NUGGETS OF GOODNESS IN THE NEST OF EVIL

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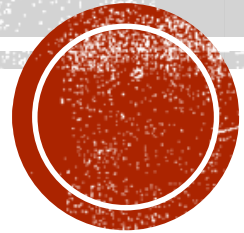

MAIN QUESTION(S)

- Are "prisoners" fundamentally different from our usual ("normal") subjects?

OR

- Can laboratory experiments capture the differences among "prisoners" and "normal" subjects?

EXPERIMENTS IN TWO MALE PRISONS IN CHANIA, CRETE (GREECE)

- The agricultural –low security– prison (1 session; 18 volunteer prisoners)

Relatively more pleasant; prisoners spend long times in an open space; possibility of cultivating land and taking care of sheep; all prisoners can meet together during "free time"; library (used as our "lab")

- The high security prison (4 sessions; 58 volunteer prisoners)

Complete isolation; very limited contact with an open space; very limited activities, especially some artistic work allowed; prisoners meet during "free time" only within very well-selected closed groups-no meetings across groups; library (used as our "lab")

Average duration per session: 2 hours. Show-up fee: 5€. Overall, average earnings (including show-up fee)=19.7€

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WHY IN GREECE?

School of Agriculture, Policy and Development - Ethical Clearance of Research
Ethical Clearance Submission Form

You must not begin your research until you have obtained consent as evidenced by this form returned signed and dated.
ALL QUESTIONS MUST BE COMPLETED.

Name: __Nikos Georgantzis_____ B158

Status *(tick)*:

Staff member	X
Visitor	
Higher degree student	
MSc student	
Undergraduate student	

SCHOOL OF AGRICULTURE POLICY AND DEVELOPMENT THE UNIVERSITY OF READING
ETHICAL CLEARANCE GRANTED

Name of academic supervisor or principal investigator: __Nikolaos Georgantzis_____

1. Title of project:
Prisoners' pro-social values in the presence of monetary temptation: Experimental evidence_____

2. Brief description of research to be undertaken:
framework called a "social dilemma" in which human subjects

BUT THE UK MINISTRY OF JUSTICE: "WE REGRET…"

School of Agriculture, Policy and Devel
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National Offender Management Service

Prof Nikolaos Georgantzis
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n.georgantzis@reading.ac.uk

National Offender Management Service
National Research Committee
Email: National.Research@noms.gsi.gov.uk

28 November 2014

NATIONAL RESEARCH COMMITTEE DECISION

Ref: 2014-340
Title: Prisoners' pro-social values in the presence of temptation: Experimental evidence

Dear Prof. Georgantzis,

Further to your application to undertake research across NOMS, the National Research Committee (NRC) has considered the information provided and is unable to support your project at the present time.

We appreciate that this will be disappointing for you and that this is not the response you would have hoped for.

As set out in the NOMS Research Applications Instruction (https://www.gov.uk/government/organisations/national-offender-management-service/about/research), consideration can be given to one resubmission.

Yours sincerely,
National Research Committee

HIGH SECURITY: ENTRANCE

LOW SECURITY: ENTRANCE

MORE PHOTOS: LOW SECURITY

MORE PHOTOS: HIGH SECURITY (IN THE NEWS)

OUR LAB (LOW SECURITY)

TWO EXPERIMENTAL GAMES AND ONE PERSONALITY TEST (LSRP)

- (Genuinely) Sequential Discrete Trust game

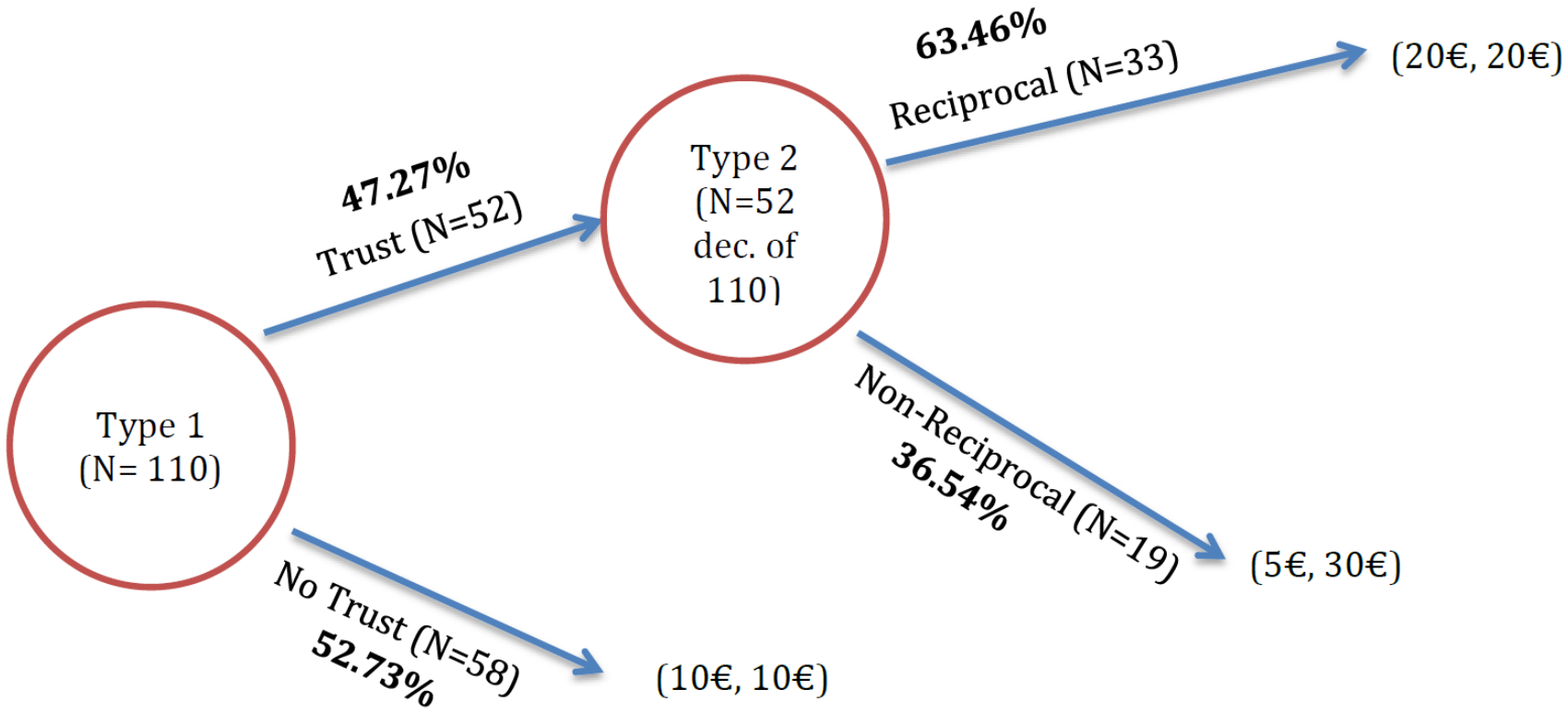
A player decides whether to take 10€ for himself and another 10€ for a second player or let the game continue allowing the latter choose between 20€ for each one of the two or take 30€ for himself and let the former down with 5€.

- A Corruption game [Jaber et al (2014) *Frontiers in Behavioral Neuroscience*]

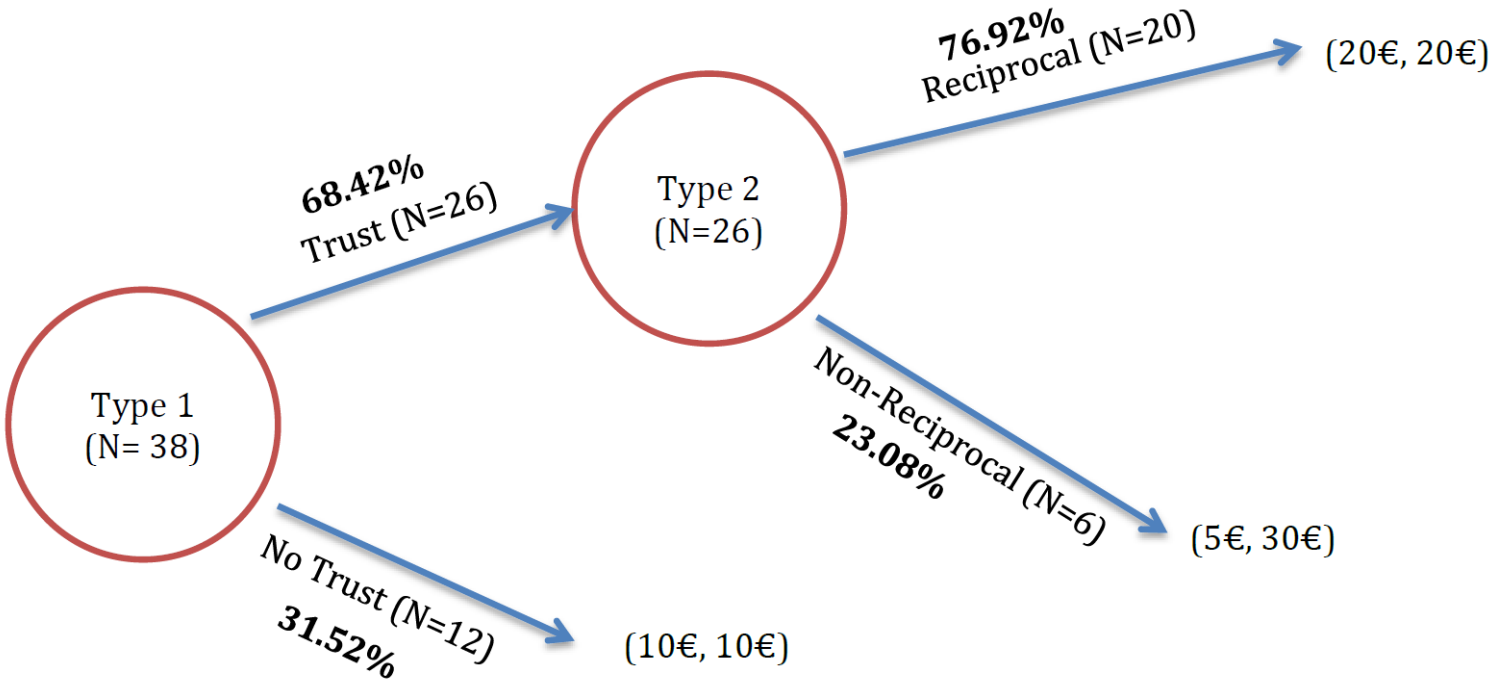
Two firms bid in an auction granting the license for a public project to one of them. An official decides who wins the auction. Bids involve combinations of bribe and quality (the larger the former, the lower the latter). Quality benefits all players but bribes are only good for officials.

