# "Competition and prosociality: <br> A field experiment in Ghana" Kerstin Grosch, Marcela Ibanez and Angelino Viceisza 

## Pre- and post-questionnaire (questions A1-A9 were post)

Dear Respondent! My name is $\qquad$ . This study has been organized by the University of Göttingen. Your cooperation in answering these questions is very much appreciated. There are no "right" or "wrong" answers to any of these questions and you will not be judged in any way based on your responses. Please answer all questions as accurately and truthfully as possible. The survey will take no more than 40 minutes. We assure you that your individual responses will not be disclosed to anyone. Your responses will be treated as completely confidential and will be used for research purposes only!

## INTERVIEW PROTOCOL

| 1. Name of Enumerator |  | 2. SNo./PNo. | $/$ | 3. Employee No. |  |
| :---: | :--- | :--- | :--- | :--- | :--- |

A. WORKSHOP. Let me ask you some questions regarding the workshop.

| Question | Answers |
| :--- | :--- |
| A1. How could you make most money in the <br> investment activity? | 11 Investment of GHC $0<2$ Investment of GHC 10 3 Investment of an amount <br> between GHC 0 and GHC 104 It depends on participant B's decision |

\(\left.\begin{array}{|l|c|c|c|c|c|}\hline Questions \& Not at all \& Not very \& Somehow \& Quite \& Very <br>
\hline A2. How interesting were the activities for you? \& \because \& \because \& \because \& \because \& \because <br>
\hline \begin{array}{l}A3. How hard have you tried to do the activities to the best of your <br>

ability?\end{array} \& \because \& \because \& \because \& \because \& \because\end{array}\right) \because\)| $\because$ |
| :---: |

We will now ask you two questions about the activity where you assembled ballpoint pens:

| Items | Not at all | Small extent | Somehow | Very much | Large Extent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A4. To what extent does your outcome reflect the effort you have put into your work? | $\because$ | $\because$ | $\because$ | $\because$ | - |
| A5. To what extent is your outcome justified, given your performance? | $\because$ | $\because$ | (-) | (-) | - |
| A6. Please rate now how closely attached you felt to participant B throughout the experiment? | $\ddot{\square}$ | $\because$ | (-) | (-) | - |
| A7. How rival have you felt towards participants B? | $\because$ | $\because$ | (-) | (-) | - |

A8. How many people do you know of the other participants who sat in this room?

$\square$
Before, we continue with the other questions, we will now do some activities again (see extra sheet). You will be only f for one of the next two activities.

A10 !!! FEHR-ALLOCATION-ACTIVITY: You will now take some decisions on how to allocate money between yourself and a matched partner in this room. Who the matched partner is, will Kerstin randomly decide by drawing a number card with a participant number. You will be either selected in role A or role B like in the allocation activity during the workshop.
We ask you in total three questions. You have to decide between two different allocation options in each question. You need to decide which of the two options you prefer. What the partner receives, we will put in this mint envelope [show envelope]. What you receive, we will put in this white envelope. You will be paid for sure for this task. Mind that your decision affects also the outcome of somebody else in this room! The money will be handed out to you at the very end of the workshop.

A11 !!! MARBLE ACTIVITY: I will place one marble on the ground. With a rope, I will measure a certain distance. Your task is to stand 1 meter and hit the marble lying on the ground with another marble. We will count how many times you hit the marble. We will play three rounds. You have 10 shots for each round. At the very end of the workshop you will be paid for this activity as we explain below. Before we continue, please try five times to get a feeling for that activity!

## A12: The Grain Farmer - on extra sheet!

## SECTION B: WORKER INFORMATION

|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| B1. Surname of Worker: | B2. Name(s) |  |  |
| B3. Gender: | 11 Male 2 Female | $\begin{array}{l}\text { B4. Is English your } \\ \text { mother-ton tongue? }\end{array}$ | $\boxed{1}$ Yes 2 No | B5. Age (in years)

B6. How many people live in your household?
B7. How many are children below 15 years?
B8. In how many houses are all the household members accomodated?
B8. How many bedrooms does your house(s) have to accommodate all persons in the household?

|  | years |
| :--- | :--- |
|  | No. of People including Children |
|  | No. of Children |
|  | No. of Houses |
| Bedrooms (amount) |  |

B9. What is the monthly income in your household? (Please give your best estimate!)
1 Less than GHC160 2 Between GHC160-299 3 Between GHC 300-499 4 Between GHC 500-999 5 More than GHC 1000

B10. Are you, in your household, the person who contributes most to the household income?
B11. Marital Status
B12. What is your main ethnicity?

