaques are only erected at least ten years after the death of the notable individual they commemorate.

The UK Land Registry Website provides the sales transaction prices for all properties sold in the UK since 1995. English Heritage website provides the installation year for the Blue Plaques that are installed at its instigation. We identified 73 properties for which we could obtain a sales transaction price in the period prior to the installation of a blue plaque and a sales transaction price after the blue plaque installation.

In order to allow for property price trends across the two sales times we compared the two transaction prices for each property with the median property price for all properties in the same postcode in the same year. We found that the price of blue plaque properties relative to the median price for the same postcode increased after the blue plaque installation. The mean difference in the two prices for the 73 properties was about 20% and significant on a one tailed t-test (P<0.05).
Homes under the hammer: The planning fallacy in televised property renovation

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ABSTRACT

People tend to underestimate how long it will take them—and how much it will cost—to complete tasks and projects—the so-called the “planning fallacy”. There are many famous examples of cost and time overruns (Ayton, 2000). In 1957, engineers forecast that the Sydney Opera House would be finished in 1963 at a cost of A$7 million. A scaled-down version costing A$102 million finally opened in 1973. In 1969, the mayor of Montreal announced that the 1976 Olympics would cost C$120 million and “can no more have a deficit than a man can have a baby”. Yet the stadium roof alone—which was not finished until 13 years after the games—cost C$120 million. The Channel Tunnel had a projected cost £2.6 billion but, the final bill came to £15 billion. The Jubilee Line extension to the London Underground cost £3.5 billion, about four times the original estimate.

What causes the planning fallacy? For large-scale industrial projects one might suspect that they reflect Machiavellian plots to secure approval for projects that once started cannot easily be cancelled. However the planning fallacy has been observed in a wide variety of activities, for example, students consistently underestimate how long it would take them to finish their assignments and other nonacademic chores (e.g., “fix my bicycle”, “clean my apartment”, and “write a letter to my friend”) (Buehler, Griffin, & Ross, 1994).

Kahneman and Tversky (1979) did not conduct empirical studies of the planning fallacy, but in their original description of the problem, suggested that when people consider how long it will take them to complete a task, they tend to adopt a singular, or “inside”, perspective, focusing on the specific aspects of the current task and a scenario of how it will be completed—as opposed to a distributional, or “outside” perspective based on how long similar tasks have taken in the past.

Several results support this inside/outside interpretation of the planning fallacy. Buehler et al.’s (1994) study found that when people estimate how long tasks will take, they tend to focus more on their specific plans for the future than on their experience with similar tasks in the past (Buehler
et al., 1994). Indeed, the planning fallacy persists even when contradictory distributional information is readily available (Buehler, Griffin, & Ross, 2002). Kruger & Evans (2004) point out that researchers who underestimate how long it will take to write a manuscript, for instance, often do so despite knowing that all of their past manuscripts took longer than anticipated.

The imperviousness of planning judgements to experience – the lack of any evidence of learning is a striking feature of the planning fallacy. In his book “Gödel, Escher, Bach” Douglas Hofstadter proposed Hofstadter’s law: it always takes longer than you expect—even when you take Hofstadter’s law into account. Buehler, Griffin & Peetz (2010) quote Douglas Adams, “Human beings, who are almost unique in having the ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so”. (Adams & Carwardine, 1991, p. 116) and George Bernard Shaw’s claim that “We learn from history that we learn nothing from history”. (Shaw, 1903/1948, p. 485).

The BBC television programme “Homes under the Hammer” offers an opportunity to study the influence of experience on planning judgments for significant monetary commitments. The programme tracks individual property developers who buy a property at auction and then renovate it for profit. Participants are interviewed after purchasing the property before and after renovating it. They are asked how much they will spend on renovating and how long it will take and after renovating the actual time and spend are reported.

Our analyses of 201 different renovation projects showed a significant cost and time overruns—the mean cost overrun was £27,811 (52% over budget); mean forecast time was 4 months; mean actual time was 8 months. Despite considerable variance in experience with previous renovation projects – 55% have previously renovated other properties - there was no evidence of any learning; cost and time overruns were uncorrelated with previous experience, whether participants worked alone or in consortium with others, their age or gender. Time –but not cost– overruns were significantly greater when developers were renovating a property as their own home –rather than for the market.
How does a machine learn to gamble responsibly?

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**ABSTRACT**

Responsible gambling messages are becoming increasingly prevalent (Reith, 2008). Industry and academic sources agree that responsible gambling messages should inform gamblers on the odds of winning (Blaszczynski et al., 2011; Miller, Thomas, Smith, & Robinson, 2016). It is surprising to us that reliable statistical information is missing from promotions for skill-based gambling forms, such as sports betting. British soccer fans are frequently advertised the odds of potential bets across across TV, bookmaker shop windows, and online (Lopez-Gonzalez, Estévez, & Griffiths, 2017; Newall, 2015; Newall, 2017). These adverts display no information to help consumers understand the often highly-variable statistical risks. This is unlike other public health domains, where for example calorie and alcohol unit labelling inform consumers at the point of sale of potential products’ relative risks. This paper uses machine learning to investigate the minimum potential risks that a fully-informed and rational soccer bettor might face across three subtly-different bet types.
Psychological factors explaining the poor’s cognitive functioning

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Agata Gasiorowska

ABSTRACT

Many of the recent studies investigated the relation between socio-economic status (SES) and various psychological variables. However, the majority of research examining negative cognitive consequences of lower SES in different samples are focused on the objective assessment of wealth. However, the relation between wealth and its subjective perception usually is only weak (Gasiorowska, 2014). Another variable that might be an important in explaining the relation between income and cognitive functions is a sense of control. Therefore, we assumed that cognitive functioning and how people evaluate their cognitive abilities, depends not only on objectively measured income, but also on psychological factors caused by one's better or worse financial situation. Summing up, the main purpose of this research project was to investigate the mediating role of money attitudes, perception of own economic situation, and sense of control, in the relation between income and cognitive functioning. To test our hypotheses, we conducted three studies. In Study 1 (N = 301), we investigated whether objective wealth would be related to abilities of reasoning and thinking, trying to conceptually replicate former research on SES and cognitive functioning (Mani et al. 2013). In Study 2 (N = 314), we tested whether money attitudes, subjective assessment of own economic situation and sense of control sequentially mediate the relationship between income and reasoning and thinking. Finally, in Study 3 (N = 287) we ruled out potential alternative explanations, and demonstrated that the relationship investigated is mediated exclusively by the feelings of insecurity in financial domain.
Transmission of time preferences from parents to children: Evidence from Turkey

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ABSTRACT

Recently a growing line of research documented that time preferences of individuals have an immense importance on individuals lifetime outcomes such as educational achievement. This shows that any heterogeneity within these preferences resulted from family characteristics may lead an inequality in childrens and adolescents life prospects. Hence many economists start to investigate the question whether those preferences are transmitted from families. However due to lack of data, empirical studies are either narrow in scale or use proxy variables for most of the vital variables. This research aims to contribute to this literature by analyzing the parental transmission of time preferences by the means of experimental questionnaire methodology proposed by Falk et. al (2015). Novelty of these survey is that the questions are chosen through an ex-ante experimental validation procedure such that the questions in these surveys are the best predictors of elicited preferences in experiments. Together with the time preferences and social preferences addressed in Falk et. al (2015), we collected a very rich set of data on educational and demographic characteristics of individuals that enables us to investigate the origin of inequality within the lifetime outcomes of children with different socio economic status. Experimental questionnaires are held by a trained team of Bilgi Economics Laboratory of Istanbul (BELIS) in Istanbul Bilgi University during registration days on two consecutive years, 2016-2017, with family units consisted of mother, father and adolescents. In 2016, 319 family unit and 768 individuals have participated in our survey. In 2017, 297 family unit and 604 individuals have participated in our survey. In total 616 family units and 1372 individuals took part in our survey. Results show that the effect of fathers time preferences and income on childrens time preferences is positive and significant while the effect of gender is significantly negative. On the other hand, results show no significant effect of mothers on child time preferences.
Delayed decision resolution and risk-taking propensity: The role of affect and real-waiting time

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ABSTRACT

Previous studies about the influence of time distance on risk-taking examined how people behave when the risk is realized in the future, but to our best knowledge, there is no study examining what happens in the day of risk resolution. The paradigms used in previous research reflected situations in which subjects made their decision once, and could not change it afterwards. However, it is easy to imagine situations where the initial decision might be changed as time goes by. In our study, we tested how people behave when the time distance disappears: our aim is to investigate whether decision-makers change their initial decision at the moment of risk resolution when given such an opportunity. Moreover, the aim of our study is to gain a better understanding of the role that affect plays on the choices made by participants in the presence and absence of time distance.