RESULTS AT A GLANCE

TRUST GAME: STUDENT MALES



TRUST GAME: PRISON MALES



Prisoners Trust more and Reciprocate more than students

THE CORRUPTION GAME: THEORETICAL FRAMEWORK

Our framework

- Trade-off between bribe and project quality
- Quality is endogenous and pro-social (equally increasing all players' earnings)
- Bribe is: (i) unfair (increases inequality), (ii) anti-social, (iii) inefficient (it costs more to sender than contributes to receiver) and (iv) more attractive (than quality) to the public officer

Players

2 Firms and 1 Town Planner

Two Stages

- Stage 1: firms i and j compete for the license of a public project
  - simultaneous decisions: quality, Q_i, Q_j and bribe, B_i, B_j
- Stage 2: town planner observes both firms' offers (firms do not observe rival offers) to decide the winning firm

MONETARY PAYOFFS IMPLEMENTED IN THE EXPERIMENTS

$$\pi_{official} = 10 + \frac{1}{2} \cdot Q_{winner} + B_{winner}$$

$$\pi_{winner} = 10 + \frac{1}{2} \cdot Q_{winner} + 10 - 2 \cdot B_{winner}$$

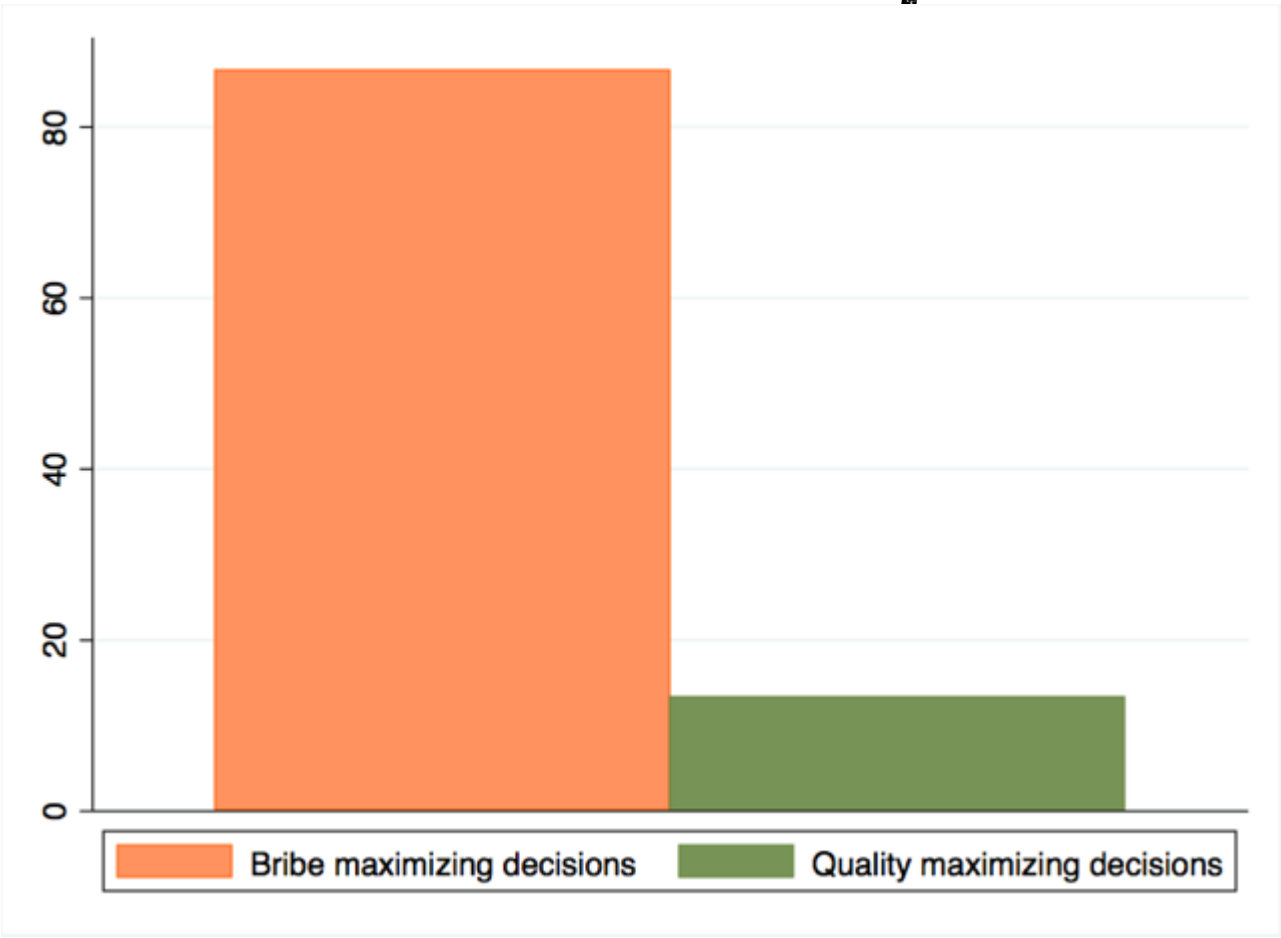
$$\pi_{loser} = 10 + \frac{1}{2} \cdot Q_{winner}$$

$A = 10$, hence $Q_i + B_i \leq 10$

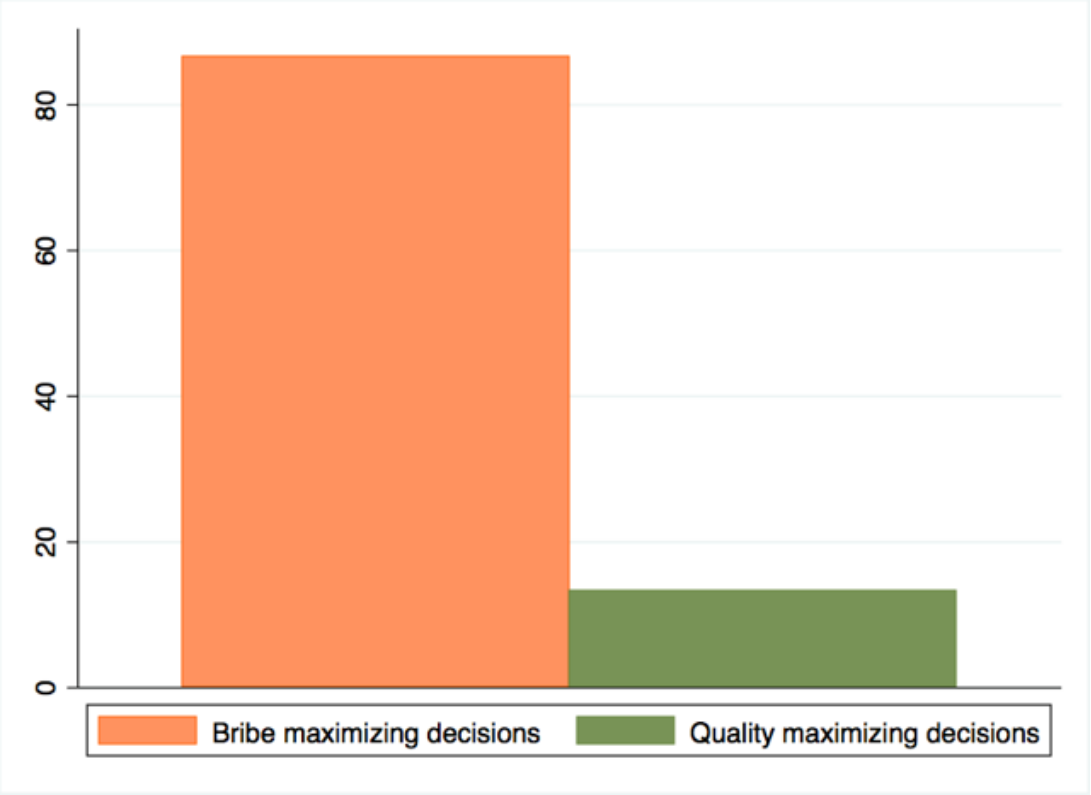
Our benchmark is the Nash Equilibria of the game:

$N = (Q_1, Q_2, B_1, B_2) = (5, 5, 5, 5)$, and $(\pi_1, \pi_2) = (12.5, 12.5)$
$N = (Q_1, Q_2, B_1, B_2) = (6, 6, 4, 4)$, and $(\pi_1, \pi_2) = (14, 14)$
$N = (Q_1, Q_2, B_1, B_2) = (7, 7, 3, 3)$, and $(\pi_1, \pi_2) = (15.5, 15.5)$

