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SPITE AND STRONG RECIPROCITY IN THE BARGAINING GAME: AN EXPERIMENTAL STUDY ^{ab}

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Abstract

The subject of this paper is spite and spiteful behaviour from the point of view of behavioural economics. We conducted an experimental study using a 'mini-ultimatum game' with complete information about payoffs and unfavourable outside option. The sample consists of 748 undergraduate students from the Faculty of Law of the University of Niš and the Faculty of Law of the University of Belgrade. In a betweensubjects design, 604 different participants are tested in the control and treatment group. In the within-subjects experiment, 144 subjects served as their own control group. The main finding is that there is a statistically significant relationship between the outside option and the respondents' choice, with roughly one-third of respondents exhibiting spiteful behaviour. Also, we found a statistically significant difference between Belgrade and Niš concerning the insistence on fair treatment, but no difference when examining the share of spiteful respondents - no regional effects on spiteful behaviour. We did not find a difference between gender concerning fair treatment, but females in Niš exhibited weakly significant level of spiteful behaviour. The study opens the door to further research with an emphasis on other subjects aimed at covering different age groups and capturing additional characteristics of the spiteful behaviour.

Key words: spite, reciprocity, fairness, spiteful behaviour, ultimatum offer.

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ИНАТ И СТРОГИ РЕЦИПРОЦИТЕТ У ИГРИ ПРЕГОВАРАЊА: ЕКСПЕРИМЕНТАЛНА СТУДИЈА

Апстракт

Предмет овог рада је инат и инаџијско понашање из угла бихевиористичке економије. Спроведена је експериментална студија коришћењем "миниултиматум игре" са потпуним информацијама о исплатама и неповољној спољашњој опцији. Узорак је формиран од 748 студената Правног факултета Универзитета у Нишу и Правног факултета Универзитета у Београду. У експерименталном дизајну "између субјеката", 604 различитих учесника тестирано је у контролној и експерименталној групи. У дизајну "унутар субјеката", 144 учесника представљало је "сопствену контролну групу". Главни налаз је да постоји статистички значајна веза између спољашње опције и избора учесника, при чему је око једне трећине њих показало инаџијско понашање. Такође, установљена је статистички значајна разлика између испитаника из Београда и Ниша у погледу правичног третмана, али не и разлика у уделу оних субјеката који су испољили инат - без регионалних разлика у погледу ината. Није утврђена разлика према полу у погледу правичног третмана, али су особе женског пола у Нишу исказале статистички незнатно већи ниво инаџијског понашања. Студија отвара врата даљим истраживањима са акцентом на субјекте различитих старосних група и додатне карактеристике инацијског понашања.

Кључне речи: инат, реципроцитет, правичност, инаџијско понашање, коначна понуда.

INTRODUCTION

Behavioural and experimental economics have gathered a large body of evidence that a substantial fraction of people is strongly motivated by concerns for fairness and reciprocity (Falk et al., 2005; Fehr et al., 1997; Fehr & Gächter, 2000; Fehr & Schmidt, 2006). These findings are inconsistent with the model of pure self-interest and deviate from the predictions of standard game theory. Individuals are concerned not only with the payoffs allocated to other relevant reference agents, but also about their intentions (Carpenter, 2010; Falk et al., 2003). These concerns about others are labelled as social or other-regarding preferences. These preferences are often difficult to distinguish as they are frequently intertwined. Literature usually differentiates several categories of social preferences: reciprocity (Fehr et al., 1997; Fehr & Gächter, 2000), inequity aversion (Bolton, 1991; Fehr & Schmidt, 1999), altruism (Andreoni, 1990; Fehr & Fischbacher, 2003; Rotemberg, 2008) and spite (Fehr et al., 2008), but besides these four categories, other motives induce people to help or hurt others (Bowles & Polania-Reyes, 2012).