To verify our hypothesis, we conducted three incentivised experiments, each devised with two stages. During the first stage, participants completed an online survey that was meant to assess their susceptibility to affect (TIPI, BIS-BAS, PANAS). The second stage was a laboratory visit comprised of two visits with a 4 week interval. In each visit participants made 40 choices between pairs of lotteries grouped in two blocks. We constructed lotteries based on Rottenstreich and Hsee’s (2005) notion that whenever the probability of winning is slightly greater than zero we deal with situations in which some hope exists, and when the probability of winning is less than 1 we deal with situations when some fear exists.
Capitalizing on cognitive biases: the case of lottery "strategies"

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**ABSTRACT**

Popularity of lotteries around the world is a puzzle. In this paper, we study one factor, which might contribute to this popularity, namely lottery "strategies" that could allegedly improve players' odds. Browsing through the Internet and books, we amass the largest dataset of lottery strategies in existence. Then we analyze their descriptions, categorize them, and investigate how they exploit their target audience’s behavioral biases, including illusion of control, authority bias, magical thinking, illusion of correlation, gambler’s fallacy, hot hand fallacy representativeness heuristic, availability heuristic and regret aversion. We found that strategies support gamblers’ (false) beliefs concerning possibility of control over lottery results. This exploratory, ethnographic work sets stage for the design of experiments testing how specific features of strategies may trigger (excessive) lottery play.
Statistics and behavioural insights: Three cases

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ABSTRACT

Statistical analysis is a main tool for every empirical study. We present two cases that illustrate the focus and reveals some blind spots associated with the use of statistical tools by economists and psychologists, namely, equal weights vs. OLS, and the Bias-Variance Dilemma, respectively. Each one of these statistical notions has behavioral implications and counterparts as the results generated by using these statistical methods have established the basis for making claims about and performing assessments of heuristic judgment and heuristic-based behavior. After elaborating on the statistical soundness of these instances, we provide our third case, which involves a ritual of performing statistical null hypothesis testing that requires close scrutiny and can shed light on the recent concerns with the lack of scientific transparency. We present the results of a pilot study on hypothesis testing literacy among academics and practitioners who were participants in a decision science conference, and point out ways to improve the statistical practices in social sciences. We provide suggestions for a smooth introduction of elements into the curricula and textbooks that rectify the presented shortcomings.
Assessing financial knowledge and understanding: New scales for UK respondents

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ABSTRACT

Surveys of financial literacy typically pose questions designed to assess respondents’ understanding, and factual knowledge of matters concerning the management of their financial resources. However, although such surveys have proved useful, evidence of thorough psychometric evaluation is sparse. One exception is a recent application of Item Response Theory (IRT) to US financial literacy surveys. The present investigation applied this technique to a UK financial literacy survey to construct and evaluate scales appropriate for UK respondents. Fifty questions to assess knowledge and understanding across ten financial domains were included in an online survey of a representative UK adult sample (N = 589). A principal components analysis identified two dimensions, each with higher loadings on either the five easier or the five harder domains. Using IRT, two 10-item scales were constructed – one each from the easier (Scale I) and harder domains (Scale II) – with a 20-item scale combining them (Scale III). Additionally, two other scales were constructed. Scale IV was a 10-item scale focusing on domains related to borrowing, and Scale V was a short, 5-item scale using three items from previous studies. IRT analyses found that the discrimination of items on all scales was at least satisfactory, and that the items were appropriately distributed across the scales in terms of difficulty. Regression analyses with demographic variables and survey questions related to financial behaviours and outcomes attested to the validity of the scales. Their potential value for policy and research purposes was discussed, together with their limitations.
The benefit of the doubt: Willful ignorance and altruistic punishment

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ABSTRACT

I analyze whether people willfully ignore information about the choices of others to avoid the costly punishment of a norm violation. In a laboratory experiment a dictator makes a binary decision that affects his and the recipient's income. A third party whose payoff is unaffected by the dictator's choice can choose to punish the dictator. I vary whether the third party immediately observes the dictator's action or can choose to reveal the action at no cost. I find that a substantial fraction of subjects choose not to reveal the dictator's choice and, in turn, choose not to punish the dictator. I interpret this as evidence that third parties choose to remain willfully ignorant, allowing them to maximize their personal payoffs by refraining from punishing dictators. Incentivized elicitations of social norms show that such behavior is in line with the social norms that prevail in a situation of initial ignorance. Altruistic punishment is significantly lower when the dictator's choice is initially hidden. Hence, third-party punishment may no longer effectively curtail selfish motivations when third parties can avoid learning other agents' actions, as is the case in many real-world applications.
Blessed are the first: the long-term effect of birth order on trust

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**ABSTRACT**

The renewed interest by the economic literature in the effect of birth order on children’s outcomes has neglected trust as a long-term output of familial environment. Acknowledging childhood as a crucial stage of life for the formation of social preferences, we go deeper into the early-life determinants of trust, a widely recognized driver of socio-economic success. We analyze if and how differences in the order of birth predict heterogeneous self-reported trust levels in Britain. We draw hypotheses from psychology, economics and sociology, and test alternative explanations to the association between birth order and trust. Relying on an index measuring birth order independently from sibship size, we find a negative and robust effect of birth order, with laterborns trusting less than their older siblings. This effect is not accounted for by personality traits, strength of family ties, risk aversion and parental inputs. It is only partially explained by complementary human-capital outcomes, and it is robust when we use alternative dependent variables and control for endogenous fertility. Multilevel estimates suggest that trust is mostly driven by within- rather than between-family characteristics. The effect of birth order is eclipsed by education outcomes only for women, while it is counterbalanced by mother’s education for the entire sample, thereby leading to relevant policy implications.
Language usage and emotional persuasion: Facilitating acceptance of hydraulic fracturing through positive terminology

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ABSTRACT

Government attempts to persuade the public of the safety and logic in the adoption of hydraulic fracturing ('fracking') to extract natural gas have thus far proven unsuccessful. Its use remains controversial and contentious. In this paper, I propose a shift in the vocabulary of, and the colloquial terminology relating to, hydraulic fracturing. I assert that specific and pre-determined word usage can invoke an emotional response consonant with the primary concepts of persuasion science, including social proof, liking and consistency. Potentially, a positive emotional response may facilitate the desired outcome, favorable reception to widespread usage of hydraulic fracturing.
Always top-up manually: Digital payment account settings and the accessible account effect

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**ABSTRACT**

Previous research found that the physical form of payment (cash versus card) influences the transparency of the transaction, consequently affecting consumer spending. Recent digital payment technologies not only differ in their physical form (smartcard versus smartphone); they also vary in their digital payment account settings (“manual deposit” versus “automatic debit”). We propose that digital payment account settings are an important aspect of payment transparency in the digital age. Referring to mental accounting theory and the accessible account effect, we suggest that an “automatic debit” digital payment account setting (large mental account) decreases the salience of an expenditure compared to a “manual deposit” digital payment account setting (small mental account). In two field studies we show that price knowledge is lower and spending is higher when the digital payment account setting is “automatic debit” rather than “manual deposit”.

Digital payments
Why do consumers turn away from cash? Multifunctionality and digital payment adoption

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ABSTRACT

Researchers warn that emergent digital (cashless) payment modes (e.g., payment with smartcards, smartphones, or smartwatches) may influence consumers’ financial behaviors. However, the understanding of consumers’ intention to adopt such payment modes is limited, based on rather hypothetical measurements and no differentiation between digital payment modes characteristics. We suggest that multifunctionality (i.e., the integration of the payment function with further applications such as identification, authentication, loyalty programs and other information functions) is an important aspect regarding consumers’ payment preferences towards cashless payment because it may provide additional advantages to consumers and may therefore increase the adoption of cashless payment modes. We examine and explain the effect of multifunctionality on cashless payment adoption. We conduct a mixed-method quasi-experiment in a retail-setting comprising a shift from a single-function payment card to a multifunctional payment card. Using survey data from 2,141 customers and data from 2,972,911 payment transactions, we assess the impact of multifunctionality on stated and revealed payment preferences. The survey data shows that multifunctionality increases the payment preference toward payment by card as opposed to cash, mediated by an increase in perceived usefulness and perceived ease of use. The payment transaction data validates this finding depicting an increase in payment card use. Our findings indicate that introducing multifunctionality to digital payment modes can change consumers’ payment preferences towards cashless payment.
The efficacy of charitable appeals: Tangible impact and specified donations

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ABSTRACT

Each week the BBC broadcasts a weekly charitable appeal on Radio 4 – the main UK talk radio station. The format is a short 2-3 minute talk presented by a different presenter each week on behalf of a different charity. Donations to each appeal are published on the BBC website. We investigated various characteristics of the charitable appeals in an attempt to identify predictors of the donations made each week which vary quite considerably; across our sample of 370 weekly appeals donations varied between £2,562 and £66,322 with a standard deviation of £10,578 and a mean donation of £14,764.

Previous research has identified that psychological aspects of appeals can influence donations – for example, appeals that identify a specific named victim are more effective than appeals which refer to numbers of victims – the so-called 'identified victim effect'. For example research participants give significantly more money when a single victim in need of medical help was described compared to when a group of victims was described (Kogut & Ritov 2005). Other research has proposed that the 'identified victim effect' is a manifestation of a more general phenomenon: a positive influence of tangible information on generosity.

Cryder, Loewenstein & Scheines (2013) find evidence for an 'identified intervention effect'; providing tangible and specific details about a charity's interventions significantly increased donations to that charity.