B13. What was the last school level you attended?

1 Yes; 2 No 3 As much as others $(50+50)$

| Married | 2 Single | 3 Separated | 4 Divorced | 5 Widowed |
| :---: | :---: | :---: | :---: | :---: |
| 1 Akan | 2 Ewe | $3 \mathrm{Ga} /$ Dangbe | 4 Krobo | 5 Hausa |

6 Other (specify)
0 None 1 Primary School; 2 JSS/JHS Middle

School 3 SHS -High School 4 HND / Diploma (Go to B14)
5 Graduate / Post-graduate - University (Go to B14)

B14. At this level, how many years have you approved?
$\qquad$ Years

## SECTION BII. PREFERENCES

We will now ask you some questions about your opinions and views:

| Item | Never willing | Rarely willing | Sometimes willing | Often willing | Extremely willing |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B14. How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? | $\because$ | $\because$ | $\because$ | (-) | - |
|  | Never patient | Rarely patient | Sometimes patient | Often patient | Extremely Patient |
| B15. Are you generally an impatient person, or someone who always shows great patience? | $\because$ | $\because$ | ( - | $\because$ | $\because$ |

B16. Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair?

B17. Generally speaking, would you say that most people can be trusted or 1 Most people take advantage 2 Most people try to be fair that you need to be very careful in dealing with people?

B18. Imagine that you received a gift of money. You can choose between getting the gift tomorrow or in one month. If you wait one month, you will receive more money. Would you prefer to get:

|  | Tomorrow | In one month |  |
| :---: | :--- | :--- | :--- |
| a- GHC100 tomorrow or GHC110 in one month? |  |  |  |
| b- GHC100 tomorrow or GHC120 in one month? |  |  |  |
| c- GHC100 tomorrow or GHC130 in one month? |  |  |  |
| d- GHC100 tomorrow or GHC140 in one month? |  |  |  |

B19. Given you had the option to get a gift tomorrow of GHC100 - how much money would somebody has to offer you that you would be willing to wait for one month for that gift?

## C. OPINION

We will now read out statements. Please tell us how much you agree with those statements from strongly disagree to strongly agree.

| Items | Strongly disagree | Slightly disagree | Somehow agree | Mostly agree | Strongl y agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C1. Many of the unhappy things in people's lives are partly due to bad luck. | $\because$ | $\because$ | ( - | ( | (-) |
| C 2 . Becoming a success is a matter of hard work, luck has little or nothing to do with it. | $\ddot{\square}$ | $\because$ | (-) | (-) | (-) |
| C3. Many times we might just as well decide what to do by flipping a coin. | $\ddot{\wp}$ | $\because$ | (-) | (-) | - |
| C4. I feel that I am a person of worth, at least on an equal plane with others. | $\because$ | - | (-) | (-) | - |
| C5. I am able to do things as well as most other people. | $\because$ | $\because$ | (-) | (-) | - |
| C6. On the whole, I am satisfied with myself. | $\ddot{\square}$ | $\because$ | (-) | (-) | © |

## D. PERSONALITY

Here we briefly describe some other guy. Please listen to each description and think about how much that person is or is not like you.

| Items | Not at all like me | Not like me | Somewhat like me | Like me | Very much like me |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D1. It's very important to him to help the people around him. He wants to care for their well-being. | $\because$ | $\because$ | $\because$ | $\because$ | - |
| D2. It's important to him to show his abilities. He wants people to admire what he does. | $\because$ | $\because$ | ( - | (-) | - |
| D3. He believes that people should do what they're told. He thinks people should follow rules at all times, even when no-one is watching. | $\because$ | $\because$ | (-) | (-) | - |
| D4. It is important to him that he does his job better than others. | ( | $\because$ | (-) | (-) | - |
| D5. He relies on himself most of the time; he rarely relies on others. | $\because$ | $\because$ | (-) | (-) | - |
| D6. If a co-worker gets a prize, he would feel proud. | $\because$ | - | ( - | (-) | - |
| D7. The well-being of his co-workers is important to him. | $\because$ | $\because$ | (-) | (-) | - |