The behavioural economics research that is the most relevant for investigating spite as a social preference and spiteful behaviour, has usually relied on the ultimatum game paradigm (Güth et al., 1982). Other often-used games in the literature are the dictator game and the public goods game. In an ultimatum game, unfair or inequitable ultimatum offer evokes specific emotions like anger (Pillutla & Murnighan, 1996), pride or envy (Wobker, 2015). In turn, these emotions motivate individuals who feel that the offered payoff is not fair or equitable to behave spitefully. Related research, as one can establish the relationship between the economic concept of social preferences and the psychological concept of personality traits, was conducted by psychologists (Becker et al., 2011; Dohmen et al., 2010). In the psychological literature, authors also examined how traits affect choices in the ultimatum game (Almakias & Weiss, 2012). However, the focus was on other personality measures, while spite and spiteful behaviour were generally a neglected topic (Marcus et al., 2014).

Spiteful behaviour is common in everyday life. Spite and spiteful behaviour represent considerable obstacles for cooperation, exchange and, thus, development (Fehr et al., 2008; Kimbrough & Reiss, 2012). The understanding of spite as a social preference and spiteful behaviour can help us better understand the nature of human coordination and cooperation. Empirical research reveals large individual differences in spitefulness. Kimbrough & Reiss (2012) found roughly 25% of participants in the bidding game behaving spitefully, while Pillutla & Murninghan (1996) found one-third of participants in the ultimatum game behaving consistently spiteful. In the money burning experiment, researchers report that an even higher share of subjects that show spiteful or envious behaviour as two- thirds of participants were ready to give up some of their payoffs to "burn", i.e. destroy others' payoff (Zizzo & Oswald, 2001). Similar results are obtained in the mathematical model of resource allocation games, where based on the rejection rates in the experiment 20% of the players were spiteful (Levine, 1998).

Finally, spite, and spiteful behaviour, is of particular interest in the Serbian context (Jovanović, 2008). In the Serbian language, the word *inat*, borrowed from the Turkish vocabulary during the Ottoman rule, is used for spite and stubbornness. While it is very hard to translate *inat* literally as spite, it can be described as a persistent behaviour that inflicts self-harm as a response to other people's conduct. Most people in Serbia hold beliefs about spite as a personality characteristic typical of members of their society. Spite and spiteful behaviour are generally perceived as a national stereotype. Indeed, anecdotal evidence confirming this stereotype are often invoked in press and literature.

In the next section, we examine the notion of spiteful behaviour and distinguish it from similar and related, but different constructs. Section 3 describes the experimental design and procedure. We use the basic ultimatum game with the outside option that provides the respondent with the opportunity to behave spitefully by rejecting an unequal offer. Section 4 reports the results and assesses gender and regional background differences in spitefulness. Section 5 provides the concluding remarks.

SPITE AND SPITEFUL BEHAVIOUR

Spite and spiteful behaviour are close, but notably separate notions. There is no standard definition of spiteful behaviour since it caught the attention of researchers from different fields (evolutionary biology, experimental economics, anthropology, etc.). To dispel some confusion, in this paper spiteful behaviour represents the individuals' action that satisfies the following conditions:

- 1. involves a certain degree of self-harm (that does not need to be lower than the harm inflicted on the reference agent).
- 2. does not generate (either immediate or future) net positive rewards.
- 3. is driven by social preferences (of a self-interested individual who is also concerned about the payoffs of others) that influence the intensity of emotions and reactions that are highly sensitive to the nature of the decision situation.

The first two elements emphasize the seemingly irrational and selfdestructive nature of spiteful behaviour. First of all, one's self-harm may be greater than the benefit achieved by causing harm to another. Hence, this definition does not equate spiteful behaviour with *negative reciprocity* where the respondent's reciprocation of unfair behaviour assumes harming the "unfair" offeror at a substantial cost to himself/herself provided the offeror is harmed relatively more (Fehr & Gächter, 2000). Spiteful behaviour may or may not lead to the outcome where the respondent is more harmed than the proposer, i.e. the change of the relative payoff in favour of the respondent is not essential.

