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by

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Charitable Giving Among Females and Males: An Empirical Test of the Competitive Altruism Hypothesis

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Abstract

We conduct a real-effort task experiment where subjects' performance translates into a donation to a charity. In a within-subjects design we vary the visibility of the donation (no/private/public feedback). Confirming previous studies, we find that subjects' performance increases, that is, they donate more to charity, when their relative performance is made public. In line with the competitive altruism hypothesis, a biology-based explanation for status-seeking behavior, especially male subjects increase performance in the public setting.

JEL classification: C91, D03, J16

Keywords: social preferences, other-regarding behavior, charitable giving, social-image concerns, competitive altruism, experiments, social status

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1 Introduction

Recently, the Giving USA Foundation (2011) estimated charitable giving in the United States for 2010 at close to \$300 billion (about 2% of disposable personal income), from which about 73% was contributed by private households. Without a doubt people give a lot to help strangers in need, yet it seems that publicity plays a particular role in their decision to donate. The charitable giving to support victims of the horrible tsunami that struck South East Asia in 2004 is a case in point. In the aftermath of the disaster Malaysian media groups started fund-raising campaigns and billionaires competed to donate the most. Newspapers provided front page coverage for million dollar cheques. The campaigns turned into a prestige contest as one newspaper editor is quoted: 'You have not made it if you are not seen giving away a million.' (Kuppasamy, 2004).¹ In addition to the anecdotal evidence from the billionaire league a number of studies provide empirical evidence from the lab and the field that social reputation may affect pro-social activity. Andreoni and Petrie (2004) observed that revealing subjects' photographs and their public good game contribution to other subjects positively and significantly affected the level of contribution. Soetevent (2005) compared church giving when the collection basket is open vs. closed and found that open baskets increase contributions. Ariely et al. (2009) found that effort in a donation-generating task is higher when performance is publicly visible. Moreover, Lacetera and Macis (2010) found that blood donors significantly increase the frequency of their donations when they approach the thresholds for which public awards (announcement in the local newspaper and public award ceremony) are given. In contrast, they do not find such effects for private awards.

Plain altruism cannot explain the difference between the level of pro-social activity in a private and a public context. Instead, economic theory offers the following two approaches. *Social-image models* (see, for instance, Akerlof, 1980; Glazer and Konrad,

¹The Giving Pledge is another high-profile example for generosity in combination with publicity. Initiated by U.S. billionaires Warren Buffett and Bill Gates it addresses extremely wealthy individuals to commit to giving part of their wealth to philanthropic causes. The pledge is a moral commitment, not a legal contract. The list of individuals who agreed to pledge is available online at the web site of the campaign (<http://givingpledge.org/>). There is also case evidence that a \$3 million donation to the New York City Children's Zoo was revoked by the donors after they felt that their gift was not satisfactorily recognized (Dunlap, 1997).

1996; Bénabou and Tirole, 2006; Ellingsen and Johannesson, 2008; and Andreoni and Bernheim, 2009) propose that the positive social image that an individual receives from doing good for others may motivate pro-social behavior. In addition to monetary payoffs, social-image models allow individuals to be also motivated by the desire to be liked and respected by others. For instance, Bénabou and Tirole (2006) assume that being regarded as pro-social by relevant others has a non-negative reputational payoff. Hence, pro-social activity may become desirable by itself as it sends a positive social signal. This, of course, requires that one's action is visible to the relevant community. Also *social status models* (see, e.g., Frank, 1985; Ball et al., 2001) are characterized by desirability (high social status brings along some reward) and visibility/non-tradability (status is obtained through actions that are socially visible). Additionally, these models stress that social status depends on "a ranking of individuals (or groups of individuals) in a given society, based on their traits, assets, and actions" (Weiss and Fershtman, 1998). Hence, the feature of positionality distinguishes social status from social-image models. Hence, goods/activities that convey status enter the utility function both as an absolute component and as a relative one.