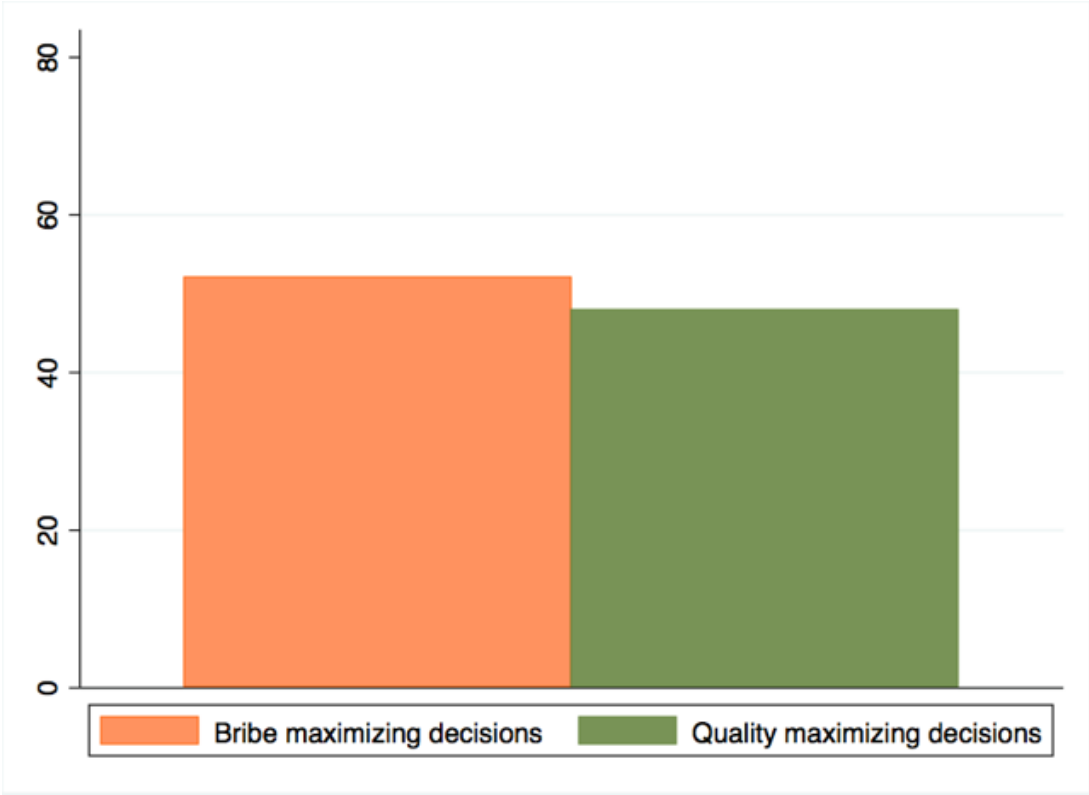
STUDENT SUBJECTS



STUDENT SUBJECTS VS PRISONERS



Laboratory subjects

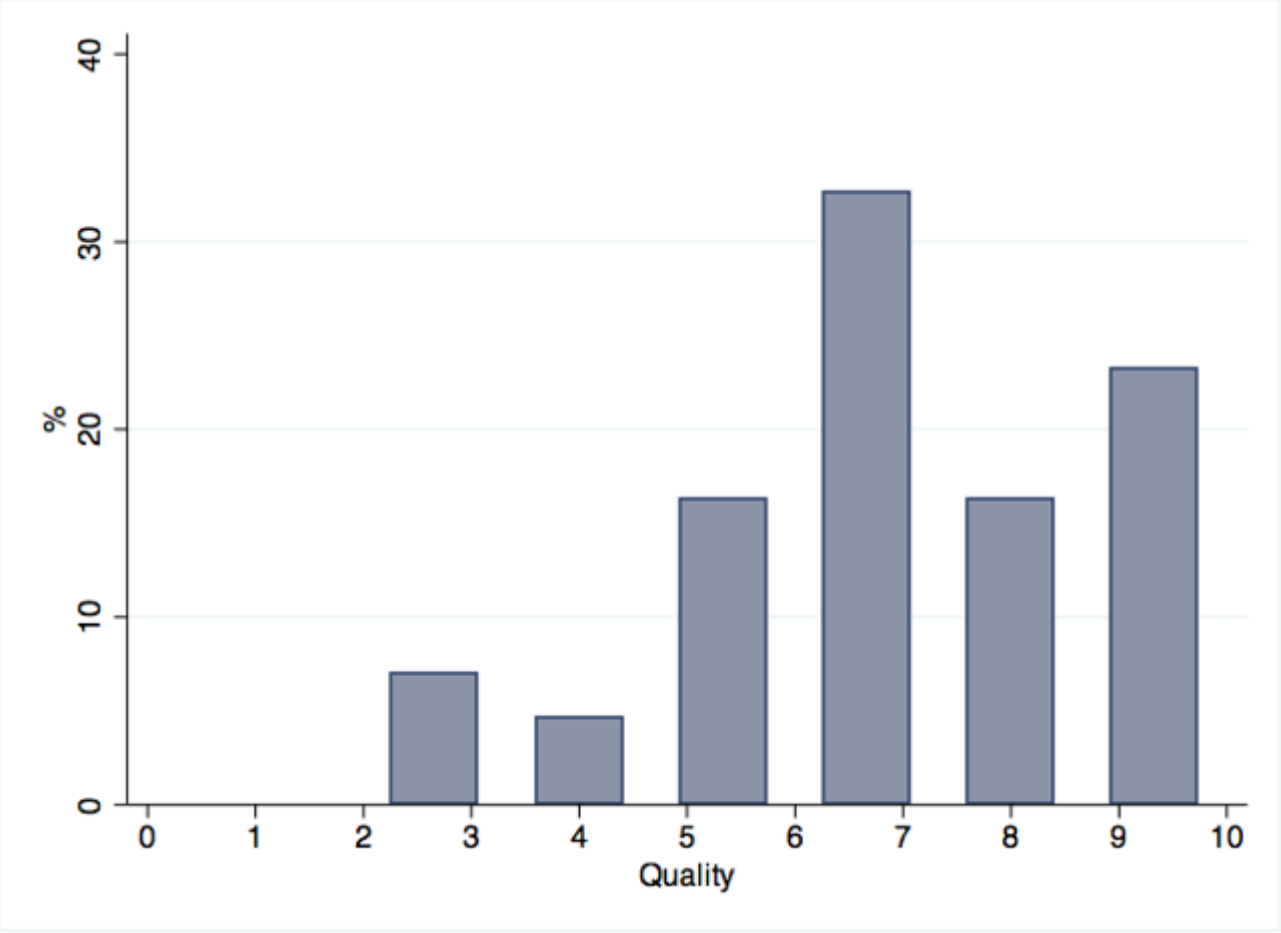


Prison subjects

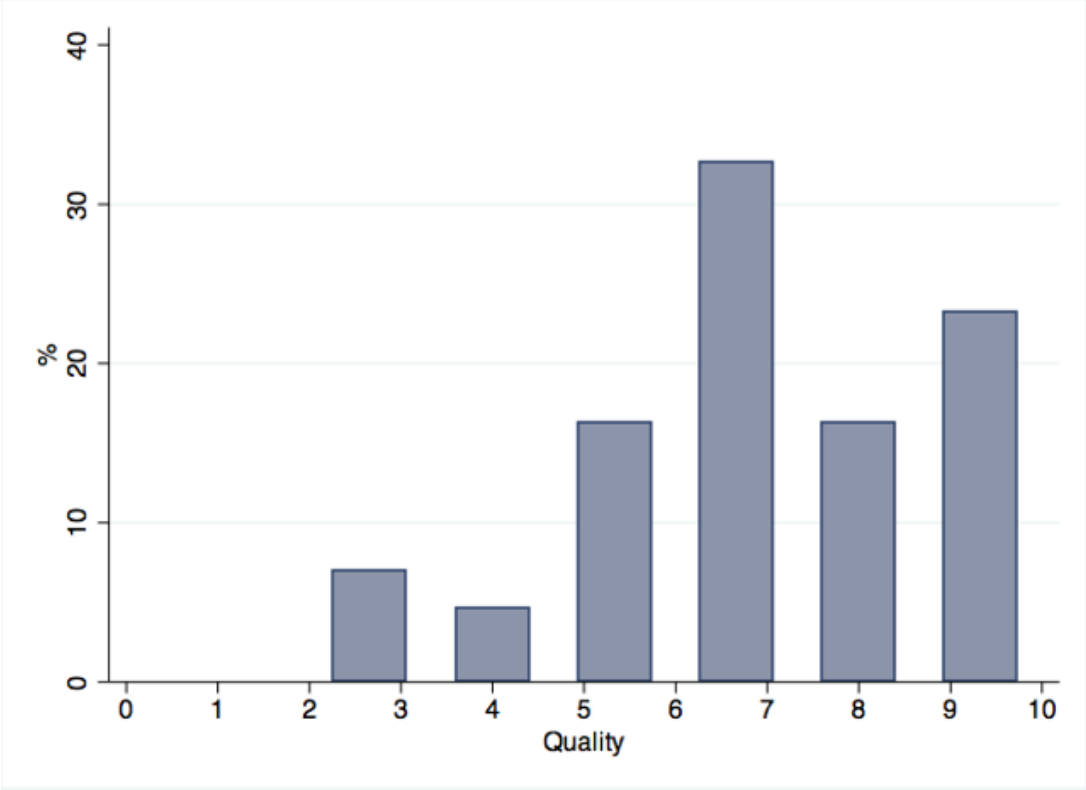
RESULTS FROM FIRM-SUBJECTS' BEHAVIOUR

Plots of quality bids

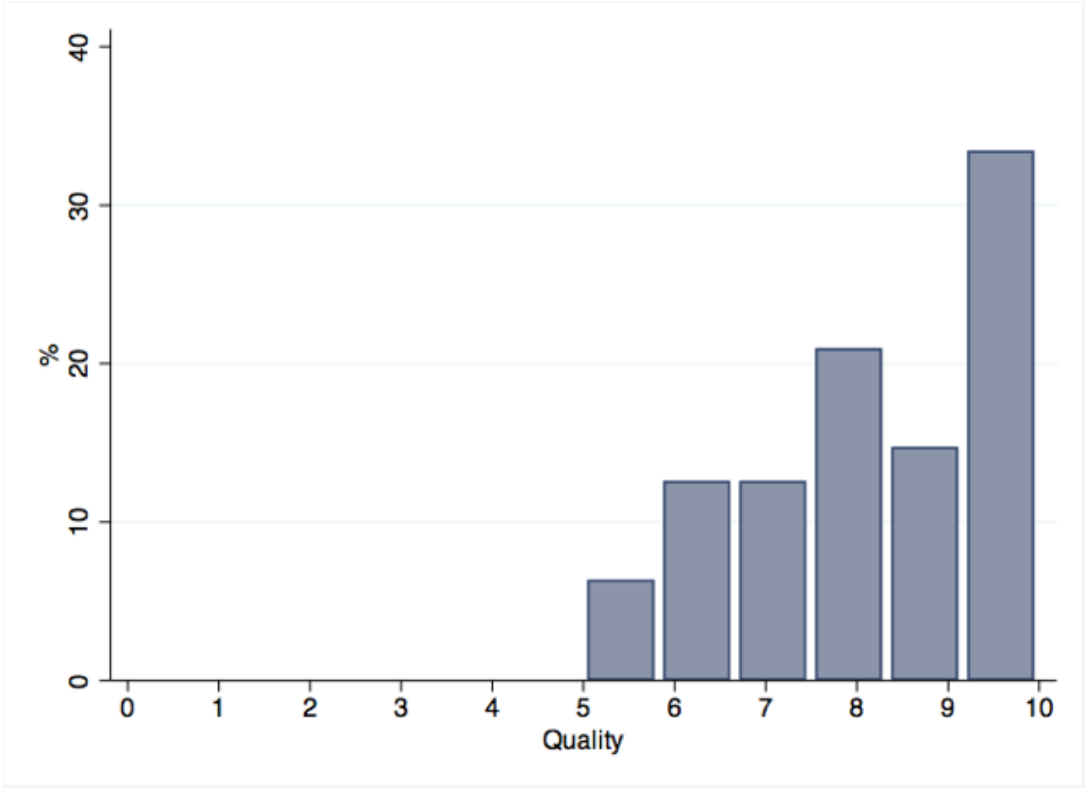
STUDENT SUBJECTS



STUDENT SUBJECTS VS PRISONERS



Laboratory subjects



Prison subjects

PSYCHOPATHY AND ECONOMIC BEHAVIOR

FAMOUS PSYCHOPATHS

FORMAL TEST FOR PSYCHOPATHIC PERSONALITY

- ***Levenson Self-Report Psychopathy Scale (LSRP Scale): 26 questions answered on an "agree-disagree" 4-point likert scale.***

Psychopathy is a personality disorder first described in 1941 by psychiatrist Hervey Cleckley. It is generally characterized as an acute or total lack of empathy and respect for others with a superficial presentation of normality.

The Levenson Self-Report Psychopathy Scale was developed by Levenson, Kiehl, and Fitzpatrick (1995)

[Levenson, M.; Kiehl, K.; Fitzpatrick, C. (1995). "Assessing psychopathic attributes in a noninstitutionalized population". Journal of Personality and Social Psychology, 68, 151-158.]

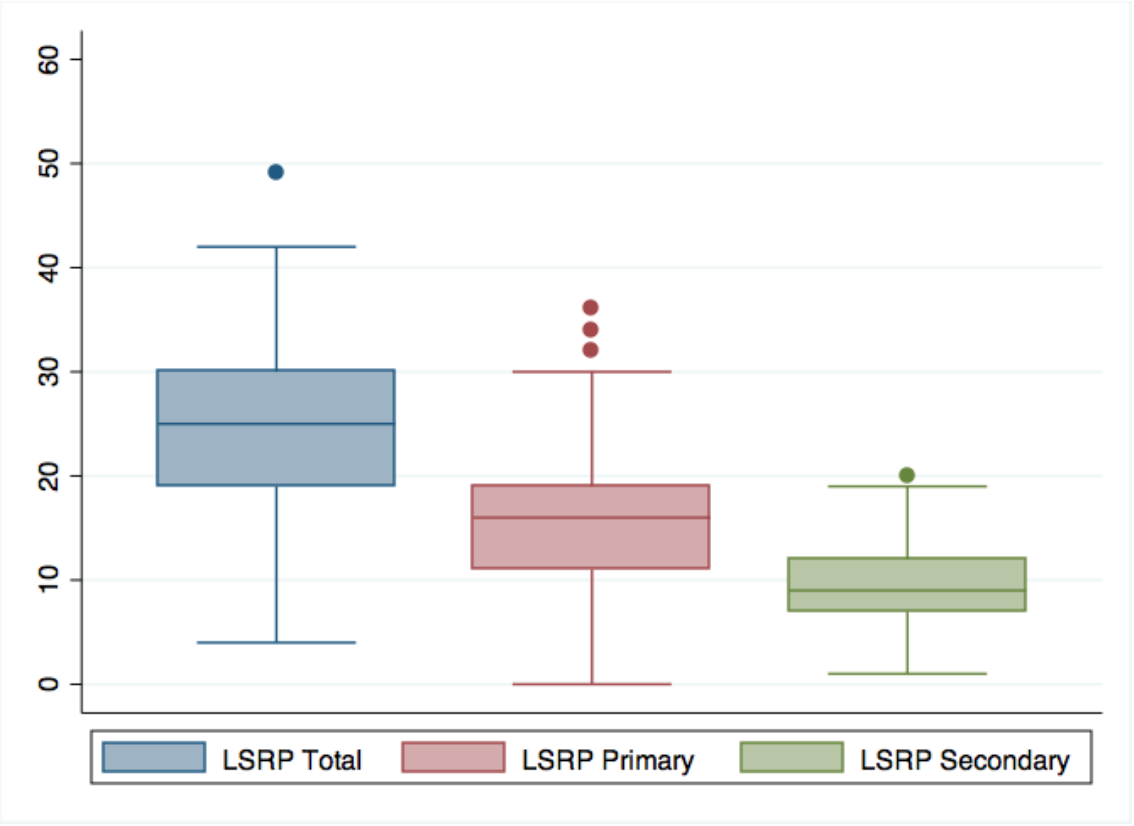
to measure psychopathy as a personality trait for use in psychological research. It measures on two scales; primary and secondary psychopathy.