Costly punishment may not necessarily be irrational, especially in the long-term repeated interactions. However, in the strict economic sense, under the second condition, spiteful behaviour is certainly not beneficial, especially in an ultimate game scenario (Cullis et al., 2012). In that respect, the notion of spiteful behaviour in this paper also differs from the evolutionary biologist approach (Sanfey et al., 2003; West et al., 2007). In evolutionary biology, spite is one of the four basic social behaviours. While it is harmful to both the recipient and the actor (who is negatively related to the recipient), it also increases future rewards as it results in a net increase in the actor's genes in the population (Gardner & West, 2004; Hamilton, 1970).

The third element makes a clear distinction between spite as a social preference and spiteful behaviour. Spiteful behaviour may be driven by other social preferences besides spite, like reciprocity or inequity aversion. Therefore, any person can act spitefully in a specific social context. Spite and Strong Reciprocity in the Bargaining Game: an Experimental Study

This notion of spiteful behaviour differs from spite that is often equated with envy. Accordingly, a spiteful or envious person always values the material payoff of relevant reference agents negatively *irrespective of both the payoff distribution and the reference agent's fair or unfair behaviour* (Fehr & Fischbacher, 2002: C4). Hence, spite as a social preference in that respect can be linked to "antisocial punishment" (Herrmann et al., 2008; Sylwester et al., 2013) where some persons are willing to pay a cost to "punish" others irrespective of their cooperative behaviour. On the other hand, spiteful behaviour includes both antisocial and altruistic punishment, as it also contains cases where punishment is meted out to agents that show antisocial (unfair or uncooperative) behaviour. The proximate mechanism that motivates altruistic punishment is negative emotions towards uncooperative or unfair agents (Fehr & Gächter, 2002). Hence, spiteful behaviour is not the same as nastiness (Abbink & Sadrieh, 2009) that requires the absence of motives of reciprocity.

The third element also makes a distinction between spiteful behaviour and strong reciprocity. Spiteful behaviour may be triggered by various social preferences, and strong negative reciprocity or inequity aversion are only possible candidates. Namely, both strict reciprocity due to unfair treatment or perception of the unfair intention of the proponent and inequity aversion due to inequitable outcome may lead to spiteful behaviour. However, there may be other candidates, such as the avoidance of being subjugated to the proposer (Yamagishi et al., 2012).

These notions of spiteful behaviour and spite as a social preference are used in the subsequent experiment. More precisely in the next section we define spiteful behaviour as a rejection of the Proponent's ultimatum offer that inflicts self-harm.

METHOD

The study was conducted during November and December of 2019. Data were collected under supervised conditions in which participants had to make decisions in hypothetical situations that we will refer to as ultimatum offers below. The experiment was carefully explained in class, and a pilot questionnaire elaborating on the procedure and payoff structure was tested to check the participants' understanding. A total of 748 undergraduate students from the Faculty of Law of the University of Belgrade and the Faculty of Law of the University of Niš responded to the questionnaire. Subjects were allotted to groups randomly. Furthermore, to prevent incentives to engage in seemingly other-regarding behaviour, the participants provided their answers under anonymity (Fehr et al., 2013). Anonymity and the one-shot manner of the hypothetical case, together with the provided context of ultimatum offers, aimed to ensure that the participants are not maximizing their long-term individual mate-

rial interests and that the results cannot be explained on grounds of reputation.

We use both the *between-subjects* and *within-subjects* design (Camerer, 2011; Charness et al., 2012). In a *between subjects* design, 604 different participants are tested in the control and treatment group. In the *within-subjects* experiment, 144 subjects served as their own control group.