We fitted a regression model with weekly donation as the dependent variable and a set of predictor variables based on codings of 366 appeals made by two independent raters: the raters coded (1) whether the appeal was made by an individual with personal experience of the charitable cause – e.g. had they witnessed the problem first hand or have they or a relative suffered from it or travelled to an affected area; (2) Did they have a self-interest - had the presenter benefitted from the charity in the past or present? (yes/no); (3) Was a single named victim identified (yes / no); (4) Was a specific donation amount suggested (yes/no); (5) If a specific
amount was proposed, was a specific tangible impact for a suggested individual donation indicated. For example, will a specific one-off donation make a significant difference to someone's life (vs. are several donations necessary to solve the problem)? (yes/no); (6) the mean voice pitch of the presenter; (7) the gender of the presenter (male/female). This model accounted for 10% of the variance in donations but only two of the factors were significant predictors: tangible impact of the appeal and presenter gender. These two binary predictors on their own accounted for 8% of all the variance in donations across the sample.

The 218 appeals that suggested a specific potential donation raised significantly more money (mean = £16,333) than the 152 that did not (mean = £12,515) however the 123 appeals that suggested a specific donation but did not describe a specific tangible impact for the donation did not raise significantly more money (mean = £13,993) than those appeals that did not suggest a specific potential donation (mean = £12,515). Moreover, the 95 appeals that both suggested a specific potential donation and described a specific tangible impact for the donation raised significantly more money (mean = £19,363) than the 123 appeals that merely suggested a specific potential donation but did not describe a specific tangible impact for the donation (mean = £13,993). The results are consistent with Cryder et al’s (2013) notion that potential donors are influenced by tangible and specific details about a charity’s interventions that an individual donor can influence. This suggests one way of addressing the helplessness that people may experience when hearing an appeal where the scale of the problem may inhibit giving because the donor’s potential donation is seen as a proverbial “drop in the ocean”.

The appeals made by male presenters raised significantly more money than those made by female presenters – on average 28% more (males [n=174]: £16732; females [n=192]; £13118). As presenters are not randomly allocated to charities there may be some confounding factors responsible for this difference though we were unable to discover any; for example male presenters did not get to present appeals for larger charities (measured either by charity income or charity spending).

Previous research on charitable donations has often been based on experiments where typically respondents are recruited to attend laboratory sessions where they are endowed with a small amount of money, presented with charitable appeals and asked how much (if any) of their endowed money they want to donate (e.g. Cryder, et al. 2013), or simply asked, hypothetically, how much money they would be willing to contribute (e.g. Kogut & Ritov 2005). One advantage of our study is that we measure actual donations made naturally by listeners to an actual appeal who are not contemplating their actions in a research context. One disadvantage of our study is that we have no information about the size or number of individual donations – accordingly it is possible that some appeals were disproportionally influenced by small numbers of very large donations that might obscure or distort the role of the factors we studied.
Rules of the game and cooperative behaviour

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ABSTRACT

According to North (1990), institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction. These rules not only affect how people behave but also how people make their decisions. With a desire for understanding and analyzing human behavior, especially dynamics of cooperation in groups, in my thesis, I investigate whether the way in which a policy is chosen affects cooperative behavior. In an experimental setting, I test the claim that the effect of a policy on the level of cooperation is greater when the policy chosen democratically by the subjects than when it is imposed exogenously. In addition to that, I want to analyze the effect of different incentive/punishment schemes combined with different policy selection mechanisms on the responses to an applied policy. Also, I question the possible effect of group size and risk attitude of individuals on cooperative behavior.
Predicting temporal discounting through psycholinguistic dimensions of time orientation

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ABSTRACT

To what extent use of a more future oriented language can show subjective preferences in terms of temporal discounting? The Italian language exhibits two ways of referring to future events in terms of predictions and planning: the “futuro semplice” (future simple) and the “presente indicativo” (present simple), the latter being able to cover the former in all of its usage, especially when properly supported by adverbial markers of future time references (Schneider 2006).

We test the hypothesis that the extent to which speakers grammatically choose to refer to future events can predict different levels of future-oriented cognition and temporal discounting. Earlier research focused on a cross-linguistic analysis based on a large correlational approach, underlying the need of tailoring more specific experimental and potentially more informative experiments.

An intra-linguistic understanding of the phenomenon with languages such as Italian, where the choice of one tense rather than the other is mostly due to speakers' stylistic and cognitive style, is desirable from three main viewpoints. Firstly, it allows to naturally control more easily for cultural variables, granting a higher internal validity of causal identification (Mavisakalyan and Weber, 2017). Secondly, it gives methodological support to further cross-linguistic experimental studies to be applied on bilingual individuals and to the effects of code-switching on behavioural outcomes, particularly on economic incentive schemes. Thirdly, it allows to investigate whether, as claimed by recent language reform proposal, the use of language can actually impact socioeconomic outcomes on a national level.
Statistical forecasts as advice: How well are people able to assess their quality?

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ABSTRACT

Judgmental forecasting is pervasive in business practice (Fildes & Goodwin, 2007), with the most recent number indicating a combination approach of judgment and statistics of 55% and rising (Fildes & Petropoulos, 2015). Forecasting support systems allow the user to apply many different types of forecasting methods to the data series. However, no approach is universally superior to all others. Forecasting competitions have shown that which approach is best depends on the characteristics of the data series (e.g. Makridakis & Hibon, 2000). Thus the forecaster has to decide which approach to use. But can people truly assess forecasting quality? In two experiments (N1 = 191, N2 = 161), we investigate (1) whether people are able to distinguish a 'good' from a 'bad' forecast, (2) whether this model selection outperforms the average, and (3) whether the quality of their model affects the participant’s subsequent forecasting behavior.
The role of dynasty trap on child labour magnitude

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**ABSTRACT**

Child labor has been gaining intense attention not only since it concerns children who are powerless, but also because of the negative long-term consequences on the economies with prevailing child labor.

The household's poverty, claimed as a major factor of persistence of child labor. A famous paper of Basu and Van (1998) shows that parents will send their children to work only if their income is below a subsistence level- the luxury axiom. However, few papers that explored the influence of poverty on child labor have found ambiguous results.

In this paper, we address the cultural aspect of the parents’ choice on their children's choice and analyze a dynastic influence on child labor.

In many studies that describe the phenomenon of child labor, the decision to allocate the children's time is in the hands of the parents. Empirical studies show that parents who worked during their childhood are more likely to send their children to work. Wahaba (2006) found that it is on average 10% more. Emerson and Souza (2003) found that the likelihood of being child laborers increases the younger their parents were, when they entered the labor force. In this paper, we analyze how parental behavior encourages their children to choose choices that are close to their choices. We explains the process of cultural trait in the case of child labor, which pass between the generations like a dynasty. This approach facilitates the understanding of the transmission of preferences within the family and enable choosing a suitable policy.
The endowment effect in the future: How time shapes buying and selling prices

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ABSTRACT

It has been widely documented that people tend to give a higher value to objects just because they own them. This pattern has been called the endowment effect (Thaler, 1980) and it is typically explained using the notion of loss aversion. The endowment effect is one of the most prominent phenomena in behavioral economics and it has important implications for a variety of situations related to buying and selling. However, virtually all research on this effect investigates transactions that take place in the present. This is a significant limitation, given that many real-world transactions have a temporal dimension. In many circumstances, people agree on a purchase or a sale and the transaction does not materialize until a later time in the future (e.g., in online buying and selling).

In this paper, we explore how transaction timing affects the endowment effect. We conducted four experiments in which the transaction timing of different products was systematically changed for buyers and sellers. We found that delaying transactions into the future systematically increases the endowment effect across products, and we show that this pattern is produced by gains being discounted in time substantially more than losses.
Factors influencing women’s decision to undergo early mammography contrary to Ministry of Health guidelines

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ABSTRACT

For young women, mammography has limited effectiveness and entails exposure to radiation, discomfort and additional costs. As in other countries, the Israel Ministry of Health does not officially recommend mammograms for women under age 50 who do not belong to risk groups. The objectives of the study were to identify the predictors of willingness to undergo early mammography (before the age of 50), contrary to the official guidelines. Using the Health Belief Model (HBM) as a theoretical framework, we surveyed 252 Israeli women aged 40–51 who are not at high risk for developing breast cancer. The results point to a number of significant factors affecting the probability a woman will undergo early mammogram, among them higher age, lower level of religious observance, private insurance coverage and out-of-pocket payments to physicians, as well as two HBM categories—lower levels of perceived barriers to mammography and higher levels of health motivation. In addition, higher levels of perceived susceptibility to illness and previous experience with mammography are significant predictors of women’s intentions to undergo early mammography. Moreover, the decision to undergo early mammography may point to lack of confidence with Ministry of Health guidelines. The results can help policymakers raise women’s awareness of the importance of the recommended policy.
Blood-types and blood donation behaviors: Empirical tests for pure altruism theory