Social-image as well as social status models capture successfully why people would engage in pro-social activities that are publicly visible. But how exactly might such a social signaling system work? What drives people to care about their social-image and what are the underlying psychological processes of status concerns? The *competitive altruism hypothesis* proposes a biology-based explanation for increased pro-social activity in a public setting. Following this perspective, the social status one gains from pro-social activity may serve as a positive signal in the context of mate selection. Due to gender differences in partner selection, particularly males compared to females should be motivated by social reputation concerns. Our experiment is set up to investigate how males and females' performance in an exhausting real-effort task is affected by (i) competition for a positive private vs. social signal, and (ii) a pro-social consequence of performance itself. This design allows us to test whether competitive altruism is a driving force of status-seeking pro-social behavior.

Our results confirm that pro-social activity is increased if relative effort is publicly visible to others. In particular, we find that only the performance of male participants

increases in a public setting, whereas both females' and males' performance increases if an activity has a pro-social consequence (vs. no pro-social consequence) but performance is not publicly visible. Thus, our findings indicate that competitive altruism may be a plausible explanation for increased pro-social activities in public settings that also accounts for gender differences. By providing a biological underpinning for social-image and social status models our results establish a link between psychological and biological processes and the economic models of social reputation.

The paper is organized as follows. Section 2 provides some background on the competitive altruism hypothesis and in section 3 we derive testable hypotheses. In 4 we describe the experimental design. Results are presented and discussed in section 5. Section 6 concludes.

2 Competitive Altruism

The competitive altruism hypothesis is derived from costly signaling theory (e.g., Spence, 1973; Zahavi, 1975). Following this perspective, pro-social behavior may show to others that the pro-social actor is high in quality or status to bear the costs for others' welfare. Thus, pro-social behavior may function as a signal of an individual's quality (e.g., ability to share resources) and/or good character (e.g., willingness to share resources, Smith and Bliege Bird, 2000). As a result, pro-social individuals may benefit by increasing their social status, and in turn, the likelihood to become chosen as a mate or ally, which makes pro-social behavior profitable in the long run (Miller, 2000, 2007; Barclay, 2011). Besides various case evidence among non-human species (most prominently: the peacock's tail, Zahavi, 1975; Zahavi and Zahavi, 1997), there is also some indirect empirical support for the competitive altruism hypothesis among humans. For instance, Barclay and Willer (2007) found that people compete to be more generous than others when they may be chosen for cooperative partnerships afterwards. Duffy and Kornienko (2010) showed that individuals transfer higher amounts in a sequential dictator game when they are placed in a generosity tournament compared to an earnings tournament, although winning the tournament does not provide any financial reward whatsoever.

If generosity may act as a signal of the helper's resources and good character, pro-social

behavior should be associated with attractiveness and desirability for relationships. Supporting this claim, Barclay (2004) found that pro-social individuals are perceived as more trustworthy than selfish individuals. The ability and willingness to share resources with others as signaled by pro-social behavior are particularly important for females' mate selection due to differences in parental investment (e.g., investment in the relationship and/or offspring, Trivers, 1972). Because human females have greater minimal parental investment, they benefit more from being choosy about partners than do males (Buss and Schmitt, 1993). Consequently, the competitive altruism hypothesis implies that the effect of social reputation on pro-social activity should be more pronounced by males than females in order to create positive signals for potential partners. In line with this assumption, Eagly and Crowley (1986) found in a meta-analytic review of the psychological literature on helping behavior that males help a stranger more often than females, if they are in the presence of onlookers but not if they are alone. Furthermore, Barclay (2010) showed that males are perceived as more attractive by women (but not vice versa) if they are described as altruistic. There is also some evidence that males contributed more to a public good in the presence of a female person but not vice versa (Van Vugt and Iredale, in press). To the best of our knowledge there is no experiment that tested the effect of competitive altruism on males' and females' pro-social activity in the context of charitable giving.

3 Hypotheses

Competitive altruism, social-image as well as social status concerns require visibility of the pro-social activity for an increase of effort. Based on these models and in line with existing empirical evidence, we expect that effort that translates into a pro-social activity is higher, when performance feedback is made public instead of private.

Hypothesis 1 *On average, public information of one's own relative pro-social activity, ceteris paribus, increases the effort in a task with a pro-social consequence.*

Following the competitive altruism hypothesis, we expect that social image and social reputation concerns should particularly account for males compared to females.