PSYCHOPATHY MEASURED THROUGH *LSRP*

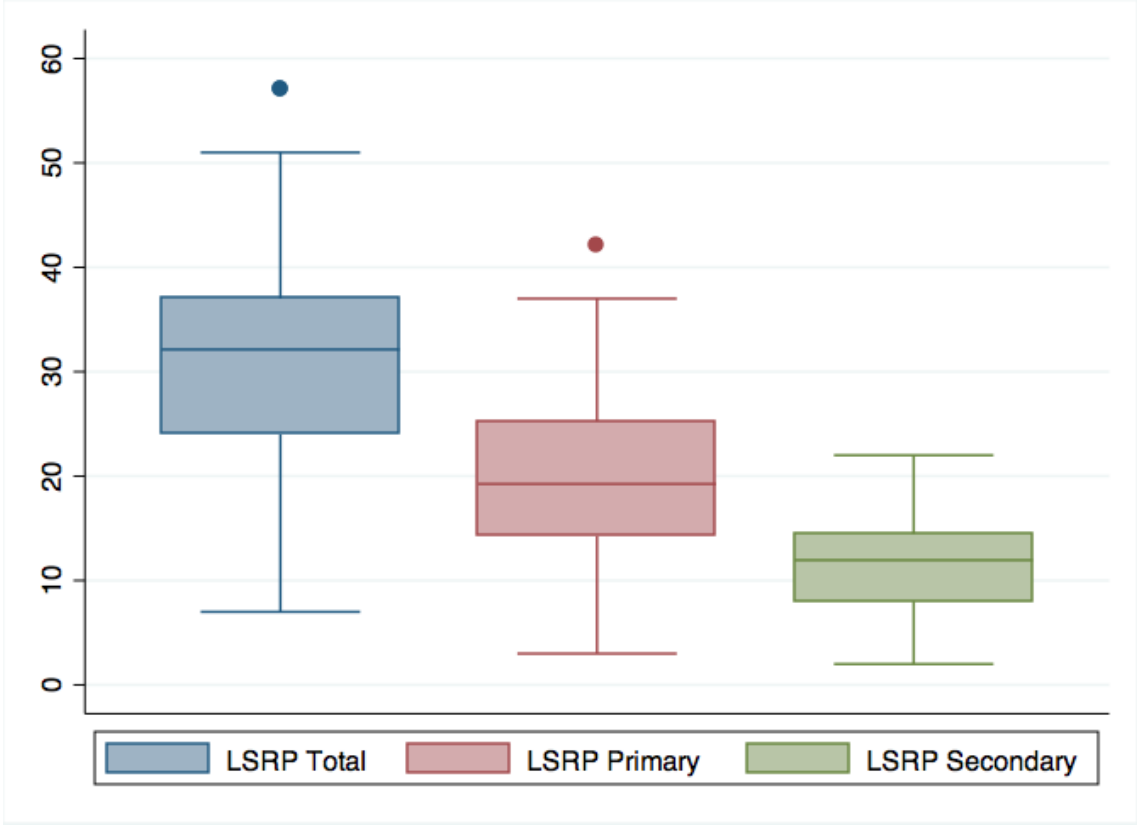
- IS NOT A PSYCHOPATHOLOGY! (It is not treated clinically)

- Psychopaths (especially those scoring high in primary psychopathy) will generally avoid institutionalization for psychiatric reasons, while those scoring high in secondary may have higher probability to end up in prison.

LSRP SCORES IN PRISON AND IN THE LAB



Laboratory subjects



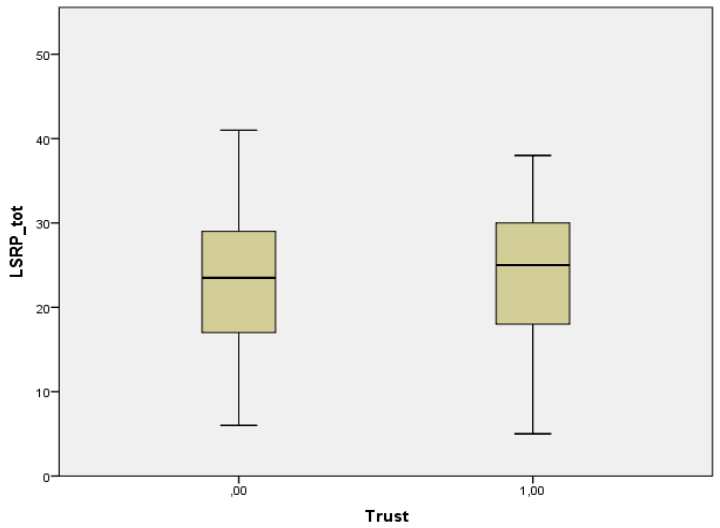
Prison subjects

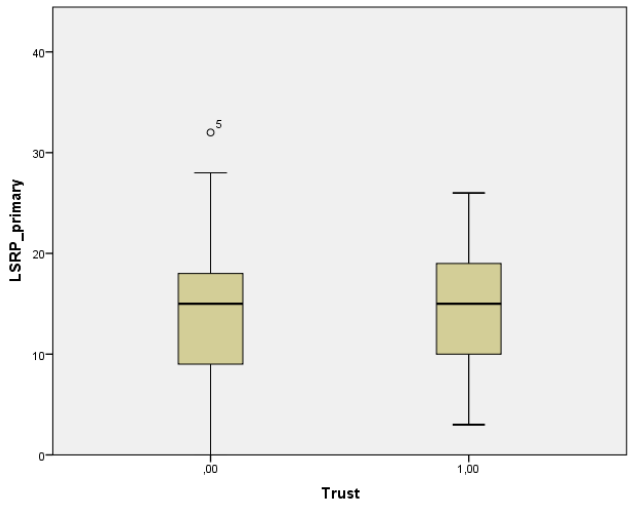
NO SIGNIFICANT CORRELATION BETWEEN LSRP AND SENTENCE

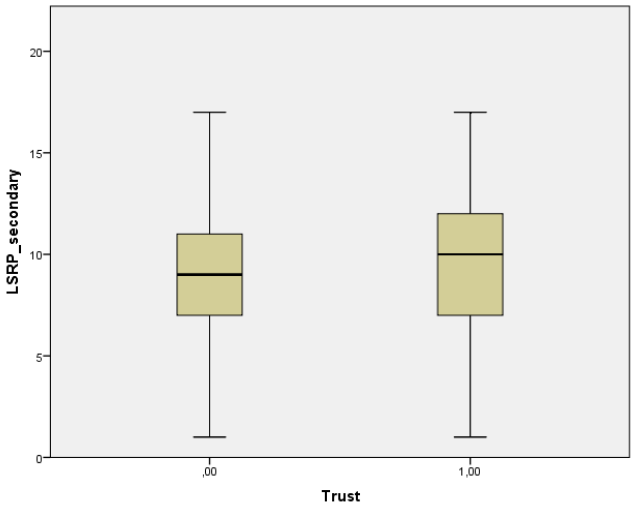
- Correlation LSRP Primary & Sentence -0.1650
- Correlation LSRP Secondary & Sentence: 0.0081
- Correlation LSRP Total & Sentence: -0.1271

TRUST AND PSYCHOPATHY (STUDENTS)

- No difference in LSRP depending on whether they trust as players 1 or not

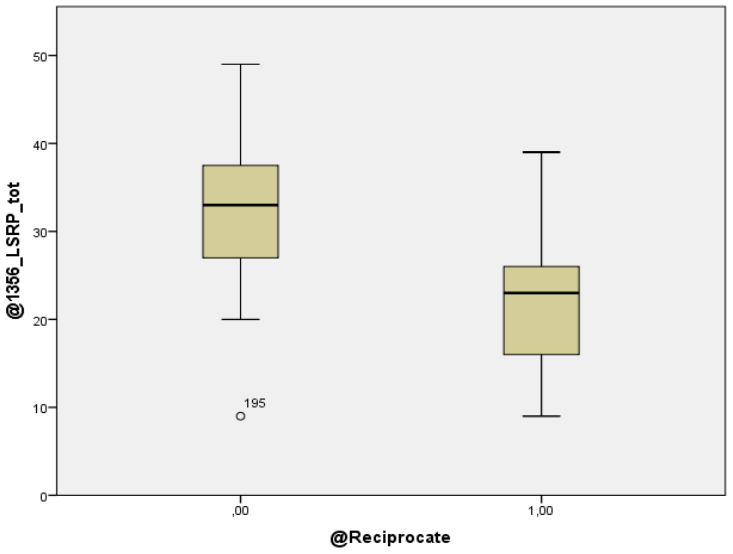


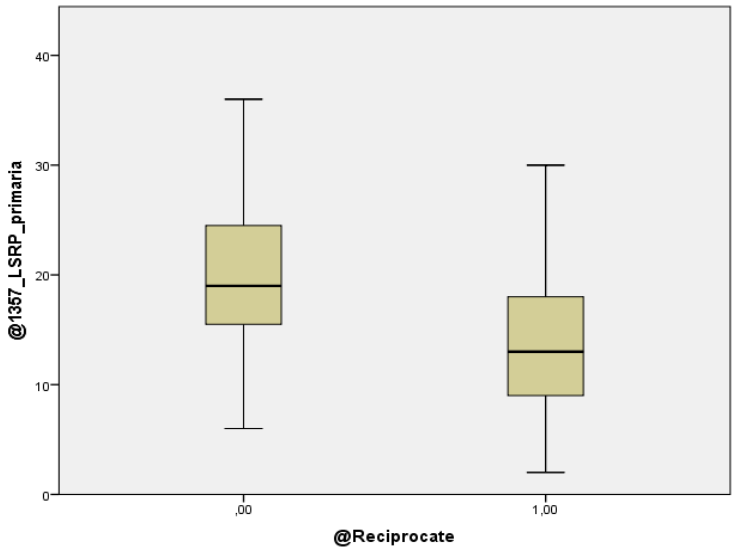


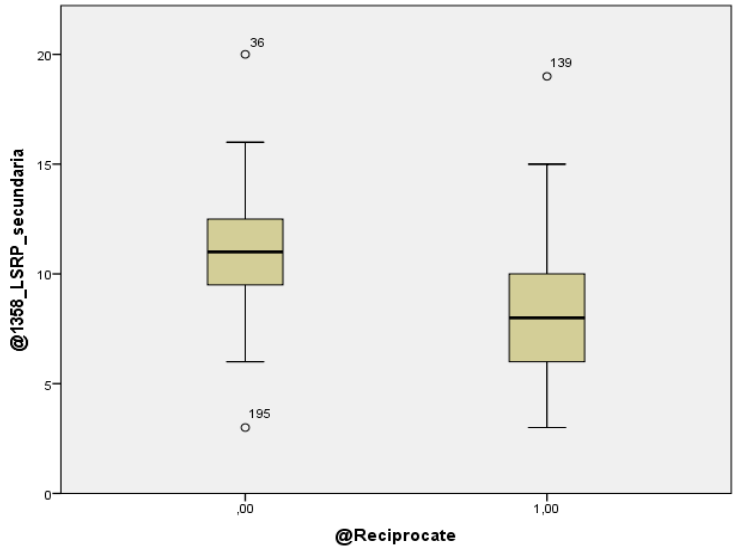


RECIPROCITY AND PSYCHOPATHY (STUDENTS)