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ABSTRACT

We examined whether the knowledge that your private donation has a large number of potential recipients causes you to give more or less. We found that the people with blood type O are more likely to have donated blood than those with other blood types, by using a Japan’s nationally representative survey. This association was found to be stronger in a subsample of individuals who knew and believed that blood type O can be medically transfused into individuals of all blood groups. However, we found that blood type O does not have any significant relationship with the other altruistic behaviors (registration for bone-marrow donation, intention to donate organs, and the making of monetary donations) and altruistic characteristics (altruism, trust, reciprocitity, and cooperativeness). After further analyses, we confirmed that the wider number of potential recipients of blood type O donations promote the blood-donation behaviors of the people with this blood type. This study provides a unique field evidence of Andreoni (2007).
Information exploitation in decisions with conflicting motives

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ABSTRACT

In economic and social life, people often face decisions that not only affect their own well-being, but also that of others. People care about the well-being of others (e.g. Fehr and Schmidt [2006]; Andreoni [1990], Bolton and Ockenfels [2000]). Hence, these decisions feature a trade-off between the right and the rewarding. At the end of the year, a hesitant manager ponders upon laying of the subordinate on whom he can conveniently blame last year’s failure in sales. In the turmoil of WWII, a soldier doubts the morality of the case he is serving, but needs the income to support his family. In such situations, how people acquire and interpret information is ambiguous. On one hand, ignorance might be a bliss. On the other hand, creative information interpretation helps to formulate narratives that justify their actions. In the above example, would the manager be prompt to prejudice against the subordinate when reviewing his work? Would the soldier quickly conclude that fulfilling his service is moral when he is observing daily occurrences around him?

This paper investigates with an experiment how people make use of information in decisions where they have conflicting selfish and altruistic motives. Specifically, we test the hypothesis of self-serving belief updating in such situations, and investigate its consequences on decision-making. Some studies have found that people choose to stay uninformed when they could receive a costless perfect signal on the consequences for others ([Dana et al., 2007]): this suggests that ignorance is a bliss. However, information that in contrast leaves people scope for interpretation can be used in a self-serving manner. For example people might twist information into a self-justifying narrative.

In the experiment, we confront the subjects with a dictator game, in which half of the subjects (dictators) are randomly selected to decide between two payoff schemes (A and B) each specifying their own and a recipient’s payoffs. These payoff schemes can feature either misaligned interests between a dictator and a recipient or no misalignment (for a payment scheme with conflicts please see the example in Table 1). In each treatment, either the dictator payoffs or the recipient payoffs of the two schemes are contingent on a binary state (G and B).
The contingency differs across treatments (see Table 2). When presenting the schemes to the dictators, we ‘fix’ dictators’ prior beliefs on the two states to 50% and 50%. The dictator receive varying numbers of informative signals which however do not reveal the state perfectly. The posterior belief is elicited after each signal. Then the subjects make their decision between the two payment schemes.
Lay estimates of ten-year rates of return on investment in New Zealand shares, real estate, and term deposits

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ABSTRACT

We studied whether a preference for investing in housing rather than in shares or bank deposits might be reflected in misjudgements of past (and perhaps future) rates of return. A New Zealand sample estimated rates of return on the three asset classes over the period 2006-2016 and also gave projections for the period 2016-2026. Available statistics suggest that actual rates of return over the period were roughly equal but most respondents overestimated the return on housing. The future is expected to be like the past but better. It is unclear whether a general preference for housing investment is a consequence of this misperception or whether the estimates of past rates is constructed from a belief that housing investments are superior.
How does consumer vulnerability relate to positive and negative financial outcomes? The mediating and moderating role of psychological characteristics

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ABSTRACT

Vulnerable consumers are at particular risk of financial detriment due to, for example, low financial literacy or numeracy; high debt; low income; or impactful changes in personal circumstances. We introduce a comprehensive and formative measure of financial vulnerability that integrates these risk factors and is grounded in definitions of vulnerability from financial regulation bodies and government agencies such as the Consumer Financial Protection Bureau. Across two studies of U.S. individuals, we assess the nomological validity of this measure through its relationship with positive and negative financial outcomes (e.g., savings levels; paying credit card balances in full each month; being in arrears on critical payments) as well as relevant psychological characteristics (e.g., personal savings orientation; money management skills; financial self-efficacy). Moreover, we examine whether and how these psychological characteristics mediate the relationship between financial vulnerability and financial outcomes. We conclude with an overview of implications for policy makers and business practitioners.
Disparities in financial strain and mental health

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ABSTRACT

This study examines whether diagnosed anxiety and depressive symptoms are associated with financial hardship indicators. Those with anxiety and depressive symptoms may exhibit higher probabilities of reporting financial strain and crisis strategies while those with financial strain may have a high probability of having symptoms of anxiety and depression which may be fueled by financial worries about not having enough money for current or future needs. The data come from the 2013 through 2016 annual rounds of the U.S. National Health Interview Survey sponsored by the Centers for Disease Control and Prevention. Two-stage probit models are estimated separately for two financial strain indicators. Medical expense hardship is depicted by inability to pay medical bills, and delaying or skipping medications or health care services due to cost. While food and housing hardship are shown by extended periods of hunger or skipping meals and paying lower rent due to being in a government program. The pooled analysis suggests anxiety and depressive symptoms influence financial strain and vice versa. Also, worries about current and future expenses significantly moderate this bidirectional association. Compared to whites, blacks, Native Americans, and those of multiple or other races have higher probability of financial strain but blacks had lower probabilities of reported anxiety and depression symptoms. Asians have lower probabilities of financial strain and poor mental health diagnoses than whites. Women have higher probabilities of both financial strain and anxiety and depressive symptoms than men.
Effects of process and outcome accountability on escalating commitment: A two-study replication

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ABSTRACT

Escalating commitment describes the phenomenon that decision-makers may become stuck in losing courses of action, throwing good money after bad. In a seminal study testing interventions against escalating commitment, Simonson and Staw (1992, Journal of Applied Psychology) found that holding decision makers accountable for the decision process (i.e., the decision strategies they use) decreases escalating commitment, whereas accountability for the decision outcomes tends to increase it. This is in line with the larger literature on these two types of accountability, showing that process accountability does, on average, improve the quality of judgments and decisions, whereas outcome accountability decreases it. The initial aim of our study was to extend the original findings by testing for interactive effects of both types of accountability. However, as we failed to reproduce the original findings in a first experiment, in spite of the fact that our materials and our procedure resembled the original study as closely as possible, we conducted a second experiment with an even stronger accountability manipulation and an increased sample size. However, once again no significant effects of accountability were found. Taken together, the results of these two experiments question the robustness of the original findings.
Implementing fair procedures?

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**ABSTRACT**

We experimentally study situations in which a decision maker allocates resources to two agents. The allocation will be unequal, but the allocation procedure may be fair. However, procedural fairness might be violated by favoritism. This feature is common in many practical settings, including governance, medical and educational settings. We find a very high degree of favoritism when decision makers are forced to allocate unequal outcomes. We consider four interventions to reduce favoritism. First, we provide full transparency about the decision by the allocator. This intervention does not reduce favoritism. Second, we provide the allocator with a randomization device. Although agents are not informed about the randomization decision (but know about the possibility), a large share of allocators chooses a fair procedure. Third, we allow the allocators to delegate their decision publicly to a fair random device. A large share of allocators is willing to even costly delegate. Fourth, we give decision makers the opportunity to avoid favoritism-inducing information about the agents. We find that a large share of decision makers takes up this opportunity if it is communicated to the agents. A smaller share takes it up if the information remains private. Thus, interventions can successfully reduce favoritism, although in each intervention the decision maker could in principle implement favoritism in the same way as in the baseline condition. We shows that favoritism is not perceived as appropriate and that the provision of simple tools helps decision makers to make more procedurally fair allocation decisions.
Common belief in rationality in psychological games

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ABSTRACT

Belief-dependent motivations and emotional mechanisms such as surprise, anxiety, anger, guilt, and intention-based reciprocity pervade real-life human interaction. At the same time, traditional game theory has experienced huge difficulties trying to capture them adequately. Psychological game theory, initially introduced by Geanakoplos et al. (1989), has proven to be a useful modeling framework for these and many more psychological phenomena. In this paper, we use the epistemic approach to psychological games to systematically study common belief in rationality, also known as correlated rationalizability. We show that common belief in rationality is possible in any game that preserves rationality at infinity, a mild requirement that is considerably weaker than the previously known continuity conditions from Geanakoplos et al. (1989) and Battigalli and Dufwenberg (2009). Also, we provide an example showing that common belief in rationality might be impossible in games where rationality is not preserved at infinity. We then develop an iterative procedure that, for a given psychological game, determines all rationalizable choices. In addition, we explore classes of psychological games that allow for a simplified procedure.
Do email scammers respond to a potential victim’s age and gender?