Hypothesis 2 *On average, public information of one's own relative pro-social activity, ceteris paribus, increases males' more than females' effort in a task with a pro-social consequence.*

An increase of effort in the presence of public information of one's own relative pro-social activity (hypothesis 1) might also be attributed to a mere competition effect. Similarly, females might put in less effort (hypothesis 2) due to a gender-competition effect known from experiments like Gneezy et al. (2003).² In contrast to this alternative explanation and in line with the competitive altruism hypothesis, we expect no overall increased effort and no gender difference in the presence of only private information of one's own relative pro-social activity.

Hypothesis 3 *On average, private information of one's own relative pro-social activity, ceteris paribus, does not increase the effort in a task with a pro-social consequence.*

Generosity is a key element of competitive altruism as it signals ability and willingness to share resources with others. Thus, an activities' pro-social consequence itself might increase effort as an effect of pure altruism. Hence, we expect that effort is higher when an activity is associated with something that is generally perceived as pro-social, even when no information or only private information of one's own relative pro-social activity is given.

Hypothesis 4 *On average, an activity with a pro-social consequence, ceteris paribus, increases effort compared to an activity without a pro-social consequence.*

²They show that males outperform females in solving mazes if groups were mixed under a tournament setting, in contrast to a unisex group composition or a piece rate scheme. In those experiments, see also Niederle and Vesterlund (2007) and Günther et al. (2010), feedback of the competition outcome is usually given in private. An exception is Gneezy and Rustichini (2004) where the competition outcome is public.

4 Experiment

4.1 Design

Our experiment is designed to test whether competitive altruism might be an underlying process explaining status-seeking pro-social behavior. It consisted of a flat-fee real-effort task that produced donations to a charity. Before the task started subjects were asked to select a charitable organization of their liking. The size of the donation depended on a subject's performance in the real-effort task. We used a within-subjects design varying the *visibility of a subject's performance* in the task, that is, the amount she donated to a charity. There is either i) no signal at all, ii) feedback with respect to the relative performance only to the subject, or iii) feedback with respect to the relative performance via a public performance ranking. Feedback was given at the very end of the experiment. In addition, we tested whether a *pro-social consequence* of performance in the task (a donation) itself has any effect on the performance.

Before receiving instructions for the experiment subjects were asked to indicate to which of five charities (Amnesty International, Greenpeace, Caritas, Doctors without Borders and Unicef) they would prefer to donate 10 Euro. Then they were asked to indicate how well the charity they selected is perceived by the general public (on a -5 to 5 scale). Afterwards, subjects were informed about the rest of the experiment, a computerized real-effort task similar to 'click for charity' in Ariely et al. (2009). The task consisted of sequentially pressing two keys (y and x, adjacent on German keyboards) on the keyboard for a specified amount of time. Subjects received visual feedback for every performed click, but they were not informed about the number of click pairs they have already achieved. See the instructions in the appendix for further details. Subjects were informed that every completed click pair generates a donation to the selected charity (except otherwise noted). We used the same decreasing payment schedule as Ariely et al. (2009). For each of the first 200 click pairs 1 ECU was donated. The donation decreased to .5 ECU for each of the next 200 pairs, to .25 ECU for each of the next 200 pairs, ..., and it was .01 ECU for each pair above 1,200. 1 ECU was converted to .02 Euro.

In the *no signal treatment*, subjects received no feedback about their own and others'

performance. In the *private signal treatment*, feedback with respect to the relative performance was shown to the subject only. In the *public signal treatment*, feedback regarding all subjects' relative performance was given via a public performance ranking. In the *no donation treatment*, performance did not translate into a charitable donation, but participants received private feedback with respect to their relative performance. Subjects played the four treatments sequentially. The no donation treatment (no pro-social consequence) was always played in period 1.³ The order of the other treatments was varied in a controlled way so that each treatment was played equally often (10 times each in one session) in periods 2, 3, and 4.