To have a better understanding of the interaction between spiteful behaviour and relevant variables we keep the procedure and payoffs simple. Students were presented with the following "mini-ultimatum offers" with complete information about payoffs. Two students, a Proposer and a Responder, bargain over the used textbook they bought together for RSD 2,500 (app. \$25). The current value of the textbook is RSD 2,000, and the Proposer and Responder have the same reservation price of RSD 1,000. The Proposer offers RSD 1,000 to the Responder to keep the used textbook. We also add an outside option to ultimatum game (i.e. both subjects receive a nonzero payoff if the offer is rejected). Hence, the Responder can either accept the offer - then the Responder gets RSD 1,000 and the Proposer keeps the used textbook, or rejects the offer opting for the sale to the third party for RSD 2,000 and both subjects receive RSD 1,000. The Responder should be indifferent as they receive RSD 1,000 in both cases. However, if they feel that selling to the third party is a fairer solution, putting both students in virtually the same position, the Responder will reject the first offer and opt for the sale to the third party. In the treatment group, the outside option is lower, and each participant receives only RSD 800 from the third party. The Responder driven by self-interest should always opt to sell his/her share of the textbook to the Proposer. But in our experiment, we expected that the principle of maximizing one's own interest would be violated and that at least some respondents would show other preferences, such as strict reciprocity or spite.

We use the same offer in the *within-subjects* experiment and examine whether responders are more willing to accept an offer to sell to the Proposer or third person – the unfavourable outside option. Again, as in the study by Marcus et al. (2014), the respondents that are simple selfinterest-maximisers should accept the offer that is higher than their outside option.

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RESULTS AND DISCUSSION

In this section, we first show the results of the *between-subjects* experiment.¹ Then we interpret the results of the *within-subjects* experiment in light of preferences for fairness and spitefulness.

Table 1 provides summary measures of variables used in the *be*tween-subjects case. The respondents reported a mean age of 20.6 (st.dev=2.1). Roughly two-thirds of students (64.2%) were from Belgrade and one-third from Niš, and the sample was 62% female.

Table 1. Between-subjects experiment

Group	Average age	Female	Male	Niš	Belgrade	Ν
Outside option RSD 1,000	20.8	208	105	112	201	313
Outside option RSD 800	20.4	165	126	102	189	291
Total	20.6	373	231	214	390	604

Table 2 shows the results of the *between-subjects* experiment. In the first group with the outside option of RSD 1,000, 64.5% (202) of the respondents (N=313) reject the Proposer. These respondents do not see the offer in which the offeror keeps the textbook being fair (or perceive it as an inequitable proposal). By opting for the sale to the third person they require to be in virtually the same position as the Proposer. Results also show that roughly *two-thirds of participants* have a substantial presence of social preferences like strict reciprocity, inequity aversion, or spite.

The result is substantially different in the second group, where the outside option is RSD 800. It indicates that there is a statistically significant relationship between the outside option and the respondents' choice (chi-square with one degree of freedom = 54.91, p = 0.00). The number of those who *punish* the Proposer, despite having a personal cost of RSD 200 is 100 (34.4%). Hence, roughly one-third of respondents are ready to incur self-harm.

		Respondent		N	
		Accept	Reject	IN	
Group	Outside option RSD 1,000	111 (35.5%)	202 (64.5%)	313	
	Outside option RSD 800	191 (65.6%)	100 (34.4%)	291	
Total		302	302	604	

Table 2. Results of the Between-subjects experiment

¹ Statistical analysis was performed using STATA version 15.1 (STATA Corp., Texas, USA).

We also analyse regional and gender variables. In Belgrade, 59% of respondents within the first group rejected the offer, and 33% in the second group are spiteful (chi-square with one degree of freedom = 27.29, p = 0.00). In Niš, 74% of respondents within the first group reject the offer - 37% of rejections in the second group (chi-square with one degree of freedom = 29.50, p = 0.00). We find a statistically significant difference between Belgrade and Niš concerning the insistence on fair treatment (chi-square with one degree of freedom = 6.98, p = 0.01), but no difference when we examine the share of spiteful respondents (chi-square with one degree of freedom = 0.58, p = 0.47). These results may indicate that in Niš inequality aversion and/or reciprocity play a more significant role. However, there are no regional effects on spiteful behaviour.