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**ABSTRACT**

Fraud is an inherently economic crime, and it requires the active co-operation of the victim, who must comply with the fraudsters’ requests if the crime is to be perpetrated. Compliance with a fraud or scam is an example of a non-optimal economic decision. We carried out an experiment to reveal the persuasive techniques favoured by scammers. We harvested incoming scam emails from friends and colleagues, and sent a single standardised reply to each of them, adding additional information indicating that the person replying was either male or female, and either young or elderly. We used qualitative analysis to compare the content of responses to our reply with the original scam approach. Replies to our responses tended to be longer than initial approaches, and there were marked changes in content compared with the scammers’ initial approaches. Attempts to induce liking and mentions of material and monetary gain increased more, from original approach to reply to our response, when the intended victim was apparently female. Mentions of charitable objectives increased more when the intended victim was apparently male. Mentions of material and monetary gain, and appeals to visceral cues were more marked in replies targeting the elderly, while appeals to reciprocity increased more in replies to younger targets. These results show that scammers do tune their interactions to what they have learned about that person, and give some insight into the techniques of persuasion that scammers believe will be effective in eliciting compliance from particular categories of victim.
Affirmative action policies and behavior in promotional tournaments: An experiment

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ABSTRACT

Both affirmative action and sabotage are very common features in organizational contexts. It is supposed that incorporating an affirmative action to even out the heterogeneity of abilities in competition, especially in tournaments, may result in more egalitarian outcomes as well as higher efforts. However, the overall effectiveness of different affirmative action policies is still in question. Especially, it is still unknown whether various types of affirmative action policies such as head-start and handicap have diverse effects on behavior. Furthermore, the effect of introduction or removals of affirmative action policies—which are very common in the filed— are not investigated well. When one considers that it is possible for agents to exert sabotage efforts towards their competitors, the net effect of an affirmative action policy becomes even more ambiguous. We run a real-effort tournament experiment with affirmative action and possibility of sabotage, and we study the effects of head-start and handicap in a dynamic context. Moreover, we look on groups with homogeneous or heterogeneous agents to study such effects. Through a theoretical model we hypothesize that any type of affirmative action will result in higher effort, but also higher sabotage. Furthermore, we hypothesize that a handicap for higher ability types will result in more sabotage than a head-start – due to loss aversion. We find that ability-based affirmative action (as opposed to randomly assigned affirmative action) represents an effective instrument to increase egalitarian outcomes and effort exerted by the underdogs. However, the underlying mechanism between head-start and handicap are different with respect to effort and sabotage: whereas head-start has an ambiguous effect on average effort and increases the winning chances of the underdogs, handicap proves to be useful for increasing effort and at the same time decreasing sabotage. However, if any affirmative action is applied randomly, the agents
affected negatively reduce their effort provision significantly. Therefore, we conclude that (i) ability-based handicapping is a better affirmative action policy in organizations than head-start; (ii) affirmative action on homogeneous agents can have detrimental effects.
Bank runs and regulatory communication: An experimental analysis

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ABSTRACT

The stability of financial systems has been at the forefront of policy-makers after the world witnessed the collapse of major financial institutions in the 2007-2008 financial crisis. A better understanding of the causes of bank failures is essential to avoid the significant welfare losses witnessed. We experimentally analyze the role that revelation of financial information plays in the likelihood of having a bank run. We base our experiments on the Diamond and Dybvig (1983) model. We have two depositors that have to decide to withdraw today or tomorrow. If both withdraw today, they both receive 200. If they both withdraw tomorrow, they both receive R, which is randomly selected a set of numbers that range from 80 to 720. If one withdraws today and the other tomorrow, the one withdrawing today receives 400 and the one withdrawing tomorrow receives 0. A regulator knows the value of R. In our TRUTH treatment, the regulator must send the precise value of R to the depositors before they decide. In our ANYT treatment, the regulator can send any range of R as long as it contains the true value of R. In ANY, the regulator can send any range of R. We find that Depositors’ early withdrawal decisions as a function of the lower bound of the message about R are significantly different in each of the three treatments. There is a significant drop in the likelihood of withdrawing early in ANY and TRUTH when the lower bound of the message equals 400. In addition, we find that there are more inefficient runs (for large R) and fewer efficient runs (for small R) in ANY than in either TRUTH or ANYT. In ANY and ANYT, there were heterogeneous strategies used by the regulators. Some were strategically vague and hid worse states with good states. In a second set of experiments, we determine which strategy is the best for the regulator.
Money illusion and intentions in an experimental labour market

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**ABSTRACT**

Employees who exert high effort in response to high nominal wages rather than high real wages are assumed to either suffer from incomplete information or money illusion. We argue that this also emerges rationally because nominal values are signals of underlying intentions. Our experimental design uses a gift-exchange game under conditions of the classical dichotomy: An aggregate increase in nominal wages leaves aggregate real wages unchanged. This allows us to disentangle intentional increases of the (nominal and real) wage and unintentional increases of the real wage that arise from low nominal wages set by others. We find that increased nominal wages increase effort in a treatment with incomplete information in which only nominal wages are reported. This effect persists in a treatment where employees are fully informed, suggesting that either money illusion or intentions are at play. We observe no effect of increased nominal wages on effort when we remove intentions in a final treatment in which employees are faced with computerised employers. We infer that intentions rather than money illusion explain the failure of the classical dichotomy and that their influence is quantitatively similar to that of incomplete information.
Cooperation under heterogeneous preferences with voting

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ABSTRACT

Existing research on the voluntary provision of public goods mostly ignores the question how the specification of the public good was determined and how this may affect the ability of the group to cooperate. In the natural world there are usually different possible specifications of the public good with varying implications for individual preferences for provision and overall welfare. We analyse experimentally how groups are able to cooperate if the specification of the public good is determined by the group itself via majority voting. Different specifications result in either symmetric or asymmetric preferences for the public good, and have varying implications on overall efficiency.
Meta-analysis of estimation of time discounting of rewards

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ABSTRACT

A large number of experimental and field studies were conducted to elicit individuals’ time preferences and provide estimates of various parameters in the models of discounted utility. We present a meta-analysis of empirical studies of time preferences, which covers research in economics, psychology, and neuroscience and cumulates evidence on the heterogeneity of estimated time preference parameters. We also examine the effect of moderator variables such as elicitation methods, types of rewards, time horizon, and framing of decision problems.
The thrill of creative effort at work: An empirical study on work, creative effort and well being

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ABSTRACT

The connections between creative effort at work and four measures of subjective well-being are studied using data on a sample of 922 Jewish Israeli adults who are salaried employees. The paper finds that self-reported creative effort aimed at making work more enjoyable is positively associated with global evaluation of life; with purpose and meaning in life, and with positive emotions. No significant link with negative emotions was found. This study also finds significant associations with three additional intrinsic features of work—creative tasks; independence at work and intellectual work—and various measures of subjective well-being, even when controlling for age, gender, marital status, having children, education, time worked, financial satisfaction, subjective health and religiosity. The robustness of the links between intrinsic features of work and subjective well-being demonstrate that work serves not only as a means to material ends, but also as a direct source of personal happiness, meaning and satisfaction.
Brexit behaviourally: Five lessons from the UK’s 2016 EU referendum

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ABSTRACT

This paper draws five behavioural lessons from the UK’s 2016 EU referendum. Based on an LSE Master’s dissertation, the data is drawn from a survey and RCT involving over 450 Leave voters.

Lesson 1: Humans are loss averse - 4x as many Leave voters prefer “Take Back Control” to “Take Control” as a slogan.

Lesson 2: Humans don’t like maths - Most Leave voters thought the Leave campaign’s figure of £350m “sent to the EU” each week was larger than the Remain campaign’s figure of £4,300 per household per year which could be lost if the UK left the EU.

Lesson 3: We’re all Human (including communicators and journalists) - “What You See Is All There Is”: Remain campaigners produced material fitting their world view, distributed via the media channels they paid attention to. Leave voters failed to recognise many Remain experts. They were not politically engaged, but 67% got news via Facebook.

Lesson 4: Humans use System 1 for political decisions - The sample were shown two red buses: one marked ‘Vote Leave’ and the other clearly marked ‘Labour IN’. Vote Leave’s red bus was identified as Labour’s by 34%.

Lesson 5: Humans don’t have fixed preferences - An RCT demonstrates that Leave voters are almost twice as likely to donate to a pro-migrant charity if asked with a behaviourally-based narrative as opposed to a fact (50% v 28%).

Conclusion: Communicators should learn to ‘Test, Learn, Adapt’.
Motivated reasoning when assessing the effects of immigration and the role of numeracy

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ABSTRACT

The effects of immigration on societies is a polarizing and heated topic in many countries. Some think that immigrants should have limited social rights in the new home country while others advocates full integration. This difference of opinion can assert itself through world-view ideology. But do these beliefs hinder people from objectively interpreting information about immigration, i.e. do people display motivated reasoning with regards to immigration? In an experiment with a representative sample (N=1,015) of Swedish adults we investigate if people display motivated reasoning when interpreting numerical information about the effects of immigration on crime rate. The result supports the notion of motivated reasoning along the lines of world-view ideology. When the numerical information showed that immigration was associated with higher crime rate, nationally oriented people were 18 percentage points more likely to make the correct assessment, compared to globally oriented people. Likewise, when the numerical information showed that immigration was associated with lower crime rate nationally oriented people were 20 percentage points less likely to make the correct assessment, compared to globally oriented people. The results also show that higher numeric ability can help people to interpret information, even if the information concerns a politically sensitive issue.
“He that has plenty of goods shall have more”? The interaction of group members’ social status with their actual trust, actual trustworthiness and the respective expectations

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**ABSTRACT**

Economic psychological and sociological research has mainly focused on the connection between a person holding a somehow measured social status and its willingness to trust some (sometimes generalized) other. In two small group studies (N=18, N=28, which equals more than 2000 trust decisions) we measured participants’ willingness to trust and to act trustworthy in a series of mutual inter-individual and monetarily incentivized Trust Games among the group’s members. Additionally, their respective expectations regarding these behaviors were measured. Group members were asked about their own subjective (“What’s your estimate about how person X rates the social status of yourself within this group?”) and their interaction-partners objective social status (“How do you rate the social status of person X within this group?”). This designs allowed us to explore the dynamics between individuals that differ in social status on the micro-level and to understand the causality (and not only the correlation) of such interactions. Results showed the following: the higher the participants’ objective social status, the more trust was granted to them and the more trustworthy behavior they received from their interaction partners. Plus, the higher the participants' objective social status, the more they were expected to act trustful and trustworthy. But, participants’ decisions to trust or act trustworthy were not connected to their objective social status.