Before the actual experiment started, subjects played a 30 seconds practice period to familiarize themselves with the task. Then subjects played 4 periods of 5 minutes each. The respective treatment was announced and its details were repeated immediately before a new period started. Between periods we offered subjects to play a filler task (solving anagrams) in order to relax from the physical activity. Each break between periods lasted 5 minutes. As announced in the instructions at the end of the experiment subjects were given feedback about their performance in all treatments except *no signal*. For *no donation* and *private signal* (private settings) they got feedback about their total performance and their relative ranking, that is, subject's task performance in comparison to the others. It was stressed that this information will be disclosed privately to each subject. For treatment *public signal* (public setting) subjects knew that at the end of the experiment each subject will read his/her total performance, his/her ranking, and the selected charity while standing, and then sit down. All details of the procedure were common knowledge.

4.2 Participants and Procedures

The experiment took place at the laboratory of the Max Planck Institute of Economics in Jena, Germany. 60 participants (40 females, 20 males) were recruited among students

³Ideally, the order of the four treatments would have been fully randomized over the four periods. However, controlling perfectly for order effects required running 24 possible variations. Due to practical aspects this was not realizable and we decided to take the test for the effect of a pro-social consequence out of the order variation and use a rotation only for the treatments that varied the visibility of a subject's performance.

from various disciplines at the local university using the ORSEE software (Greiner, 2004). The experiment was programmed in Java. The post-experimental questionnaire was programmed and conducted with the software z-Tree (Fischbacher, 2007). Each participant earned €9.50 (including a €2.50 show-up fee) in the experiment. The 2 sessions (each with 30 participants) lasted both approximately 60 minutes.

When subjects arrived at the laboratory they were randomly assigned to one of the computer terminals. Each computer terminal is in a cubicle that does not allow communication or visual interaction between the participants. Participants were given time to read the instructions. There was enough time to privately ask for clarifications about the instructions. Subjects had to answer several control questions before the experiment started in order to make sure that they understood the instructions properly.

At the end of the experiment subjects were paid in cash. Privacy was guaranteed during the payment phase. Donations were made online directly after the payment to subjects. In order to make donations credible, we asked in each session 2 participants to monitor the transaction after the experiment. This was announced in the instructions.

5 Results

Before subjects knew details of the experiment we asked them to pick a charity (out of five) they would prefer to donate 10 Euros to, and how well the chosen charity is perceived by the general public (on a -5 to 5 scale). 12 subjects selected Amnesty International (mean belief about public perception: 1.58, standard error: .37), 9 Greenpeace (2.77, .49), 3 Caritas (2, 0), 22 Doctors without Borders (1.63, .4), and 14 Unicef (2.14, .32). Two of our 60 subjects experienced technical difficulties during the experiment and, thus, our analysis is restricted to the remaining 58 subjects.

We first look at the treatments that resulted in a donation since their order varied in a systematic way, making sure that each of the treatments was played equally often in each period. Table 1 reports summary statistics of subjects' performance. Generally, male subjects performed significantly better than female subjects in each of the treatments (rank-sum tests, $p < .01$).

In order to test whether performance is affected by its public visibility, we compare

Table 1: Performance in donation treatments

	all subjects		male		female	
	mean	s.e.	mean	s.e.	mean	s.e.
no signal	1293.6	34.11	1425.05	59.88	1224.42	37.3
private signal	1307.29	33.25	1446.45	56.46	1234.05	36.29
public signal	1358.75	36.21	1531.35	64.5	1267.92	36.23
observations	58		20		38	

Note: Treatments *no signal*, *private signal* and *public signal* were played in periods 2-4 using a perfectly balanced rotation.

performance in treatments *no signal* and *public signal*. A signed rank matched pair test supports hypothesis 1 ($p = 0.005$). Performance is larger when feedback of one's relative performance is given publicly in comparison to a situation without feedback.

Result 1 *Participants' performance is significantly higher, when their relative rank is visible to others.*

When we look at the treatment changes from *no signal* to *public signal* split by gender, it becomes evident that the performance increase is mainly driven by male subjects (signed rank matched pair test, $p = 0.001$). In contrast, there is no performance increase among female subjects ($p = 0.42$). More precisely, in comparison to treatment *no signal* 90% of male subjects increased their performance in treatment *public signal*, whereas this was only the case for 58% of female subjects.