## E. WAGE EMPLOYMENT

| E1. When did you start your employment? |  | Month/ Year |
| :--- | :--- | :--- |
| E2. How many hours do you work per day on average? |  | Hours |
| E3. What is your salary? |  | GHC per month |
| E4. If salary is paid per crate/ box, how many do you fill per <br> day? |  | Number (if the salary is not paid per crate/box, make a cross) |
|  |  |  |


| E5. Is overtime paid extra? | $1=$ Yes $/ 2=\mathrm{I}$ don't work extra hours $/ 3=$ The company does not pay overtime / $4=$ No $\ggg$ E6 |
| :---: | :---: |
| E6a. If yes, how much? | GHC per hour |
| E6. Do you get extra payments based on the overall performance of the company? | $1=$ Yes / $2=$ No |
| E7. Do you get extra payments based on the overall performance of a group (for instant targets)? | $1=$ Yes / $2=$ No |
| E7a. If you get a production/productivity bonus - how much do you get on average per month? | GHC per month (if no "Productivity Bonus" is received, make a cross) |
| E7b. If you get a bonus for high quality work - how much do you get on average per month? | GHC per month (if no "Quality Bonus" is received, make a cross) |
| E8a. On average, what is the amount you get usually as an attendance bonus? | GHC |
| E9. Everything included, what do you earn within a month on average? | GHC |
| E10. Which of the following alternatives would best describe your skills in your own work? | 1 I need further training to cope well with my duties 2 My duties correspond well with my present skills 3 I have the skills to cope more demanding duties |
| E11. Do you feel bullied/ discriminated at work? | 1 Yes 2 No (Go to F1) |
| E2a. If yes, why? | 1 Threats of physical violence; $2=$ Bullying/ harassment 3 Discrimination linked to ethnic background; 4 Other, please specify |

## F. JOB SATISFACTION

| Statement | Terrible | Unhappy | Mixed | Mostly satisfied | Pleased |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F1. How satisfied are you with the working conditions at Golden Exotics? | $\because$ | $\because$ | ( - | ( $\because$ | $\because$ |
| F2. How do you feel about your job? | ( | $\because$ | (-) | (-) | - |
| F3. How do you feel about the people you work with - your co-workers? | ( | $\because$ | (-) | (־) | $\because$ |

G. ORGANIZATIONAL IDENTIFICATION / COMMITMENT Please rate the following statements from strongly disagree to strongly agree...

| Items | Strongly disagree | Slightly disagree | Somehow agree | Slightly agree | Strongly agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G1. When someone criticizes [CN], it feels like a personal insult | $\because$ | $\because$ | ( - | (-) | - |
| G2. In general, I view [CN] problems as my problems | $\because$ | $\because$ | (-) | (-) | $\because$ |
| G3. I am willing to put in a great deal of effort beyond that normally expected in order to help [CN] to be successful. | ( | $\because$ | (-) | (-) | - |
| G4. There are often breakdowns in communication here* | ( | $\because$ | ( - | (-) | (-) |
| G5. People are suspicious of other departments /working groups* | ( | $\because$ | ( - | (-) | (-) |
| G6. There is very little conflict between departments/working groups here | $\because$ | $\because$ | (-) | (-) | $\because$ |
| G7. Does your job involve doing all or part of your work in a team? | Yes | No |  |  |  |
| [If yes, ask the following, if not jump to ENDING] |  |  |  |  |  |
| G8. I feel strong ties with my working group | ® | $\because$ | (-) | (-) | - |
| G9. The supervisors at [CN] do not foster competition between workers* | $\because$ | - | (-) | (-) | - |
| G10. Suggestions and contributions of team members are respected. | $\because$ | - | (-) | (-) | - |


| G11. There were many personal conflicts in our team.* | $\because$ | $\because$ | $\because$ | $\because$ | $\because$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| G12. Every team member feels responsible for maintaining and <br> protecting the team. | $\because$ | $\because$ | $\because$ | $\because$ | $\because$ |

ENDING: Thank you very much for answering the questions. Please take the questionnaire and go to Kerstin to receive your payment for today. If there is a queue, please keep some distance to her desk and wait until she is free.