		Belgrade		N
		Accept	Reject	IN
Crown	Outside option RSD 1,000	82 (40.8%)	119 (59.2%)	201
Group	Outside option RSD 800	127 (67.2%)	62 (32.8%)	189
Total		209	181	390
		N	N	
		Accept	Reject	IN
Cassia	Outside option RSD 1,000	29 (25.9%)	83 (74.1%)	112
Group	Outside option RSD 800	64 (62.7%)	38 (37.3%)	102
Total		93	121	214

Table 3. Results of the Between-subjects experiment by region

		Female re	N	
		Accept	Reject	IN
Crown	Outside option RSD 1,000	72 (34.6%)	136 (65.4%)	208
Group	Outside option RSD 800	101 (61.1%)	64 (38.9%)	165
Total		173	200	373
		Male res	N	
		Accept	Reject	IN
Group	Outside option RSD 1,000	39 (37.1%)	66 (62.9%)	105
	Outside option RSD 800	90 (71.5%)	36 (29.5%)	126
Total		129	102	231

Table 4. Results of the Between-subjects experiment by gender

We do not find a statistically significant difference between gender concerning fair treatment (chi-square with one degree of freedom = 0.19, p = 0.66). Nearly two-thirds of female students (65.4%) reject the offer in the first group, and the share of male students is almost the same (62.9%). On the other hand, compared to 39% of female students that reject the offer in the second group and inflicting self-harm, only 29% of male students state that they would reject the offer (chi-square with one degree of

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freedom = 3.31, p = 0.07). Females exhibit a weakly significant (at p = 0.1) level of spiteful behaviour. This is contrary to some previous findings. Fehr et al. (2013) find that males score higher in spitefulness, while Marcus et al. (2014) find that the share of altruistic types is always significantly higher for males than females, but find no gender differences for the fraction of spiteful types.

To test for the robustness of our findings we conducted the *within-subjects* experiment. Table 5 provides summary measures of variables used in the *within-subjects* case. The respondents reported a mean age of 19.9 (st.dev=1.1). The majority of students (60.2%) were from Belgrade and the sample was 72% female.

Table 5. Within-subjects experiment

Variable	Average age	Female	Male	Niš	Belgrade	Ν
Total	19.9	104	40	57	87	144

In the first group with the outside option of RSD 1,000, 66% (95) of the respondents (N=144) reject the offer compared to 64% in the *be*-*tween-group* experiment. Similarly, in the second group with the outside option of RSD 800, 32% (46 respondents) reject the offer compared to 34% in the *between-group* experiment. However, the *within-group* experiment based on respondent choices allows us to classify preference types.

Table 6. Within-subjects experiment results

		Outside option RSD 800		Total
		Accept	Reject	_
Ortaida antian DSD 1,000	Accept	44 (30.5%)	5 (3.5%)	49
Outside option KSD 1,000	Reject	54 (37.5%)	41(28.5%)	95
Total		98	46	144

We define the spiteful type as the one *that rejects the offer in the second ultimatum game* with the outside option of RSD 800. However, there are two preference subtypes. The first is 28.5% of respondents (41 out of 144) who in the first ultimatum game with the outside option of RSD 1,000 opted to reject the offer and sell the textbook to the third person and maintain their choice even when it induces self-harm rejecting the offer with the outside option of RSD 800. This subtype (*reject-reject*) is spiteful.

The second subtype (*accept-reject*) may be spiteful, but it is more likely that it is either irrational or simply responders failed to understand the experiment. Table 5 shows that only 3.5% of respondents in the first round (with outside option of RSD 1,000) accepted the offer, but in the second round (with outside option of RSD 800) rejected the offer. Gener-

ally, respondents should make consistent decisions when playing variants of the same game. The rational choice theory predicts that if a Responder accepts the offer in the first game, then they should also accept this offer in the second game (condition).