Furthermore, the difference of subjective minus objective social status is a measure of the subjective anticipated status evaluation of the partners in one trust dyad. The higher the mutual anticipated status evaluation of both interaction partners (of the dyad in sum) and, additionally, the more the trustor perceived himself as higher in social status compared to his partner, the more
this trustor was prone to trust. This interaction effect translates, based on the subjective anticipated status difference perceived by the trustors, into a cartel of trust among the subjectively status-high participants. In this way, the saying "He that has plenty of goods shall have more" is filled with an unexpected meaning.

Implications for the inequality debate will be discussed, also based on further findings from further studies with additional groups which will be conducted until the conference takes place.
A cross-societal comparison of cooperative dispositions and norm enforcement

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**ABSTRACT**

All societies face a multitude of small- and large-scale cooperation problems. Societal differences in culture and institutions have previously been identified as a key driver of individual cooperative behaviour when making a trade-off between personal benefits and societal welfare. A possible explanation is that culture and institutions influence cooperative dispositions, beliefs, and the propensity to punish free-riding, all of which jointly affect cooperative efforts. We measure these important factors using variants of public goods games with student participants in four countries (Morocco, Turkey, UK, US). We find that differences in the cooperation rates across societies cannot be explained by differing cooperative dispositions alone. Beliefs about other people’s cooperative efforts and propensities to punish help to explain cross-societal variation in behaviour. Furthermore, costly altruistic punishment in our one-shot game is remarkably similar across different societies. This contrasts previous studies that use repeated games to investigate cross-societal differences in punishment. Thus, societal differences in punishment are likely to be driven by strategic play or retaliation emerging in repeated interactions. Interestingly, we find that emotional responses to free riding are similar across societies, making negative emotions a likely driver of costly altruistic punishment.
Poor but happy? Culture, diligence and wellbeing

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ABSTRACT

This study suggests a new way of looking at the connection between economic growth and well-being. For this purpose we draw on insights from anthropology, psychology and various subfields of economics. The principal argument developed here is that producing goods, particularly highly valued goods, requires diligence. Painstaking effort, carefulness and perfectionism are needed to turn out high quality goods and services. A lack of diligence lowers effective output both directly by reducing final output and indirectly by leading to the installation of defective capital goods. We use a neoclassical growth model to illustrate how diligence affects the steady-state per capita income.

The downside of perfectionism is its psychological burden. On the level of the individual the careful production of goods and services necessitates a high level of self-control and a willingness to spot and eradicate errors. On the level of the collective the burden of producing with little error comes in various forms of organizational controls and feedbacks. I argue that the burden or disutility from diligence and the utility from income are valued differently across cultures and countries. Moreover, in large and complex societies this variable is arguably not set in such a way as to balance its benefits against its costs. Rather, the level of diligence is a culturally determined variable with differences in cognitive styles, organizational traditions and religion as important determinants. A key implication of this approach is that some countries experience a decline in utility in the process of economic growth. The empirical part of the paper uses data from the World Happiness Report and from studies providing international indices of quality measures to shed light on the hypotheses put forward in this paper.
The effect of the resource’s value on the equity efficiency conflict. Evidence from mouse tracking experiments

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ABSTRACT

When allocating resources, people often must compromise between two competing principles, namely equity and efficiency. We propose that it is easier to consider equity as a guiding principle when the resources being allocated are abundant. Data from three experiments suggests that people are less likely to waste scarce resources, even if it means deviating from equity. Moreover, using mouse tracking techniques we demonstrate that the conflict between equity and efficiency arises mostly when allocating scarce resources, but when the resource being allocated is one of many others, people experience smaller conflict, and more easily discard the resource to maintain equity.
Factors influencing young adults’ choices of method of paying for smartphones

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ABSTRACT
In four studies we asked undergraduates what new smartphone they would choose to replace their current not working smartphone. Technical information and user-friendly expert evaluations were presented about 5 smartphones ranging from budget to premium. We expected and found in two of the studies that more expensive smartphones were chosen if a desire was induced by means of instructions compared to no desire for a more expensive smartphone than the current. In the two other studies this effect was eliminated when instalment payment was default. In a fifth study of a more heterogenous sample of young adults from 18 to 25 years old, instalment payment as default offered a 20% discount on the cash price. Significant more expensive smartphones were then chosen both when desire was induced and not induced. A significant difference was still found between those who indicated they wanted to purchase a new smartphone and those who indicated they did not want to purchase a new smartphone. We conclude that a discount increases desire which may lead to over-borrowing. Suggesting that choices of instalment payment is not perceived as a loan, a positive attitude toward borrowing did not correlate positively with choice of more expensive smartphones with instalment payment as default.
Malleable lies: Communication and cooperation in a high stakes TV game show

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ABSTRACT

We investigate the credibility of non-binding pre-play statements about cooperative behavior, using data from a high-stakes TV game show in which contestants play a variant on the classic Prisoner’s Dilemma. We depart from the conventional binary approach of classifying statements as promises or not, and propose a more fine-grained two-by-two typology inspired by the idea that lying aversion leads defectors to prefer statements that are malleable to ex-post interpretation as truths. Our empirical analysis shows that statements that carry an element of conditionality or implicitness are associated with a lower likelihood of cooperation, and confirms that malleability is a good criterion for judging the credibility of cheap talk.
Can multidisciplinary teams be trained to apply behavioural insights in different choice architecture projects?

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ABSTRACT

Choice architecture has been drawing attention from different sectors of society in several countries, as growing numbers of researchers, scholars, think tanks and organizations have become involved with it. This paper describes an experience that has taken place in Sao Paulo, Brazil, November 2017, aimed to discuss the possibilities and difficulties around training multidisciplinary teams to work on choice architecture projects. Set around three questions – 1. what would be required for groups to learn about it?; 2. how could they be guided towards working on choice architecture?; 3. how long could this take? – we explain how the group worked, inputs used and a summary of the results achieved at the end, bringing in a tentative list of necessary steps to reproduce the experience in different settings. The final goal is to contribute to the discussion over choice architecture as it may be used by policy-makers and organizations, as well as less formal groups or individuals, by taking a closer look at this process. However relatively young a research line in applied behavioural science, choice architecture has become increasingly relevant in several countries over the past few years. The UK was the first country to officially adopt this perspective when the Behavioural Insights Team-BIT was created, in the early 2010’s, followed by other Nudge Units, as they are also known, in Australia, Singapore, Denmark, the US and others. Issues addressed may range from automatic pension plan enrolment and organ
donation to increasing savings among low income populations or recycling. As “the world’s first government institution dedicated to the application of behavioural sciences”, the BIT’s aims—making public services more cost-effective and easier for citizens to use, improving outcomes by introducing a more realistic model of human behaviour to policy, and wherever possible, enabling people to make ‘better choices for themselves’—have been inspiring other initiatives all over the world.

Training staff to work on such projects can be a challenge. The sixteen-hour workshop described here brought together sixteen people with different backgrounds, who had had previous 24-hour workshops on economic psychology and behavioural science, focusing on economic mental life and behaviour, decision-making, heuristics and biases, motivation, behavioural change, and some choice architecture. At the current workshop, on Day 1 they were reminded of relevant data on the psychology of decision-making and behavioural change and took a deeper look into choice architecture concepts and techniques, along with case studies and limitations to it, plus basic foundations of scientific methodology, which allowed them to build preliminary keys for problem analysis. On Day 2, they selected three problems brought up by them (1. how to increase employee adhesion to educational initiatives at a fintech that already uses incentives as part of their policy; 2. how to increase impact in an action to increase savings in a medium size town, proposed by an influential Brazilian YouTuber who broadcasts videos about financial decisions; 3. how to help the population to save for retirement, particularly those out of formal jobs), and proceeded to analyse them, in smaller groups, seeking to identify elements that would permit a fuller understanding of the context and the psychological challenges to improve the situation. The coordinator suggested steps for developing the work, from the need to clarify what the real problem(s) might be under the apparent initial claim or complaint, through the formulation of behavioural hypotheses, particularly in what concerns heuristics and biases, on one hand, and incentives and obstacles to behaviour change, on the other, highlighting nudging strategies.