## A10: FEHR-ALLOCATION; PARTICIPANT:

$\square$ The different questions:

| Round | Option 1 <br> YOU / Partner | Option 2 <br> YOU / Partner | Decision (Option1 or 2) | Information for <br> Kerstin only |
| :---: | :---: | :---: | :---: | :---: |
| ENV | $0,50 / 0,50$ | $0,50 / 1,00$ | _ | 2 |
| PRO | $0,50 / 0,50$ | $0,50 / 0,00$ | 1 | 2 |
| SHA | $0,50 / 0,50$ | $1,00 / 0,50$ | 1 | 1 |

## A11: MARBLE-ACTIVITY

- Round 1: In this round, you will be matched with someone else in this room. Kerstin will draw any other participant number afterwards to determine your matched partner. Depending on who of you two will hit the marble more often, will get GHC2,5 whereas the other one receives GHC0,5. Start now with your ten throws!
- Round 2: In this round, you will get for each hit GHC 0,25 ! Start now with your 10 throws!
- Round 3: In this round, you can decide on how you want to be paid:

Option 1: Get paid GHC 0,25 for each marble hit
Option 2: Become matched with somebody else and you will receive GHC2,5 if your performance is better than the performance of your matched partner. Otherwise you will receive GHC0,5.

For which option do you decide?

[Let participant do the activity and report the performance and decision on report-table]

| Round | Performance | Information for Kerstin only |
| :---: | :--- | :--- |
| $\mathbf{1}$ |  | competition |
| $\mathbf{2}$ |  | PIECE-RATE |
| $\mathbf{2}$ |  | SEL-SELECTION |

## A12: The Grain-Farmer

We are on the Golden Exotics banana plantation right now. There is good weather and bad weather for bananas. Which of the two pictures stands for good weather and which stands for bad weather?
Imagine that you are a grain farmer and you are given 10 kilos of seeds for free for the coming season. You can choose between two different types of seeds to take. You can either take the seeds of Abdu or of Bara. It is important that you realize you can take as many kilos of Abdu and Bara seeds as you want as long as at the end you are taking 10 kilos in total-no more and no
less. On your answer sheet you will see a place for you to write how many Abdu seeds and Bara seeds you will take.

- Explanation of the differences of Abdu and Bara seed: Abdu seed is of higher quality than Bara seed but is more vulnerable to the weather.That is, when there is good weather the Abdu seed produces a harvest that sells for GHC 300. When the weather is bad the harvest is so bad that it cannot be sold, eaten, or fed to the animals. On the other hand, the Bara seed does not respond to the weather and always gives GHC 100 per kilo.
- Go through the different columns for the ABDU seed and explain the different quantities of Abdu seed affect one*s income from the harvest given GOOD weather (afterwards bad weather)!
- Go through the different columns for the BARA seed and explain the different quantities of Abdu seed affect one*s income from the harvest given GOOD weather (afterwards bad weather)!
- Ask control questions: If the weather is good and one had 5 kilos of bara seeds, how many Abdu seeds does one have? How much money does one make from these Bara seeds? ... from these Abdu seeds? In total? (repeat those type of questions until you feel confident about understanding)
- Tell about weather: That it is unknown if there is bad weather or good weather. The chance of good weather is $50 \%$ and the chance of getting bad weather is $50 \%$.

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Your <br> Decis | Kilos of Seed Abdu | Kilos of Seed Bara | Yield Abdu | Yield Bara | Total Yield | Yield Abdu | Yield Bara | Total Yield |
|  | 0 | 10 | 0 | 1000 | 1000 | 0 | 1000 | 1000 |
|  | 1 | 9 | 300 | 900 | 1200 | 0 | 900 | 900 |
|  | 2 | 8 | 600 | 800 | 1400 | 0 | 800 | 800 |
|  | 3 | 7 | 900 | 700 | 1600 | 0 | 700 | 700 |
|  | 4 | 6 | 1200 | 600 | 1800 | 0 | 600 | 600 |
|  | 5 | 5 | 1500 | 500 | 2000 | 0 | 500 | 500 |
|  | 6 | 4 | 1800 | 400 | 2200 | 0 | 400 | 400 |
|  | 7 | 3 | 2100 | 300 | 2400 | 0 | 300 | 300 |
|  | 8 | 2 | 2400 | 200 | 2600 | 0 | 200 | 200 |
|  | 9 | 1 | 2700 | 100 | 2800 | 0 | 100 | 100 |
|  | 10 | 0 | 3000 | 0 | 3000 | 0 | 0 | 0 |