- Student subjects in the trust game had revealed that higher LSRP scores were related to non reciprocity as a second player

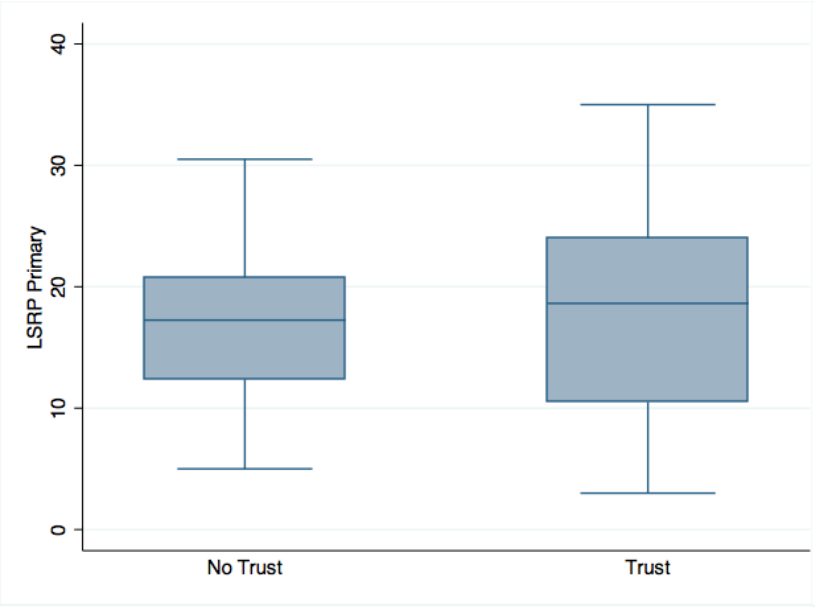


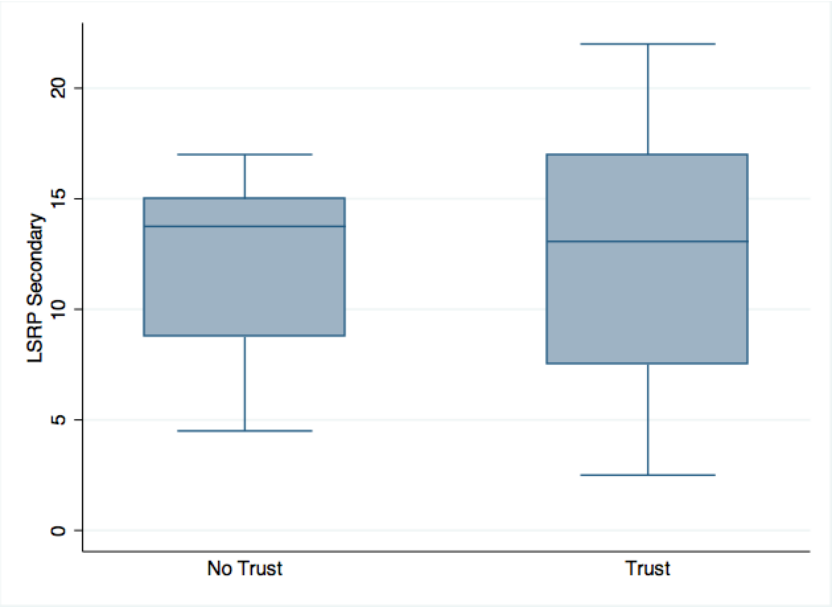


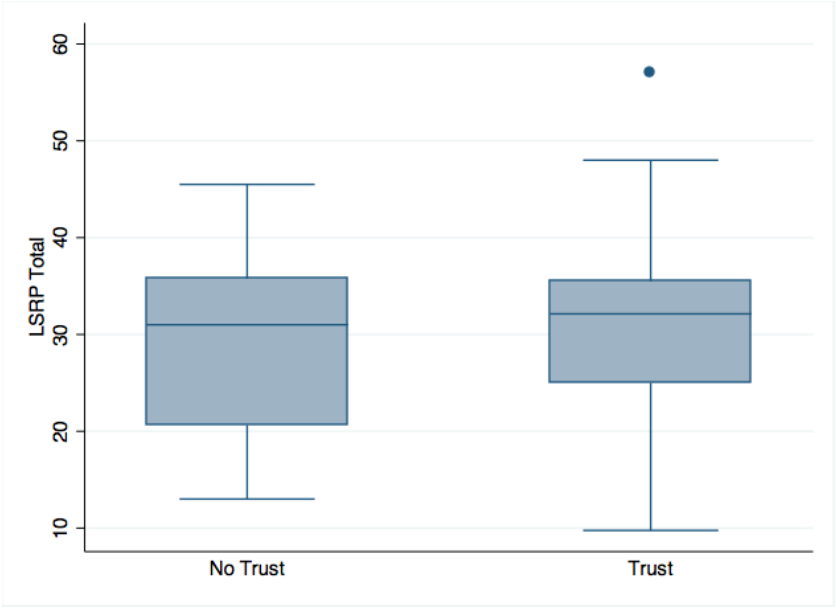


Differences in psychopathy, primary psychopathy and secondary psychopathy degrees between non-reciprocting (0) and reciprocating (1) P2 players.

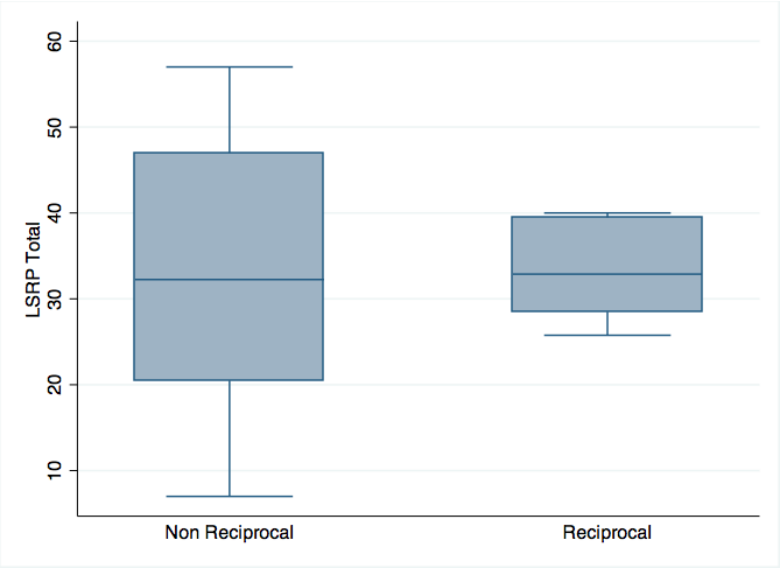
TRUST AND PSYCHOPATHY (PRISON)

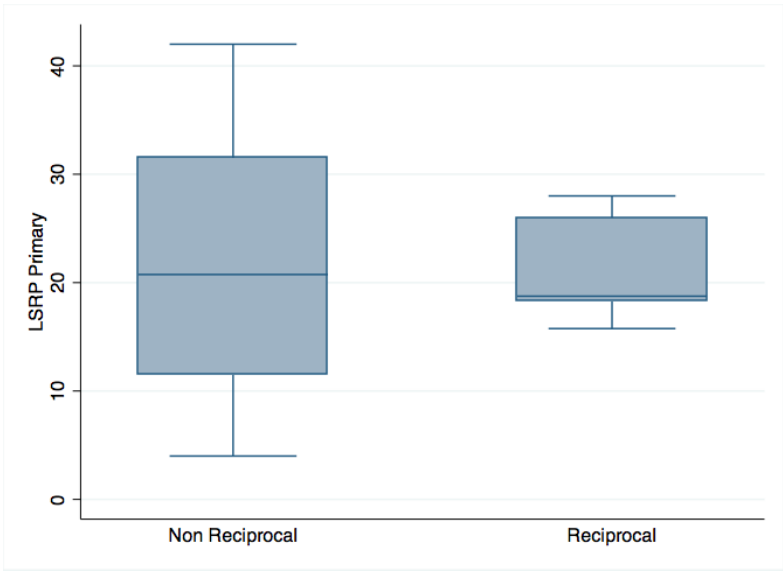


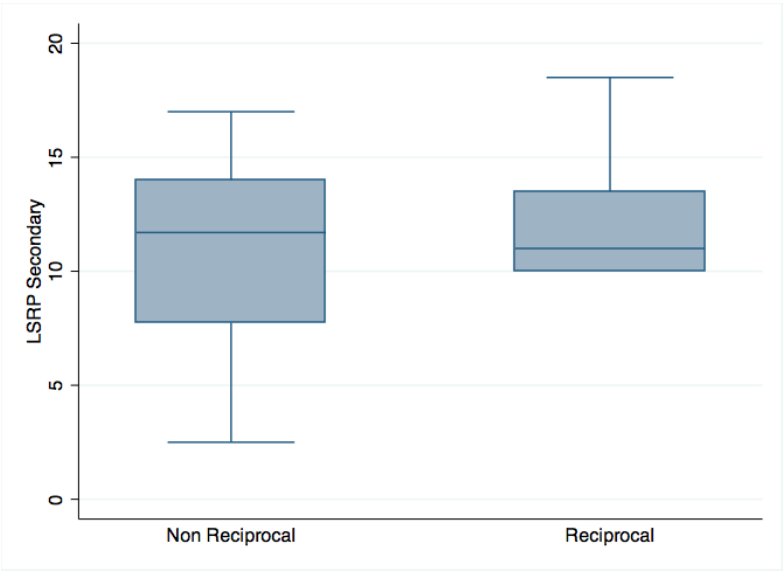




RECIPROCITY AND PSYCHOPATHY (PRISON)







LSRP: WHY DOES IT NOT WORK WITH PRISONERS?

- The prisoner sample is overall much less educated than students and a verbal test like LSRP does not capture their personality

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- The reciprocating (N=20) and non reciprocating (N=6) subsamples are surprisingly similar in all variables ….

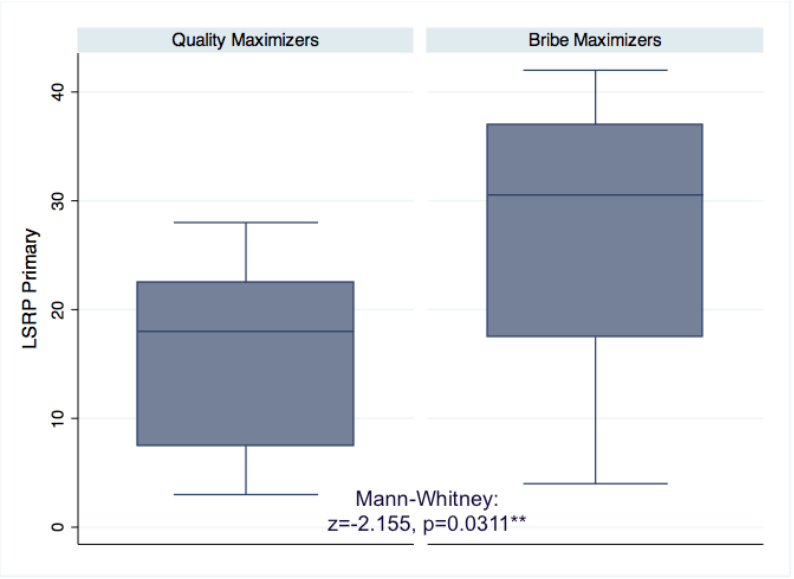
LSRP: WHY DOES IT NOT WORK WITH PRISONERS?