The workshop itself was devised taking choice architecture principles into consideration, with gradual build-up of knowledge, examples, stories, frequent recaps and as simple as possible language in order to make it easier for participants to grasp the main topics and increase their capability of actually applying them in real life situations. All groups became quite involved on the task and insightful debates were generated. Although two groups did not come up with full proposals to redesign the contexts and achieve the envisioned goals, the exercise was well worth it as they were able realize the complexity of projects of this nature, diagnose some of their drawbacks and at the end get a sharper view of the whole process. The third group managed to reduce the original scope to youths (18-30, with just over two minimum wage income, i.e. around 400-500 dollars a month) and was able to analyse the context and economic behaviour and decision-making patterns involved in their not saving for retirement, pointing to relevant biases such as inertia, subjective hyperbolic discount, overconfidence, mental accounting, excessive
optimism, loss aversion and trouble identifying risks. A financial product was then devised to counter them by means of gamification, edutainment, incentives, long term challenges and the need to keep the money there for several years (as opposed to withdrawing it too early). In short, the product is intended to make it easier to enrol and contribute, removing possible obstacles, while also offering short term incentives to keep saving behaviour active through what would require several decades of regular contributions. This experience might be an initial indication that it is possible to train multidisciplinary teams on the main behavioural science concepts over a relatively short amount of time (30 to 40 hours) so that they could be guided, under supervision, into achieving insightful routes to address context redesigning or, even better, developing preliminary yet feasible choice architecture projects to later be tested and, when validated, possibly scaled up.

Keywords: application; choice architecture; economic psychology and behavioural science; multidisciplinary training.

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The good, the bad, and the angry: an experimental study on the heterogeneity of people’s (dis)honest behavior

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ABSTRACT
Dishonesty has a negative impact on government, companies, and our personal lives. Previous experiments explored which conditions favor or disfavor the emergence of dishonesty. However, these studies are static: subjects are either fully aware of the consequences of all available actions, or they are uncertain, but the uncertainty cannot be cleared. On the contrary, many real interactions are dynamic: people know that they will have a chance to lie, but they do not initially know the exact consequences of the available actions. And they have to invest resources (e.g., time) to find them out. Here we capture the essence of this type of interactions by means of a novel decision problem in the context of relatively small lies (maximum payoff = 90 cents). We study the distribution of choices, the effect of response time and time pressure. We report numerous findings, the most intriguing of which is that, in our decision context, people can be divided in three types: Good people, who act honestly independently of the exact payoff associated with telling the truth; Angry people, who first look at the exact payoff corresponding to telling the truth and then lie only if this payoff is low; Bad people, who maximize their payoff without even checking the exact payoff corresponding to telling the truth. The first two classes are large, whereas only few people (less than 16%) appear to belong to the third class.
Age differences in emotional responses to monetary losses and gains

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ABSTRACT

Financial decisions often involve losses and gains, which may affect our emotional well-being – even when those losses and gains relatively small. Theories and evidence from life span developmental psychology have posited that older adults are better than younger adults at maintaining their emotional well-being in response to negative life experiences. However, younger and older adults may not experience the same life experiences. Here, we examined age differences in emotions reported after randomly assigned losses and gains. Older and younger adults played a double-or-nothing gamble with a 50% chance of losses or gains. Older adults felt better than younger adults, especially after losses (vs. gains). Older adults reported relatively more avoidance of preoccupation, suggesting that they dwelled less on their experienced losses, which may have reduced the negative emotions they felt after facing losses. Our findings have implications for interventions that aim to promote better emotional well-being across the life span.
The effect of paternalistic alternatives on attitudes toward nudges

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ABSTRACT

Nudges are increasingly being proposed and used as a policy-tool around the world. The success of nudges is dependent on public acceptance and many questions about what makes a nudge acceptable remain unanswered. In this paper we examine the effect of alternatives on acceptance for nudges: do attitudes change when the nudge is presented alongside with either a more paternalistic policy alternative or a less paternalistic alternative? In a sample drawn from the Swedish general public (n= 641) we find that overall no effect of the alternative on acceptability. However, we find that individualistic participants was influenced by the alternative - acceptance was increased when the alternative to the nudge was more paternalistic. An important lesson for policy is that nudges jointly presented with information about what the alternative is will be differently received by different people.
Higher spending, lower self-esteem: The effects of money spending and materialism on self-esteem

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ABSTRACT

The current study examined the effect of money spending on individual's self-esteem, as well as the moderating role of materialism. In Study 1, 98 college students were recruited, and were asked to name a particular item which he/she wanted to buy at the moment, as well as his/her acceptable price range ("a = the lowest price, b = the highest price"). Then participants were instructed to imagine buying the particular item at the lowest price "a", the median price ",(a+b)/2", or the highest price "b". Lastly, participants' state self-esteem (including three dimensions named performance, social, and appearance) was measured. The results showed that, after controlling for monthly living expense and parents' educational levels, the social state self-esteem of the participants who imagined buying a particular item at the highest price that they can accept was significantly lower than those who imagined buying the particular item at the lowest or the median price (F(2, 77) = 3.26, P < .05, partial η2 = .08). The findings proved preliminarily that higher money spending elicited lower self-esteem.

In Study 2, 152 non-student participants were recruited, and were asked to recall one purchase experience in the past three months. The money spent in the purchase experience should be either within or beyond one's affordability. Then a manipulation check item was measured. Lastly, participants' state self-esteem, materialism, and trait self-esteem were measured. The results showed that, after controlling for trait self-esteem and other demographic variables (gender, age, monthly income, the level of education), the main effect of money spending on performance, social, and appearance state self-esteem were all non-significant, whereas the interaction effects of money spending and materialism were significant or marginally significant regarding social and appearance state self-esteem (social: β = .13, t = 1.90, P = .059; ΔR2 = .01; appearance: β = .19, t = 2.52, P < .05; ΔR2 = .04). Simple effect tests were conducted, and the results are as follows. As for participants who had relatively low materialism, a beyond-affordability purchase experience did lower their social and appearance state self-esteem; whereas for those who held relatively high materialism, a beyond-affordability purchase experience contributed to their social and appearance state self-esteem. The findings indicated that, the influence of money spending on self-esteem varied as a function of one's materialism.

Overall, two studies were conducted to address the influence of money spending on one's self-esteem. The findings suggested that, spending too much money at one time not only might cause financial problems, but also affected one's self-evaluation in a negative way.
Exploring the cross-cultural practice of transnational community in Taiwan

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ABSTRACT

This project of intercultural education aimed to explore pluricultural people's interpretation and evaluation on transnational community in Taiwan. Based on transnationalism and transculturalism, this study concerns the human right issues for immigrants and pluricultural people. Research participants as immigrants in Taiwan were asked about their typical thinking styles in transnational community, their cultural integration in terms of transnational behaviors, and their collective memory of transnational community. Interview questions included what key factors were involved with their identity negotiation, what roles the transnational community and collective memory would be for their identity negotiation and what were the positive or negative aspects impacting cross-border identity. Based on the experiences of pluricultural people and transnational communities, this project expected to enhance the depth and width of developing transcultural knowledge in textbook reform on History in K-12 schools. It is to transform cross-border identity into knowledge embedded with local culture in response to globalization and localization. The purpose of this paper is to portrait the cross-cultural practice of transnational community for Taiwan's immigrants. It is to report their external socio-cultural expectation of ethnic economics, to understand their internal life course of national identity, and to clarify transnational community in relation to their cross-border identity. In conclusion, the cross-cultural practice of transnational community combined the external contexts such as ethnic economic interaction among transnational communities, social report and ethnic industry, and the internal contexts such as ethnic identity, language use, and collective memory in ethnic history.
Persuading consumers to embrace socially responsible act: An experimental investigation

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ABSTRACT

We experimentally investigate the role of non-binding persuasion in motivating socially responsible behaviors in markets with negative externalities imposed on third parties. We also vary the costs of engaging in socially responsible behavior and investigate what influences the increase in these costs have on the incentives for sellers and buyers to act in a socially responsible manner and the effectiveness of persuasion. We show that social persuasion can indeed promote socially responsible behavior through its effects on the attitudes of both sellers and buyers.
Call to claim your prize: Perceived benefits and risk drive intention to comply in a mass marketing scam

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ABSTRACT

Mass marketing scams (MMS) represents one of the most rapid growing crimes. It extracts an enormous financial and emotional toll, yet, there is a real dearth of empirical studies examining factors that could help explain response to scams. As MMS employ a range of tactics to entice potential victims, in a series of studies, we included a wide range of measures —age, education, numeracy, loneliness, and perception of benefits and risks— that could help us better understand why some people respond to scams while other refrains. We also studied whether activation fee and cold vs. hot scam solicitations impact response rate. Our studies indicate that consumers are responding to perceived risks and benefits in their decision-making, regardless of persuasion elements used by scammers. Furthermore, our studies indicate that consumers with lower levels of education and high perception of benefits are at increased risk for mass marketing scams.
Pulling for the team: Competition between political partisans