Result 2 *The performance increase of male participants is significantly higher than the one of females, when the relative rank is visible to others.*

We compare performance in treatments *no signal* and *private signal* in order to test whether private feedback is sufficient to motivate an increase of performance. We find that subjects of the entire/male/female sample increase performance on average, but not at a statistically significant level (signed rank matched pair test, $p = 0.59/p = 0.64/p = 0.87$).

Result 3 *Participants' performance is not significantly higher, when their relative rank is visible only to themselves and not to others.*

To further check the robustness of hypotheses 1, 2, and 3, we perform regression analyses that control for potentially confounding variables. Table 2 reports results of two random effects panel regressions with heteroskedasticity-robust standard errors. The dependent variable is always a subject's performance in the real-effort task with a pro-social consequence. Column I presents a basic specification with dummies for the treatments *private signal* and *public signal*, the number of period, a dummy for the subject being male, and interaction terms for the male dummy and the treatments as independent variables, respectively. The specification in column II adds dummies for the charities Amnesty International, Greenpeace, Caritas, and Doctors without Borders, and the public perception score subjects gave to the charity they selected as control variables.

Supporting hypothesis 1, there is a significant main effect of treatment *public signal* in both analyses, indicating that performance in this treatment is higher than in treatment *no signal*. In line with hypothesis 2, there is a significant male * public signal interaction effect in both analyses, indicating that males increase their performance more than females in treatment *public signal* compared to treatment *no signal*. Finally, supporting hypothesis 3, there is no significant main effect of treatment *private signal* as well as no significant male * private signal interactions effect in both analyses, indicating that performance in this treatment does not increase (also not by males) relative to treatment *no signal*. Overall, regression analyses clearly confirm the hypotheses 1 to 3.

Treatment *no donation* is not part of the rotation that varies the treatment order in a controlled and balanced way. Instead, it was always played in period 1, while every other treatment was played equally often in period 2/3/4. Average performance in treatment *no donation* (mean: 1057.79, st. error: 43.79) is significantly lower than average performance in treatment *no signal*, as well as in comparison to the other two treatments (signed rank matched pair tests, $p < .001$).

Result 4 *Participants' performance is significantly higher, when their effort translates into a donation.*

Table 2: Panel regression results

DV: click pairs	I:		II:	
	coeff.	st.error	coeff.	st.error
private signal	21.4	32.97	21.4	33.48
public signal	113.08	23.99 ***	113.08	24.35 ***
period	45.25	9.85 ***	45.25	10 ***
male	284.48	75.28 ***	282.6	84.55 ***
male * private signal	14.15	38.74	14.15	39.33
male * public signal	74.35	29.64 ***	74.35	30.1 ***
Amnesty International	–	–	-75.22	88.3
Greenpeace	–	–	25.81	98.01
Caritas	–	–	-107.66	79.01
Doctors without Borders	–	–	79.5	81.35
public perception of charity	–	–	12.21	20.64
constant	1002.54	69.23 ***	969.32	83.45 ***
N	174		174	
R^2	0.3		0.3	

significance levels: *** = 1%, ** = 5%, * = 10%

Of course, the lack of a pro-social consequence in treatment *no donation* is not the only possible explanation for the observed difference. Alternatively, learning could have caused the effect, and, in part, it probably did. The fact that the task is meaningless (see Ariely et al., 2008) in *no donation* is another possibility. As explained before a complete treatment rotation design could not be realized and we had to accept this potential confound with respect to hypothesis 4.

6 Discussion

The competitive altruism hypothesis suggests that human males rather than females increase pro-social activity in public settings in order to receive a positive reputation, which may benefit them in sexual selection. We apply and test the competitive altruism

hypothesis to account for charitable giving in public contexts.⁴ Confirming previous findings, pro-social activity increases, if it is publicly compared to others' performance. In line with the competitive altruism hypothesis, we show that this effect is moderated by gender: males increase their performance more than females under public competition. However, we do not find an increase of performance under private feedback. Moreover, the activity's pro-social consequence itself increases performance, irrespective of the given feedback. Previous experimental research on giving and gender finds that men tend to be less altruistic than women when the context is more anonymous than under 'standard' conditions.⁵ Our results suggest that men's motivation to give is boosted when the context is more public than under 'standard' conditions.