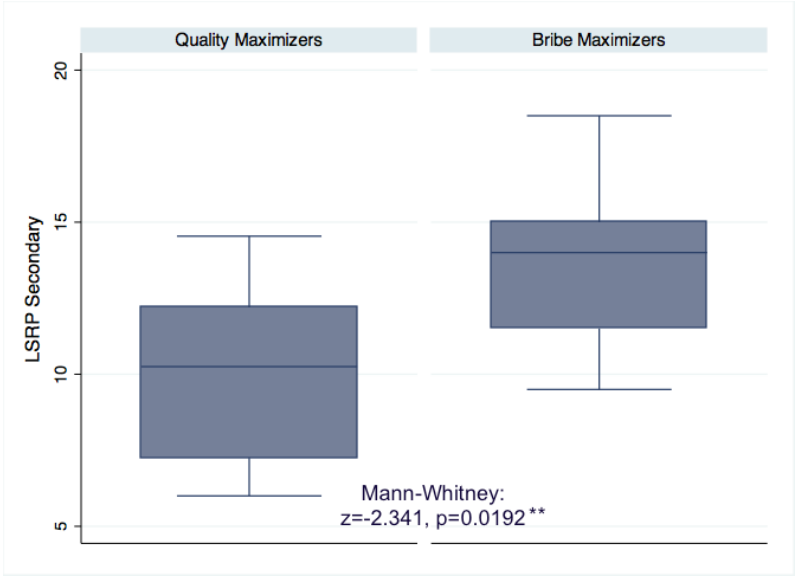
- The prisoner sample is overall much less educated than students and a verbal test like LSRP does not capture their personality (?)

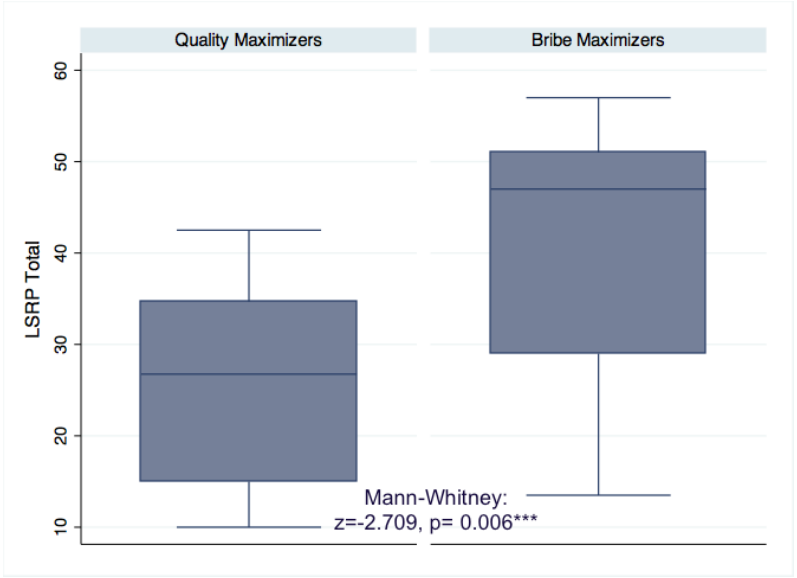
- The reciprocating (N=20) and non reciprocating (N=6) subsamples are surprisingly similar in all variables ….

- Except for education: Reciprocating subjects have, on average, gone almost through a whole educational level higher than non-reciprocating ones (1.166 vs. 1.944)

TOWN PLANNERS AND PSYCHOPATHY



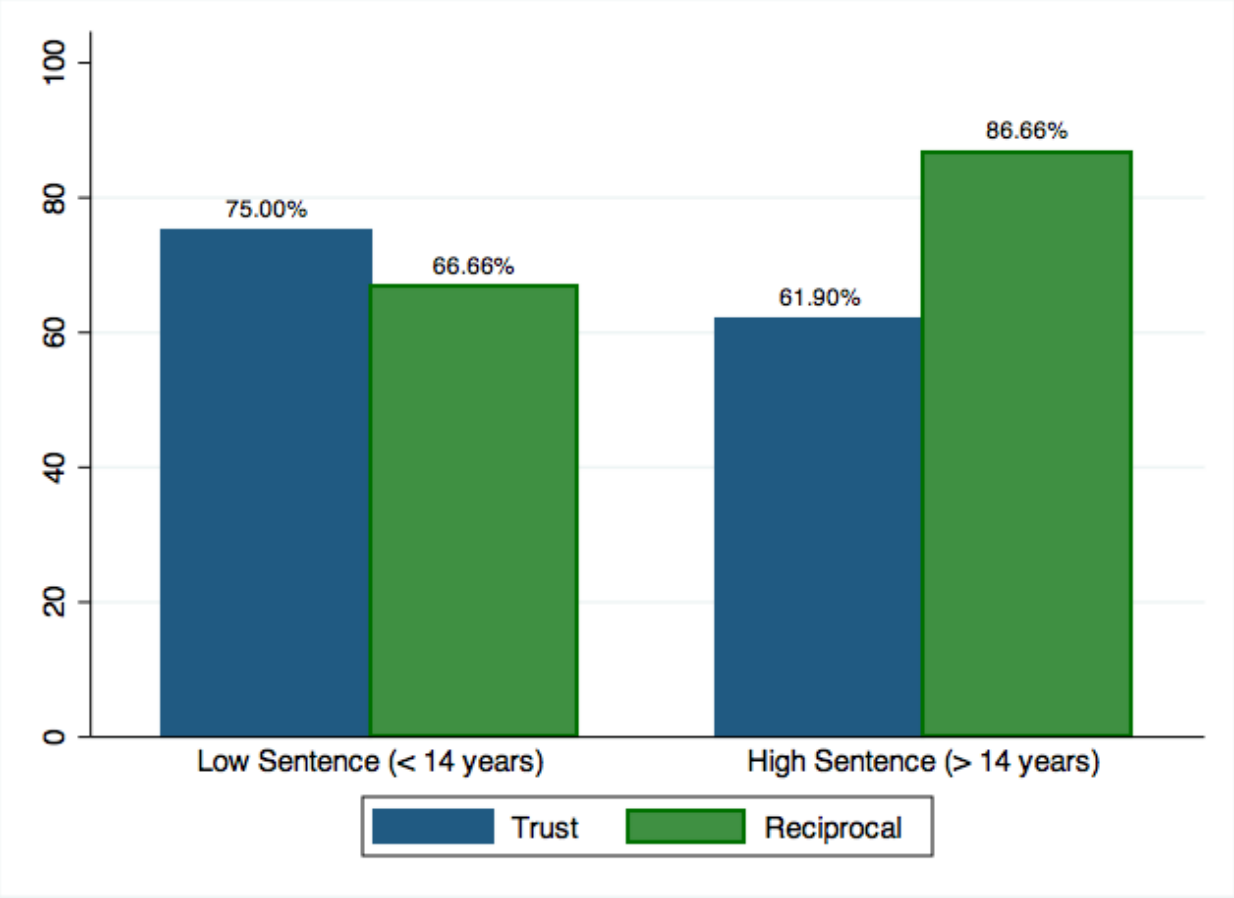




- Prison subjects in the corruption game suggest that higher LSRP scores is related to deciding according to bribe as officials

CORRUPTION AND PERSONAL CHARACTERISTICS

TRUST AND OTHER CHARACTERISTICS (PRISON)



Y = Bribe

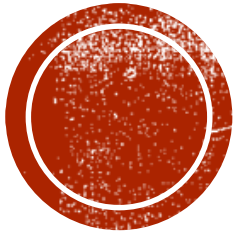
	(1) bribe	(2) bribe	(3) bribe	(4) bribe	(5) bribe
Sentence	0.0355*	0.0292**	0.0280**	0.0373**	0.0276*
	(0.069)	(0.049)	(0.050)	(0.021)	(0.072)
Sentence Remain	0.225	0.207	0.204	0.312	0.251
	(0.347)	(0.306)	(0.261)	(0.114)	(0.226)
Education	0.182		-0.149		-0.0742
	(0.760)		(0.758)		(0.898)
Married	1.136			0.724	0.302
	(0.413)			(0.400)	(0.799)
Children	0.790	0.440		0.648	
	(0.231)	(0.233)		(0.122)	
Brothers	0.377		0.115	0.335	
	(0.368)		(0.702)	(0.318)	
LSRP Total	0.0984				
	(0.106)				
Origin	-1.118			-0.726	-0.174
	(0.300)			(0.287)	(0.826)
Age	-0.271	-0.146**	-0.0851**	-0.225**	-0.106
	(0.102)	(0.022)	(0.036)	(0.012)	(0.238)
LSRP Primary		0.101*	0.0907**	0.114**	0.0920
		(0.076)	(0.096)	(0.044)	(0.120)
LSRP Secondary		0.0318			
		(0.737)			
_cons	7.181	4.239	2.999	6.317*	3.834
	(0.104)	(0.055)	(0.122)	(0.023)	(0.218)
N	15	16	15	16	15