The second preference (*reject-accept*) type has either weak inequality aversion or reciprocity type of social preferences, but they also react to monetary incentives as they are not willing to decrease the economic payoff of the Proposer at a personal cost. This egalitarian or reciprocal type prefers allocations that yield equal payoffs for both parties over those with unequal payoffs unwilling to undertake costly punishment. The table shows that 37.5% of respondents reacted to monetary incentives and were not willing to undertake costly punishment.

The third preference (*accept-accept*) type always accepts the offer. This type does not have a pronounced preference for reciprocity or inequality aversion. Hence, 30.5% of respondents may be altruistic (if their payoff remains the same as in the outside option) valuing the other agent's payoff or the joint payoff positively.

Results concerning spiteful behaviour are generally consistent with those from the *between-group* experiment. We did not find a statistically significant difference between Belgrade and Niš concerning the share of spiteful respondents (chi-square with one degree of freedom = 0.08, p = 0.77). Moreover, we did not find a statistically significant difference between gender with respect to spitefulness (chi-square with one degree of freedom = 0.51, p = 0.47). The only weakly statistically significant difference is the gender-related spitefulness in Niš, where females are more likely to behave spitefully (chi-square with one degree of freedom = 3.70, p = 0.05).

Finally, we use logit regression analysing the binary outcome of being spiteful. Table 7 reports the results on the probability of being spiteful (respondents that reject the offer in the second ultimatum game). To test the effect of legal education on spitefulness, we use the respondents' age as a proxy. On the one hand, by attending law school, students may be more prone to act spitefully as they might insist on equity (reciprocity) and be more willing to punish the Proponent. On the other hand, attending law school may have the opposite effect as the students will put more value on the monetary outcome and will take only actions that are in their self-interest. Consequently, the age may be either negatively or positively related to the probability of behaving spitefully. We also examined differences in the expression of preferences other than self-interest between students from Niš and Belgrade. In this regard, we expected that there were no differences since the respondents share the same values. We had the same expectation considering the gender of our respondents (students). However, as noted Fehr et al. (2013) find that males score higher in spitefulness.

Hence, as independent variables, we consider dummies for gender and region, as well as the variable age which measures the age of respondents in years. Specifications (2) and (4) exclude the second subtype (*accept-reject*) as these responses may be problematic. The effect of gender on being spiteful may depend on the region so specifications (3) and (4) add an interaction term.

The age of respondents is statistically significant in all specifications as respondents are acting more spitefully with age. This is opposite to Fehr et al. (2013) who examine subjects aged from 8 to 17 years and show that spiteful types decrease with age (and altruistic types become more frequent with age). However, in our study, the difference between the oldest and the youngest student respondents is only 6 years with low variability of age, so it is hard to draw any firm conclusions. Results also reveal that the interaction effect is weakly statistically significant in the specification (4).

	(1)	(2)	(3)	(4)
Female	0.145	0.0259	-0.571	-0.665
	(0.473)	(0.469)	(0.556)	(0.559)
Niš	0.320	0.233	-0.868	-0.880
	(0.395)	(0.416)	(0.834)	(0.809)
Age	0.491**	0.419 *	0.490**	0.428*
-	(0.178)	(0.184)	(0.175)	(0.184)
Female x Niš			1.638+	1.588+
			(0.954)	(0.950)
Constant	-10.810**	-9.347*	-10.220**	-8.995*
	(3.493)	(3.684)	(3.522)	(3.690)
Observations	144	139	144	139
Pseudo R ²	0.023	0.035	0.072	0.054
BIC	188.0	182.5	192.3	184.2

Table 7. Logit regressions with spiteful type as dependent variable

Robust SE in parentheses. *** Denotes significance at the 1% level.

 ** Denotes significance at the 5% level. BIC - Bayesian information criterion

In the logit model, one cannot base statistical inferences merely by looking at the coefficient and statistical significance of the interaction terms (Ai & Norton, 2003). To provide an easier interpretation of Table 7, we use marginal effects (Williams, 2012) that provide a good approximation of the amount of change in probability of being spiteful that will be produced by a 1-unit change in age (Figure 1).