While our findings indicate that competitive altruism may be a plausible motivational process to explain increased pro-social behavior in public settings, they also relate to empirical phenomena in a neighboring field of economic research, that is, the literature on competition and gender. Females are often less competitive than males particularly if gender-mixed comparison is available. For instance, Gneezy et al. (2003) show that males outperform females in solving mazes if groups were mixed (3 females, 3 males) under a tournament setting, whereas they find no gender difference if groups were unisex or under a piece rate scheme. Moreover, Niederle and Vesterlund (2007) find that males choose a tournament scheme more often than females, even when controlling for factors like overconfidence, risk aversion, and feedback aversion. Niederle and Vesterlund (2007) conclude that the residual gender gap is due to females having less of a taste for

⁴Note that our application of competitive altruism to charitable giving is not intended as a substitute to social-image models (see, for instance, Akerlof, 1980; Glazer and Konrad, 1996; Bénabou and Tirole, 2006; Ellingsen and Johannesson, 2008; and Andreoni and Bernheim, 2009) or social status models (see, e.g., Frank, 1985; Ball et al., 2001). Instead, it provides a process model that is in support of the general message of social-image/status concerns, and adds a unique own prediction about gender differences.

⁵Eckel and Grossman (1998) conduct a double-anonymous dictator experiment and find that women, on average, donate twice as much as men. Rigdon et al. (2009) conduct a double-blind dictator game with and without a weak social cue (three dots in a watching-eyes configuration). Again, female subjects are significantly more generous in the condition without the cue. The significant increase in giving 'under observation' is entirely driven by the behavior of male subjects. Bolton and Katok (1995) use a less anonymous dictator game design and find no difference between male and female giving. Andreoni and Vesterlund (2001) report evidence in favor of men/women being more altruistic in double-blind dictator games depending on whether the price of giving is low/high.

competition. Günther et al. (2010) point out that a stereotype threat (see Steele et al., 2002) may decrease females' effort counteracting the positive effect of competition on effort. They find that females do not improve performance when competing against men in a stereotypically 'male' task, while they increase performance at least as much as men do in a neutral or 'female' task. We find a somewhat higher overall performance by males than females, irrespective of treatment, which might indicate that our task was rather perceived as 'male' than 'female' due to its physical character. We leave it for future research to show whether competitive altruism is moderated by the perception of the task as female- vs. male-stereotypical. Note, however, that competitive altruism may also induce stereotype threat effects. For instance, if females anticipate (due to their experiences made in life) that males put in extra effort in public competition settings, then they might either avoid these situations or compete less than they normally would. Furthermore, it could be tested whether competitive altruism only applies for mixed-gender groups in that potential mates are around (as in the present experiment) or also if male-only comparison is available.

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Appendix

A. Experimental Instructions

Welcome and thank you for participating in this experiment. In this experiment you can earn a certain amount of money, which depends on your and the other participants decision. **Hence, it is important that you read the following instructions carefully.**

Please note that these instructions are only meant for you and that you are not allowed to exchange any information with the other participants. Similarly, during the entire experiment it is not allowed to talk to other participants. If you have any questions or concerns, please raise your hand. We will answer your questions individually. Please do not ask your question(s) aloud. It is very important that you follow these rules; otherwise we have to stop the entire experiment. Please also turn off your mobile phone now.

General scheme

The experiment lasts about 60 minutes and consists of four different Sections. In the following text it will be explained to you, what you have to do in the different sections.

During this experiment, you can earn money for a charity organization. The choices are Amnesty International, Greenpeace, Caritas, Doctors without Borders, Unicef. You will also receive a fixed amount of money for your participation in the experiment. How much you give to charity depends on your performance during the experiment. Your earnings will be displayed in ECU (experimental currency units). Your ECU will be exchanged into Euro according to the following exchange rate: 1 ECU = 0,02 Euro. All earned ECU will be exchanged into Euro and disbursed in cash at the end of today's session. The amount given to charity will be deposited online immediately after the experiment. Additionally you will receive your fixed payoff in cash. You will receive 2,5 Euro for your arrival. Additionally you will receive the fixed amount of 4 Euro for your participation in the survey.

After completing a short questionnaire the experiment is finished and you receive your

payoff.