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**ABSTRACT**

At every level of politics, people form teams to compete for power and resources. Here we use economic experiments to investigate how people balance the desire for their team’s victory versus their own expenditure of effort. We design an economic tug of war in which the side that exerts greater effort wins a reward. In Experiment 1, participants compete individually or in teams, which were assigned arbitrarily. In Experiment 2, participants compete individually or in teams based on their political party, Democrats against Republicans. In both experiments, we find that participants shirked by exerting less effort in teams than in individual competition. The results support theories about free-riding in groups, and they depart from theories about the automatic potency of partisan motives. We discuss why it is difficult for groups, including political partisans, to mobilize toward a common goal.
Marketization and trust decline in China: An interpretation from homo economicus belief

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ABSTRACT

It is believed that trust can promote economic growth (e.g., Algan & Cahuc, 2013; Bjørnskov, 2012; Knack & Keefer, 1997; Zak & Knack, 2001). For example, Knack and Keefer (1997) found that higher trust is conducive to economic growth for a sample of 29 market economies, and that a standard deviation increase in people's level of trust raises economic growth by 1.15%. However, is the converse also true? This question has seldom been asked or answered before. Over the past 30 years, the Chinese economy has grown rapidly, due in large part to continuously deepened marketization reform, but rapid economic growth was accompanied by a dramatic decline in the level of trust. Specifically, Chinese college students' interpersonal trust scores decreased across birth cohorts from 82 in 1998 to 72 in 2009 on a scale with a theoretical score range from 25 to 125 (Xin & Zhou, 2012). Therefore, one question is whether Chinese people's trust declined with the market economy development on the macro level.

Another potential question is which mechanism played a crucial role on the micro level for understanding the negative influence of marketization on trust. Although few studies have directly investigated and interpreted this issue, some studies have examined the relationship between a market economy or marketization and variables related to trust, e.g., donation, dishonest behavior and self-interested behavior. For instance, Reeson and Tisdell (2010) found that the market can produce more self-interested behavior. The introduction of market institution into a public goods game could trigger participants' “market instinct”, which caused them to abandon the previously expressed social preferences (donation) and become self-interested profit maximizers. Cohn, Fehr and Maréchal (2014) found that a significant proportion of bank employees became dishonest when their professional identity as bank employees was rendered salient, which suggests that the prevailing business culture in the banking industry acquiesces in the dishonest behavior. What is the source of the dishonest business culture? How to clearly define the market instinct? In our opinion, both of them can be attributed to people's homo economicus belief. In the recent years, we have conducted a series of studies to interpret trust declining from the view of homo economicus belief.

The present paper aims to summarize our previous findings to address the two questions. First, we report empirical evidence about how Chinese people's trust declined with the market economy development on the macro level; then, using the framework of homo economicus belief, we explain the mechanism of marketization influencing trust on the micro level.
The benefit of the doubt: Willful ignorance and altruistic punishment

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ABSTRACT

I analyze whether people willfully ignore information about the choices of others to avoid the costly punishment of a norm violation. In a laboratory experiment a dictator makes a binary decision that affects his and the recipient’s income. A third party whose payoff is unaffected by the dictator’s choice can choose to punish the dictator. I vary whether the third party immediately observes the dictator’s action or can choose to reveal the action at no cost. I find that a substantial fraction of subjects choose not to reveal the dictator’s choice and, in turn, choose not to punish the dictator. I interpret this as evidence that third parties choose to remain willfully ignorant, allowing them to maximize their personal payoffs by refraining from punishing dictators. Incentivized elicitations of social norms show that such behavior is in line with the social norms that prevail in a situation of initial ignorance. Altruistic punishment is significantly lower when the dictator’s choice is initially hidden. Hence, third-party punishment may no longer effectively curtail selfish motivations when third parties can avoid learning other agents’ actions, as is the case in many real-world applications.
Statistics and behavioral insights: Three cases

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ABSTRACT

Statistical analysis is a main tool for every empirical study. We present two cases that illustrate the focus and reveals some blind spots associated with the use of statistical tools by economists and psychologists, namely, equal weights vs. OLS, and the Bias-Variance Dilemma, respectively. Each one of these statistical notions has behavioral implications and counterparts as the results generated by using these statistical methods have established the basis for making claims about and performing assessments of heuristic judgment and heuristic-based behavior. After elaborating on the statistical soundness of these instances, we provide our third case, which involves a ritual of performing statistical null hypothesis testing that requires close scrutiny and can shed light on the recent concerns with the lack of scientific transparency. We present the results of a pilot study on hypothesis testing literacy among academics and practitioners who were participants in a decision science conference, and point out ways to improve the statistical practices in social sciences. We provide suggestions for a smooth introduction of elements into the curricula and textbooks that rectify the presented shortcomings.
A behavioral view of financial regulations and management

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ABSTRACT

Financial regulations are designed to keep within safe range the operational risk of financial institutions. Risk management involves assessment of existing as well as forthcoming risks, and development of methods to reduce and tame risk. I will juxtapose the existing theory underlying the scientific approach to risk assessment and operational rules in firms with the evidence of practice in this area. A behavioral approach to the study of risk management allows us to move beyond the mathematics of risk and logic of managing risk to view the underlying psychological inclinations that shape important and consequential decisions observed in the field. In particular, behavioral insights that rely on distinction between risk and uncertainty and evaluation of heuristics enrich our existing framework and enhance our risk management tools.
Nudging consumers to engage in the energy market: Trial results and next steps

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ABSTRACT

Ofgem is working to improve consumer engagement in the energy market, so that consumers shop around and get cheaper deals on their energy bills. Here we present the results of Ofgem’s first large-scale randomised controlled trial, the Cheaper Market Offers Letter (CMOL) trial, led by Ofgem’s Behavioural Insights Unit. In this trial we found that a single personalised letter providing customers with details of cheaper energy tariffs (the ‘CMOL’), tripled switching rates over a one month period. We also discuss our next steps for applying behavioural insights in the energy industry.
Motivations and attitudes towards postgraduate studies: 
The experience of University of Greenwich in widening 
and sustaining postgraduate taught (PGT) study in the UK

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**ABSTRACT**

Postgraduate education is a valuable investment and yet there is an alarming declining trend in the number of UK-domiciled new entrants to postgraduate taught programmes (PGT) since the year 2011/12. One can argue that the increase in undergraduate fees can help explain this trend since the level of debt already taken at the undergraduate study could deter students from continuing to postgraduate study and increase the debt burden (Taylor and Littleton, 2008; NUS and HSBC, 2010; Moore et al., 2013). In the effort to counteract the trend and to widen participation into PGT programmes, the government started in 2016 a provision of postgraduate loans of £10,000. In this study we adopt the Expectancy-Value theory as a model of academic achievement motivation and we apply it in the context of PGT studies. We make use of an online survey of University of Greenwich final year undergraduates and alumni. We use Principal Components Analysis and Stereotype Probit models to estimate different degrees of intentions to enter PGT programmes of the respondents. We control for factors such as: socio-economic background, expectations and attitudes, motivations and drivers for undertaking PGT study of postgraduate prospective students, This paper provides an insight on both students' motivation and barriers to pursue postgraduate study and on the effect of the most recent government reforms in terms of fees and governmental grants and students loans. We show how the fear of debt and the availability of funding affect the motivation for continuing with higher education.
A study on attitudes towards postgraduate education

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ABSTRACT

Supply side economic policies designed to encourage participation in postgraduate education have the ultimate goal to improve productivity of the workforce. In the effort to reach this goal and to widen participation into PG education, the government introduced in 2016 the provision of postgraduate loans of £10,000 to all those interested in entering PG taught programmes. For these types of policies to deliver the expected impact, they should be designed taking into consideration individual’s motivations, drivers and other socio-economic factors in relation to educational experiences.

This research explores PG decisions by proposing a new theoretical model of PG choices. The model goes beyond the traditional Human Capital model and embraces a more interdisciplinary approach to take into account personal and socio-economic factors that can affect choices. The optimal solution derived under both the rational hypothesis and the bounded rationality hypothesis, and under two different schemes of intertemporal discounting, identifies the optimal time to enter PG studies and in this extent it is an optimal stopping point solution. The solution is simulated under different scenarios of debt repayment, debt costs and wage premium. The results of the baseline scenario indicate an optimal stopping time that closely mimics the historical data for the UK and that are in line with the different theoretical frameworks and discounting schemes, with more procrastinate in the presence of fear of debt. The results of the simulations show that the optimal stopping time is sensitive to the wage premium and undergraduate debt level and repayment scheme.
From the invisible hand to the nudge: Mergers and acquisitions of British universities

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ABSTRACT

39 mergers and acquisitions were initiated by British universities and colleges between 1998/1999 and 2015/2016. They represent nearly 25% of all institutions of higher education, which report statistics to HESA. In the market conditions, when the competition for rankings is heated and international student enrolment is declining, universities merger and amalgamation processes may allow universities decrease the number of competitors, increase tuition fees, change the variety of offered degrees and thus nudge prospective students into choosing their institution. This paper will look into the effects of such mergers as well as add further evidence to the discussion on whether these processes take advantage of the market power.