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Y = BRIBE MAXIMIZING

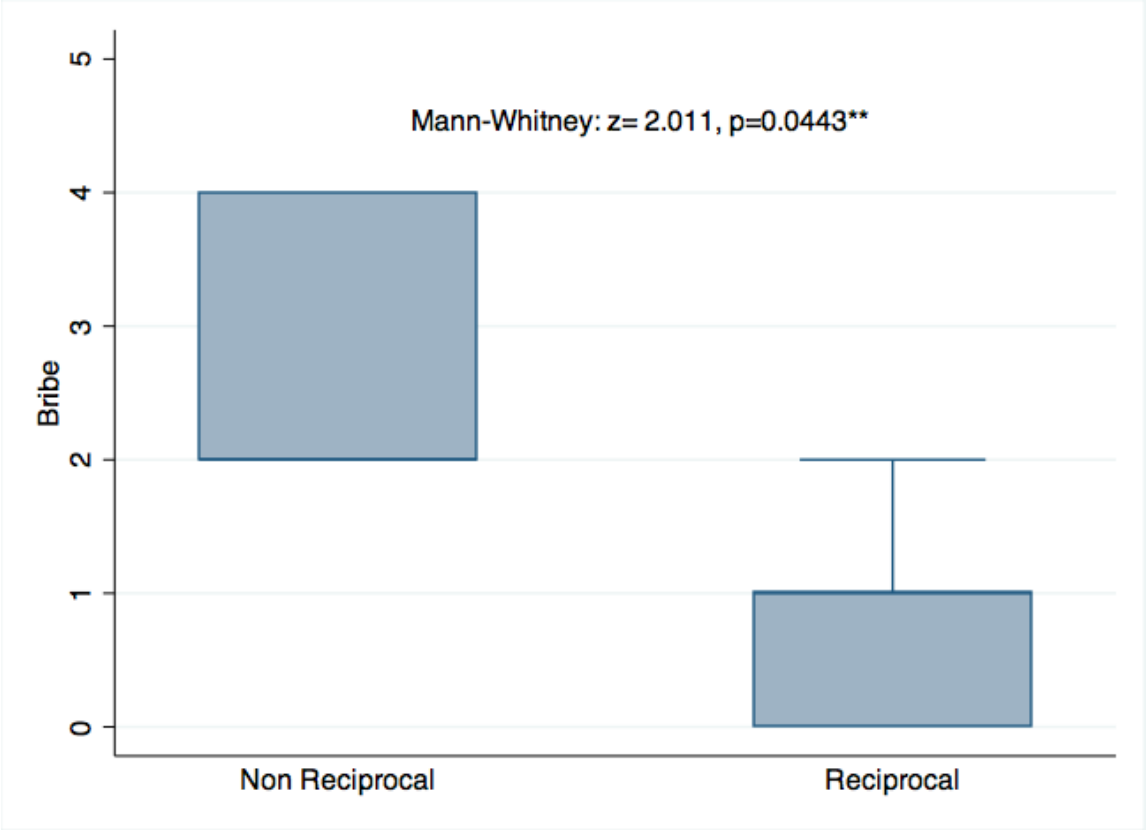
	(1) Bribe max	(2) Bribe max	(3) Bribe max	(4) Bribe max	(5) Bribe max
origin	1.005	1.019	1.019	1.255	0.971
	(0.388)	(0.383)	(0.383)	(0.166)	(0.407)
sentence	0.00527	0.00524	0.00524	0.000855	0.00479
	(0.867)	(0.867)	(0.867)	(0.975)	(0.885)
sentence_remain	-0.00439	-0.00393	-0.00393	0.00453	-0.00596
	(0.886)	(0.899)	(0.899)	(0.856)	(0.852)
age	0.0281	0.0292	0.0292	0.0333	0.0223
	(0.533)	(0.535)	(0.535)	(0.462)	(0.605)
lsrp total	0.0940**		0.114		
	(0.050)		(0.647)		
lsrp primary		0.0882	-0.0261		0.116**
		(0.295)	(0.934)		(0.050)
lsrp_secondary		0.114	0	0.337**	
		(0.647)	(.)	(0.050)	
_cons	-6.016	-6.190	-6.190	-7.300	-5.093
	(0.088)	(0.132)	(0.132)	(0.057)	(0.113)
N	17	17	17	17	17

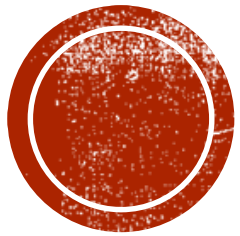
p-values in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$