Here is an overview of the course of the experiment:

1. Read the instructions
2. Test section
3. Sections A, B, C, D
4. Questionnaire
5. Payoff and end of the experiment

Details of the experiment

In this experiment you can earn money for a charity organization. You already told us, which charity organization you prefer. Your earnings will be donated to the charity of your choice.

You donate to the charity by clicking two keys on the keyboard in turn, as fast as you can, during a specific amount of time. The first 200 clicks, will result in a donation of 1 ECU per couple of clicks. For the next 200 clicks, the donation will be 0,5 ECU per couple of clicks. The 200 clicks after that, will result in a donation of 0,25 ECU per couple of clicks. Therefore, the more clicks, the more generous the donation. The following table shows you, how much you donate, depending on the amount of keystrokes (or short: clicks) that you have already done.

Therefore, for example, if you have done 300 clicks, the result is a donation of 250 ECU. If you managed to do 700 clicks, the donation will be 362,5 ECU. If you managed to do 1000 clicks, the donation will be 387,5 ECU.

Course

In order for you to feel comfortable with clicking, you will be given the **chance to test it (Section T)**. This section lasts 30 seconds. You cannot donate during this test section. After that, there will be four sections, which will each last 5 minutes. Between each section, you will receive a different task. These tasks do not demand any physical

activity and we will make sure you have enough time to rest before you continue. Your answers in this task will not be stored and evaluated. They are also not relevant for your payoff. So the purpose of the tasks between the sections is solely the time filling during the rest period.

The four sections differ from each other as follows:

- **Section A:** There is no chance to donate. At the end of the Experiment, ...
 - the number of your clicks will not result in a donation,
 - you will not be informed about the number of your clicks,
 - you will be informed, what your ranking in comparison to the other participants in this section is (so which place you rank with the number of clicks in comparison to the other participants)
 - the other participants will not be informed, about the number of your clicks.
- **Section B:** In this section there will be a donation at the end of the experiment. At the end of the experiment, ...
 - the number of clicks will be turned into a donation (the more clicks, the more generous the donation)
 - you will not be informed about the number of your clicks.
 - you will not be informed, what your ranking in comparison to the other participants in this section is
 - the other participants will not be informed about the number of your clicks.
- **Section C:** In this section there will be a donation at the end of the experiment. At the end of the experiment, ...
 - the number of clicks will be turned into a donation (the more clicks, the more generous the donation)
 - you will be informed about the number of your clicks.
 - you will be informed what your ranking in comparison to the other participants in this section is

o the other participants will not be informed about the number of your clicks.

● **Section D:** In this section there will be a donation. At the end of the experiment, ...

o the number of clicks will be turned into a donation (the more clicks, the more generous the donation)

o you will be informed about the number of your clicks,

o you will be informed about what your ranking in comparison to the other participants in this section is

o The other participants of the experiment will additionally be informed about your performance in this section. For this, we will call each participant individually. You will then stand up, name the charity organization of your choice, the number of your clicks and your ranking.

IMPORTANT: The order of the Sections is random. Therefore, you may first perform Section C and then Section B. Of course, you will be informed about which section you perform at the time, at the beginning and during the section.

Your earnings from the experiment

Your earnings from the experiment consist of the 4 Euro for the questionnaire, the basic payment for your arrival (2,5 Euro) and the fixed amount for your participation. This amount will be paid in cash, after completing the questionnaire, at the end of the experiment. Through your performance in the experiment, you additionally donate an amount to a charity organization. For this, we randomly choose one of the sections B, C or D. The ECU earned by you will be exchanged into Euro. **After the experiment the received amounts will be donated online under the supervision of two participants from the experiment.**

Control questions:

Does your own payoff depend on the amount of clicks in this experiment?

o Yes

o No

This is not clear yet

Does your donation depend on the amount of clicks in this experiment?

Yes

No

This is not clear yet

There are 4 sections in this experiment (A,B,C,D). Which section will be played third?

A

B

C

D

It is not possible to know that yet, because the order is random.

In how many sections can you make a donation

1

2

3

4

5

From which section(s) will your performance be made public at the end of the experiment? (standing up individually and naming the number of clicks and ranking)?

Section A

Section B

Section C

Section D