Figure 1 Adjusted predictions with 95% confidence intervals – Model (3)

Figure 1 shows predictions from a specification (3) while manipulating the values of the age covariate. When we obtain marginal effects for different ages, we see that the regional effect of gender on spiteful behaviour differs considerably by age.

CONCLUSION

Our results indicate that a significant fraction of respondents express other than self-interest preferences. In the between-subjects design, the share of respondents who express other than self-interest preferences falls from 66% to 34%, but this result is still statistically significant. The same can be said for the within-subjects design (the decline is from 68% to 32%). These results confirm previous findings from other countries that spiteful behaviour is a robust phenomenon of a non-negligible minority of respondents (Fehr et al., 2013). This allows us to make, though limited, distinction between different social preferences. However, the paper does not address the question of why individuals are spiteful, i.e. we cannot claim that a specific social preference triggers spiteful behaviour. Namely, both strict reciprocity due to unfair treatment or due to perception of the unfair intention of the proponent or inequity aversion due to inequitable outcome may lead to spiteful behaviour in our experiment. There may be other triggers such as the endowment effect (Kahneman et al., 2011, 2018).

There are no significant regional effects concerning spiteful behaviour, thus confirming our initial hypothesis. Contrary to some previous

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findings in the *between-experiment*, females exhibit a weakly significant level of spiteful behaviour. However, we only find modest support in the *within-experiment* in the Niš region where females are more likely to be spiteful. The impact of age on the probability of being spiteful may be a consequence of the exposure to legal education, but without additional control variables, it is not possible to draw any firm conclusions. A possible explanation is that students put more value on reciprocity and as a consequence are more prone to spiteful behaviour.

While the sample size is high, there may be several problems with our approach. First of all, the subject pool consists only of students, which may lead to the lack of representation. Furthermore, the subject pool consists of rather inexperienced participants. Hence, replication with different subject pools is consequently important to confirm the generalizability of our findings. Finally, the stakes are small, and consequently, spiteful behaviour may diminish if stakes are rather high. These issues should be addressed in further research. This augmented approach could be easily arranged in multiple locations and expanded to be a large-scale cross-cultural experiment that the field is currently missing.

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ИНАТ И СТРОГИ РЕЦИПРОЦИТЕТ У ИГРИ ПРЕГОВАРАЊА: ЕКСПЕРИМЕНТАЛНА СТУДИЈА

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Резиме

Предмет овог рада су инат и инацијско понашање из угла бихевиористичке економије. Спроведена је експериментална студија коришћењем "мини-ултиматум игре" са потпуним информацијама о исплатама и неповољној спољашњој опцији. Узорак је формиран од 748 студената Правног факултета Универзитета у Нишу и Правног факултета Универзитета у Београду. У експерименталном дизајну "између субјеката", 604 различитих учесника тестирано је у контролној и експерименталној групи. У дизајну "унутар субјеката", 144 учесника представљало је "сопствену контролну групу". Главни налаз је да постоји статистички значајна веза између понуђене спољашње опције и избора учесника, при чему је око једне трећине њих испољило инаџијско понашање. Такође, установљена је статистички значајна разлика у изборима испитаника (студената) из Београда и Ниша у погледу правичног третмана, али не и разлика у уделу оних субјеката који су испољили инат – без регионалних разлика у погледу ината. Није утврђена разлика према полу у погледу правичног третмана, али су особе женског пола у Нишу исказале статистички незнатно већи ниво инаџијског понашања. Коначно, утврђено је статистички значајно повећање инаџијског понашања са повећањем година, што је протумачено могућим утицајем правног образовања на испитанике будући да оно акценат ставља на правичност (и последично кажњавање и инат) као основну вредност. Студија отвара врата даљим истраживањима са акцентом на субјекте различитих старосних група и додатне карактеристике инацијског понашања.