TRUST AND CORRUPTION

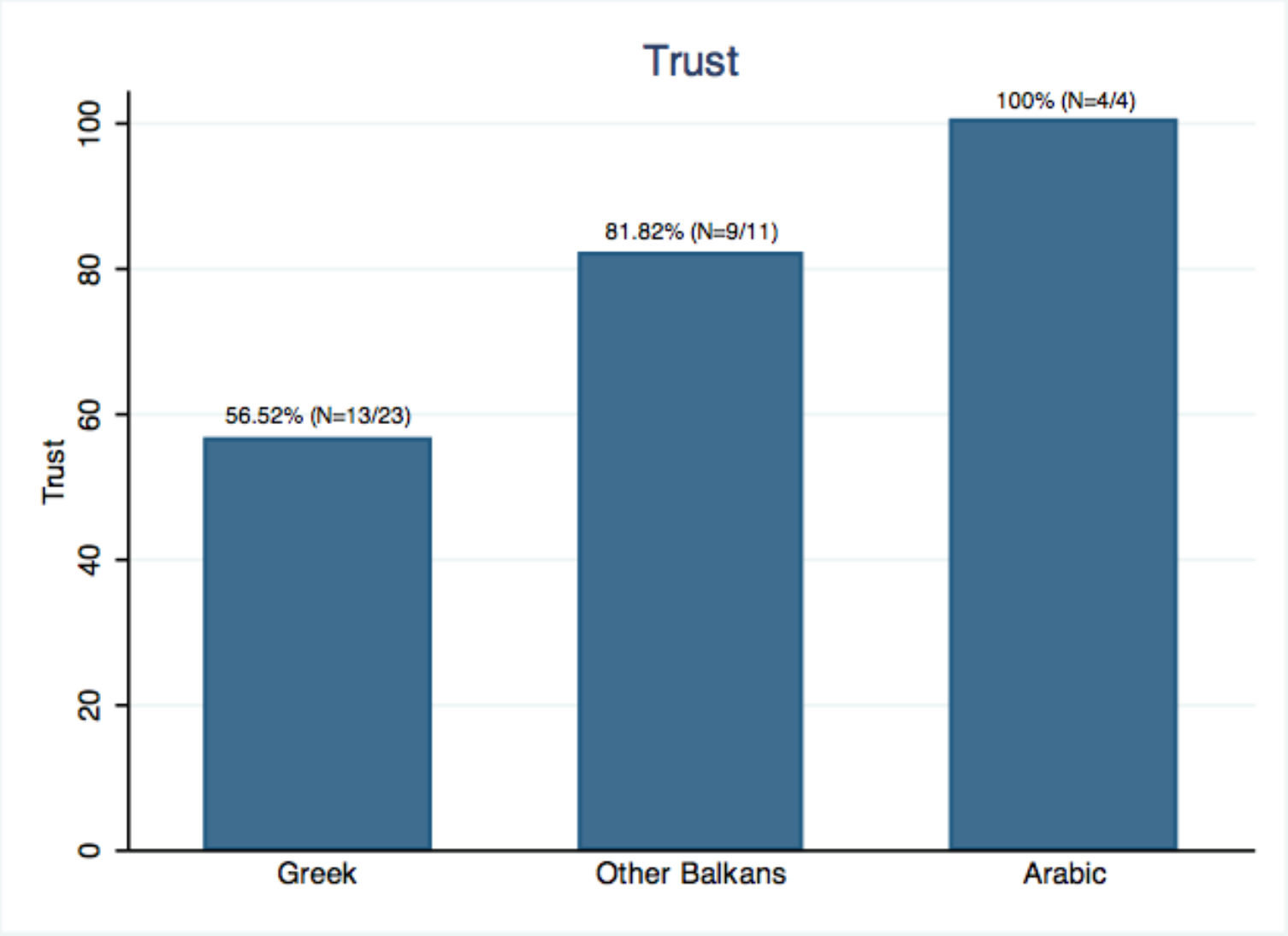
BRIBE AND RECIPROCITY



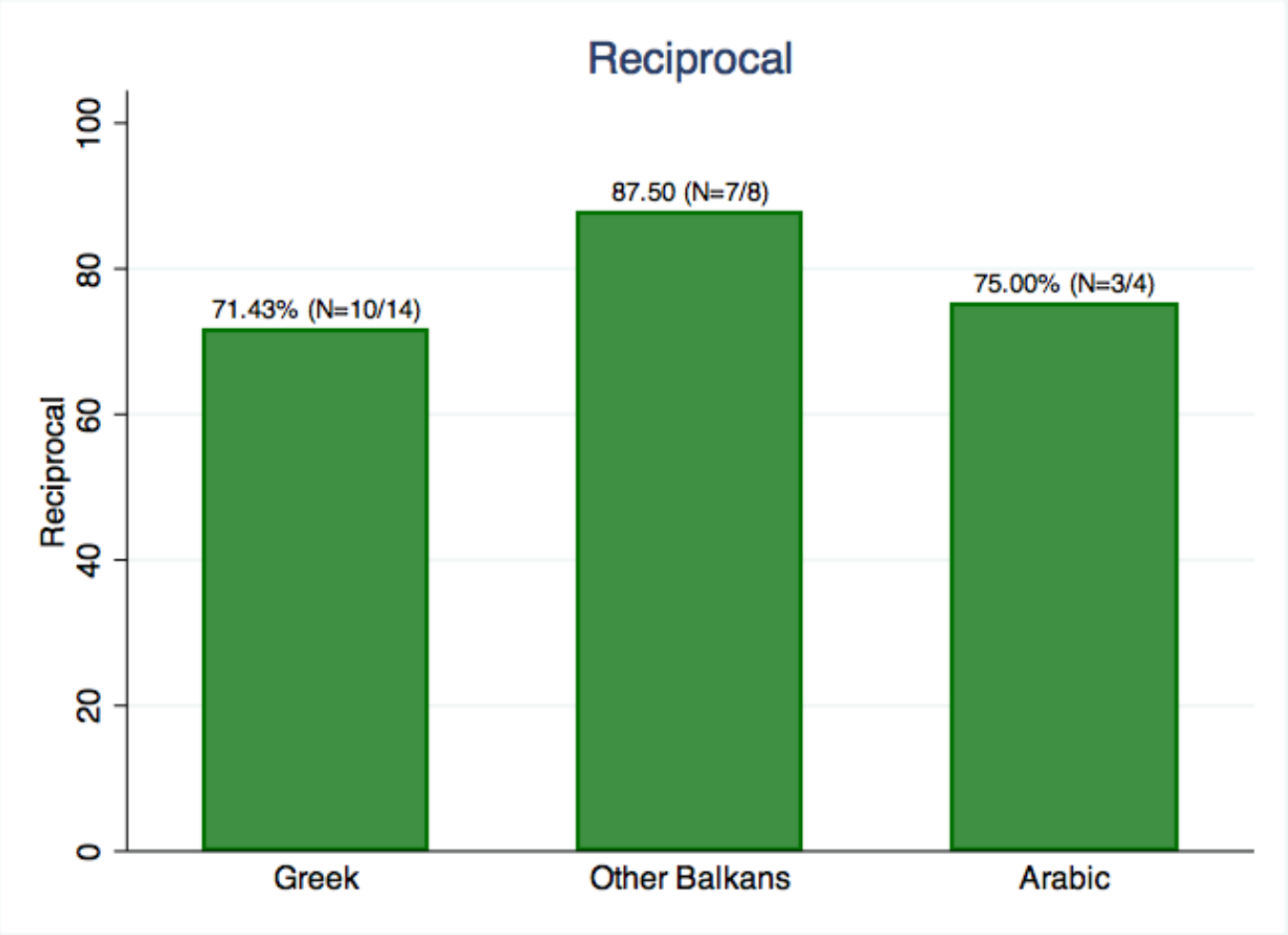


ORIGIN AND BEHAVIOR

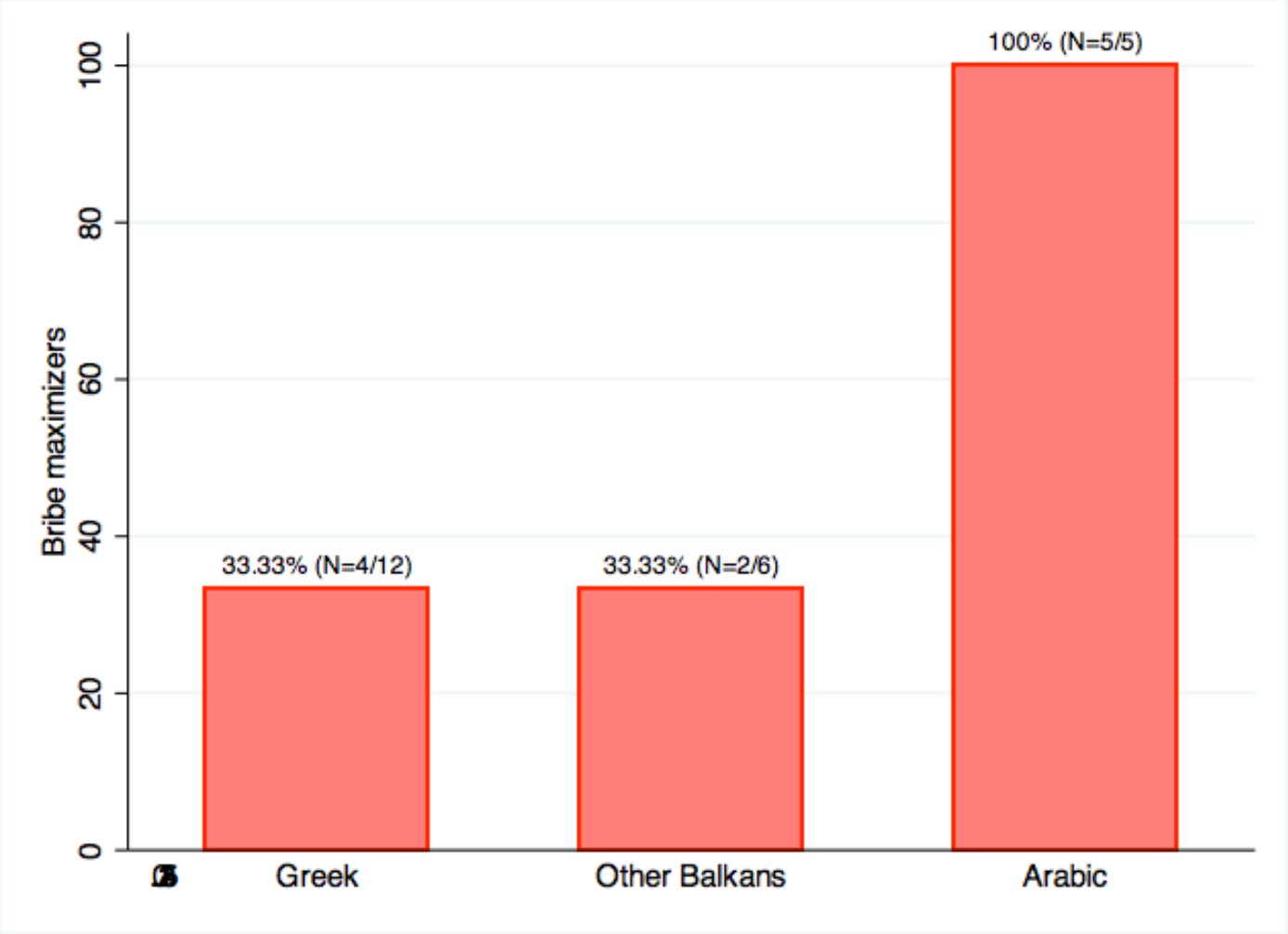
TRUST AND ORIGIN



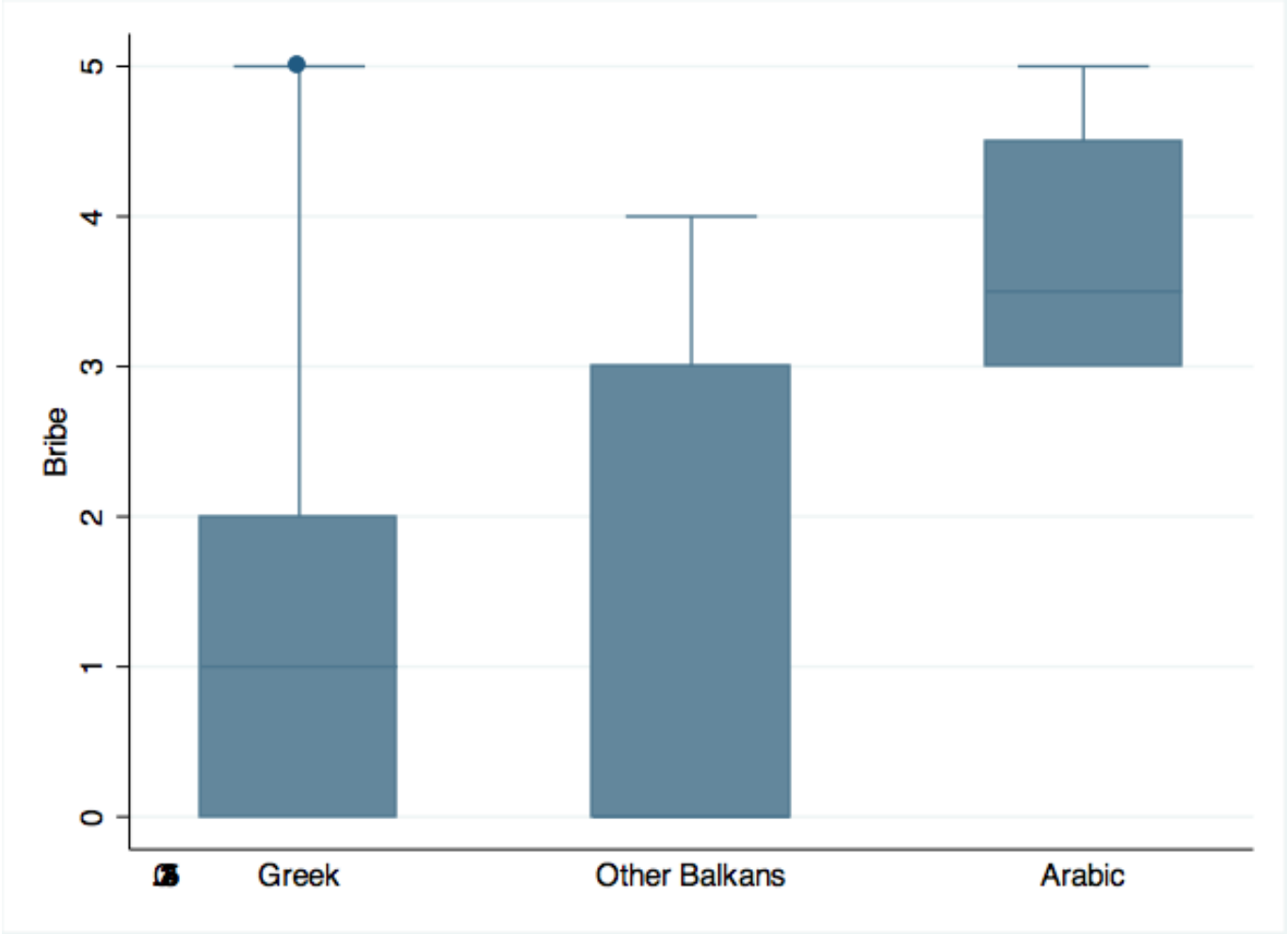
RECIPROCITY AND ORIGIN



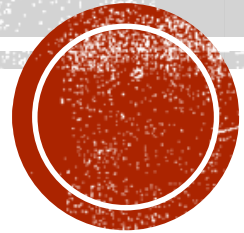
BRIBE MAXIMIZERS AND ORIGIN



BRIBE AND ORIGIN



PHYSIOTRUST



EVENTS ANALYZED

- Event 58: decision making player 1's screen appears
- Event 59: players 1 make their decision
- Event 61: players 2 make their decision (if they can). (Players 2 not deciding do not observe nothing).
- Event 63: results screen.

VARIABLES

- Baseline HR=the beat just before an event
- IBI1=First Interbeat interval after an event
- IBI2=Second Interbeat interval after an event
- dIBI1=IBI1-baseline
- dIBI2=IBI2-baseline
- dAvIBI=average(IBI1,IBI2)-baseline
- All variabes in milliseconds ellapsing between heart beats.
- Longer IBIs mean heart goes slower. When dIBI1 is positive then, decceleration.
- An acceleration means stress, a deceleration means alert, attention.

Y= TRUST

	(1) trust	(2) trust	(3) trust	(4) trust	(5) trust
datodermoeven58	3.031*	3.108*	3.175**	2.988*	3.175**
	(0.057)	(0.052)	(0.046)	(0.061)	(0.046)
datodermoeven59	-3.031*	-3.109*	-3.175**	-2.988*	-3.175**
	(0.057)	(0.052)	(0.046)	(0.061)	(0.046)
dibi1ibi1baseline	0.00175	0.00126	0.000922	0.00190	0.000922
	(0.563)	(0.689)	(0.773)	(0.528)	(0.773)
dibi2ibi2baseline	-0.00148	0.000737	-0.000169	-0.000566	-0.000169
	(0.643)	(0.818)	(0.960)	(0.862)	(0.960)
dibi1eve59ibi1base	-0.00973**	-0.00965**	-0.00979**	-0.00957**	-0.00979**
	(0.040)	(0.038)	(0.040)	(0.040)	(0.040)
dibi2ev59ibi2base	0.00597*	0.00443	0.00555	0.00498	0.00555
	(0.098)	(0.203)	(0.134)	(0.157)	(0.134)
lsrp_primaria	-0.0307		-0.0445		-0.138*
	(0.385)		(0.229)		(0.060)
lsrp_secundaria		0.0790	0.0935*		0
		(0.139)	(0.091)		(.)
lsrp_tot				0.00299	0.0935*
				(0.910)	(0.091)
_cons	0.195	-0.854	-0.425	-0.249	-0.425
	(0.688)	(0.086)	(0.487)	(0.673)	(0.487)
N	48	48	48	48	48
df_m	7	7	8	7	8
df_r					

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Y=RECIPROCITY

	(1) reciprocate	(2) reciprocate	(3) reciprocate	(4) reciprocate	(5) reciprocate
datodermoeven61	-4.460	-11.46*	-10.32	-6.048	-10.32
	(0.300)	(0.083)	(0.115)	(0.168)	(0.115)
datodermoeven63	4.457	11.46*	10.32	6.046	10.32
	(0.301)	(0.083)	(0.115)	(0.168)	(0.115)
dibi1evento61ibi1baseline	-0.00282	0.00162	0.00318	-0.000354	0.00318
	(0.640)	(0.852)	(0.722)	(0.960)	(0.722)
dibi2evento61ibi2baseline	-0.00399	0.00392	0.00721	0.00197	0.00721
	(0.630)	(0.737)	(0.580)	(0.849)	(0.580)
dibi1evento63ibi1baseline	0.0124	0.0149	0.00987	0.00946	0.00987
	(0.206)	(0.173)	(0.378)	(0.345)	(0.378)
dibi2evento63ibi2baseline	0.00201	0.00438	0.00684	0.00401	0.00684
	(0.763)	(0.675)	(0.523)	(0.616)	(0.523)
lsrp_primaria	-0.0857		-0.0639		0.248
	(0.180)		(0.425)		(0.271)
lsrp_secundaria		-0.350*	-0.312		0
		(0.090)	(0.123)		(.)
lsrp_tot				-0.113*	-0.312
				(0.075)	(0.123)
_cons	1.911	3.723	4.409	3.397	4.409
	(0.100)	(0.068)	(0.052)	(0.051)	(0.052)
N	23	23	23	23	23

p-values in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

SEVERAL (PRELIMINARY) CONCLUSIONS

- Prisoners are either similar or more trusting, reciprocal and prosocial than student subjects.
- Prisoners and students have similar LSRP scores.
- LSRP is not a good predictor of sentences.
- Unlike with student subjects, LSRP does not relate much to reciprocity in the trust game.
- But LSRP, longer sentence and young age relate to bribing and bribe-seeking behaviour.
- Trust decreases and reciprocity increases with a prisoners' sentence.
- Bribers tend to be less reciprocal.
- Trusting behaviour is predicted by higher arousal when faced with task and lower arousal when deciding.
- Also, trusting decisions relate to lower attentional resources.
- Finally, apart from lower LSRP scores reciprocal decisions imply a lower arousal and a higher one when receiving feedback.