

The Pinhas Sapir Center for Development, Tel Aviv University The Eitan Berglas School of Economics Tel Aviv University

# "Individual Decision-Making: A Behavioral Approach"

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The Eitan Berglas School of Economics

Ofair Hall

Tel Aviv University

# Anat Bracha

The Eitan Berglas School of Economics, Tel Aviv University <u>Affective Decision Making: A Behavioral Theory of Choice</u> Affective decision-making is a strategic model of individual choice under risk and uncertainty where we posit the agent has two inner cognitive processes -the "rational" and the "emotional" process. Observed choice is the result of equilibrium in this intrapersonal game. As an example, we present applications of affective decision-making in insurance markets, where the risk perceptions of consumers are endogenous. We then derive the axiomatic foundation of affective decision, and demonstrates its relationship to the existing preferences in the literature and show that affective decision making is a model of ambiguity-seeking behavior consistent with the Ellsberg paradox.

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### The Tennis Coach Problem

The paper introduces a new allocation game, related to Blotto games: each tennis coach assigns his four different skilled players to four positions, and then each team plays all other teams in the tournament. The set of equilibria is characterized and experimental behavior in variants of the game is analyzed in light of an adapted level-k model. The results exhibit a systematic pattern- a majority of the subjects used a small number of strategies. However, although level-k thinking is naturally specified in this context, only a limited use of low level-k thinking was found. These findings differ from those obtained in previous studies, which found high frequencies of level-k reasoning among subjects in various games. Thus, the results illuminate some bounds of the level-k approach.

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#### Economics Department, Ben Gurion University

Are Beautiful People More Employable? Evidence from a Field Experiment Job applicants in Europe and in Israel increasingly imbed a headshot of themselves in the top corner of their CVs. Most still don't. We sent 2,592 CVs in pairs to 1,296 advertised job openings. In each pair, one CV was without a picture while the second, otherwise almost identical CV contained a picture of either an attractive male/female or an average-looking male/female. Employer callbacks to attractive men are significantly higher than to men with no picture and to average-looking men, nearly doubling the latter group. Strikingly, attractive women do not enjoy the same beauty premium. In fact, women with no picture have a slightly (but not significantly) higher rate of callbacks than attractive or average-looking women. All of these findings are robust to jobs that involve dealing with the public as well as more private, office jobs. Overall, we find no evidence of sex discrimination.

## Dan Ariely dandan@duke.edu

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# Large Stakes and Big Mistakes

Workers in a wide variety of jobs are paid based on performance, which is commonly seen as enhancing effort and productivity relative to non-contingent pay schemes. However, psychological research suggests that excessive rewards can in some cases result in a decline in performance. To test whether very high monetary rewards can decrease performance, we conducted a set of experiments in the US and India in which subjects worked on different tasks and received performance-contingent payments that varied in amount from small to very large relative to their typical levels of pay. With some important exceptions, very high reward levels had a detrimental effect on performance.

Eric Eyster joint with Matthew Rabin and Dimitri Vayanos e.eyster@lse.ac.uk

# **Cursed Markets**

There is evidence that people do not fully take into account how other people's actions depend upon these other people's information. This paper explores such strategic naivety in financial markets using Eyster and Rabin's (2005) notion of "cursed equilibrium", in which each agent correctly predicts the distribution of others' actions but underestimates the degree to which these actions are correlated with others' information. We apply the concept to

Kyle's (1989) demand-submission game, allowing different traders to be cursed to different extents. Cursedness leads to momentum trading, where the least cursed uniformed traders submit upward-sloping demand schedules and benefit from the presence of informed traders to profit from more cursed uninformed traders. Cursedness can also generate trading volume that increases in the degree of informational asymmetry among traders, in contrast to Kyle's prediction.

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## Mental Equilibrium and Rational Emotions

We introduce emotions into an equilibrium notion. In a mental equilibrium each player "selects" an emotional state which determines the player's preferences over the outcomes of the game. These preferences typically differ from the players' material preferences. The emotional states interact to play a Nash equilibrium and in addition each player's emotional state must be a best response (with respect to material preferences) to the emotional states of the others. We first discuss the concept behind the definition of mental equilibrium and suggest two interpretations. One evolutionary and the other based on the idea of rational emotions. We show that this behavioral equilibrium notion organizes quite well the results of some of the most popular experiments in the literature of experimental economics. We expose some attractive properties of mental equilibria which are useful for deriving the set of mental equilibria for specific games.

Nicholas Burger, Gary Charness, and John Lynham\* <u>Field and Laboratory Experiments on Procrastination and Willpower</u> Abstract: The issues of self-control, procrastination, and willpower have been the focus of a number of recent theoretical models. We conducted two experimental studies to investigate patterns in how people complete a task of significant duration and how willpower depletion affects behavior, providing some of the first data under financial incentives in these areas. In the first study, cumulative weekly 'quotas' (over a five-week period) designed to keep people from falling too far behind in the overall task did not prove helpful, as completion rates were 50% higher in the treatment without weekly quotas. Perhaps surprisingly, we found no evidence in the aggregate data (although there was considerable heterogeneity) of an increasing profile of the number of hours spent at the task over time, in contrast with at least the spirit of quasi-hyperbolic models. As we found strong evidence of intra-week cycles suggesting the possibility of willpower depletion and replenishment, our second study isolates the effect of direct willpower depletion (via the Stroop test) on the first day of a two-day period. We found that depleting willpower did indeed lead to less work (and poorer quality) on the first day, but that this intervention surprisingly led to a higher completion rate overall. This behavior is consistent with models in which seemingly related activities are linked due to cognitive load, as well as the Bénabou and Tirole self-signaling model of willpower.

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On the weighting of losses and of low probability extreme outcomes

Prospect theory (Kahneman and Tversky, 1979) captures robust deviations from the prescriptions of expected utility theory that reflect overweighting of losses and of extreme outcomes. The current paper reviews research that explores the boundaries of these behavioral tendencies. Studies of the tendency to overweight losses (loss aversion) suggest that this bias emerges in long experiments without feedback. This bias does not occur in short experiments, and in long experiments with feedback. Studies of the effect of low probability extreme outcomes reveal a large description-experience gap: Decision makers tend to overweight extreme outcomes in decisions from descriptions, and underweight extreme outcomes in decisions from experience. The implications of these results are discussed.

# Lorenz Goette lorenz.goette@unige.ch

Département d'economie politique, University of Geneva <u>Fairness and Effort: Evidence from field Experiment</u> If paying higher wages motivates individuals to voluntarily provide more effort, this has sweeping implications for labor markets like involuntary unemployment or non-competitive inter-industry wage differentials. While laboratory experiments support this positive relationship between effort and wage levels, evidence from field data is less clear cut. We combine data from randomized wage increases in a field experiment with a follow-up study to measure fairness perceptions and social preferences of the workers. The workers were hired from a publishing house to distribute the newspaper within a finite horizon. We find that a wage increase only affects effort if it alleviates perceived unfairness, but not if it merely improves an already fair outcome. In addition, we find that only the reciprocal workers act on their fairness perceptions. This evidence strongly corroborates the predictions of the fairwage effort hypothesis.

Nagore Iriberri <u>nagore.iriberri@upf.edu</u> <u>Department of Economics and Business, Universitat Pompeu Fabra</u> <u>The Importance of Relative Performance Feedback Information: Evidence from</u> <u>a Randomized Natural Experiment</u> Using High School Students We study the effect of providing relative performance feedback information under piece-rate incentives. A randomized natural experiment that took place in a High School offers an extraordinary opportunity to test this effect in a real-effort setting. For one year only, students received information that allowed them to know whether they were above (below) the class average as well as the distance from this average. We exploit a rich panel data set and find that the provision of this information led to a strong positive effect on students' performance (5% increase). Moreover, the effect was significant for the whole distribution. However, once the information was removed the effect disappeared. To rule out the concern that the effect may be driven by teachers within the school, we verify our results using national level exams (externally graded) for the same students and the effect remains.

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## Visibility and Economic Behavior

We empirically study the socio-cultural visibility of economic activities, roughly defined as the speed with which members of society notice an individual's engagement in different activities. In a modern market economy -the U.S. -- we focus on consumption activities. We show that, consistent with a conspicuous consumption model a la Veblen, income elasticities and other features of commodities can be predicted from a survey-based measure of the visibility of consumer expenditures. In a pre-market economy -- a native society of foragers-farmers in the Bolivian Amazon -- we focus on activities such as fishing, hunting, and harvesting. Overall, we provide evidence consistent with a strong social signaling motivation in economic behavior.

# Columbia Business School, Columbia University

# Volunteering and Image Motivation

In this study we examine the relationship between monetary incentives and image motivation in behaving prosocially, both on the extrinsic and intrinsic margin. In particular, we examine the effect of monetary incentives on volunteering participation rates, and conditional on participation, the properties under which monetary incentives enhance effort. We suggest that fixed monetary incentives, or limited monetary incentives, can enhance performance due to its negative interaction with image motivation.

# Sanjiv Erat and Uri Gneezy

# Rady School of Management, UC San Diego

## White Lies

When do people tell white lies? In this paper we distinguish between two types of white lies, those that help others at the expense of the person telling the lie that we term altruistic white lies, and those that help both sides that we term Pareto white lies. We find that a large fraction of the participants are reluctant to tell even a Pareto white lie, demonstrating a pure lie aversion that is independent of any social preferences over outcomes. In contrast, a nonnegligible fraction of participants are willing to tell an altruistic white lie if the lie hurts them a bit but helps the other a lot. Comparing white lies to those in which lying increases own payoff at the expense of the other reveals important insights into the interaction of incentives, lie aversion and social preferences over distributions. Finally, in line with previous finding, women are less likely than men to lie when it is costly to the other side. Interestingly, we find that women are more likely to tell an altruistic lie, but tend to tell fewer Pareto ones.

## Anat Bracha, Michael Menietti, and Lise Vesterlund

## The Role of Seed Money when Public Projects have Fixed Costs

Many public projects have fixed costs of production, which causes them to have increasing returns to production at low levels of provision. Andreoni (1998) shows that voluntary provision in such an environment may get trapped at zero provision outcomes. He demonstrates that the use of announcements and the collection of seed money may eliminate such inferior outcomes. We investigate this model experimentally to determine whether announcements increase contributions in the presence of fixed costs, and whether the effect of announcements is greater in the presence of fixed costs. For sufficiently large fixed costs we find that simultaneous contributions give rise to coordination problems, and that announcements help secure that desirable projects are provided for. Interestingly for small fixed costs announcements may reduce total contributions.