

Altruism, Trust, and Reciprocity: Experiment Update, and Detailed Walkthrough

CGAP // ChangaLabs // Busara

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Disclaimer

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Overview

As individuals often look to handle large or unexpected expenses through family and social networks (rather than financial institutions), community and peer-group fundraising form an essential part of informal insurance strategies and safety nets for many – especially those at the bottom of the pyramid without access to formal financial services.

The objective of this research was to gain a better understanding of the drivers of pro-social, altruistic and reciprocal giving behavior, and ultimately inform the design of new offerings and services tailored towards the needs of the low-income market segment. The research consisted of two independent experiments looking at how people chose to share with others money with others under different settings.

Experimental Overview

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- As individuals often look to handle large or unexpected expenses through family and social networks (rather than financial institutions), community and peer-group fundraising form an essential part of informal insurance strategies and safety nets for many – especially those at the bottom of the pyramid without access to formal financial services.
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RESEARCH OVERVIEW

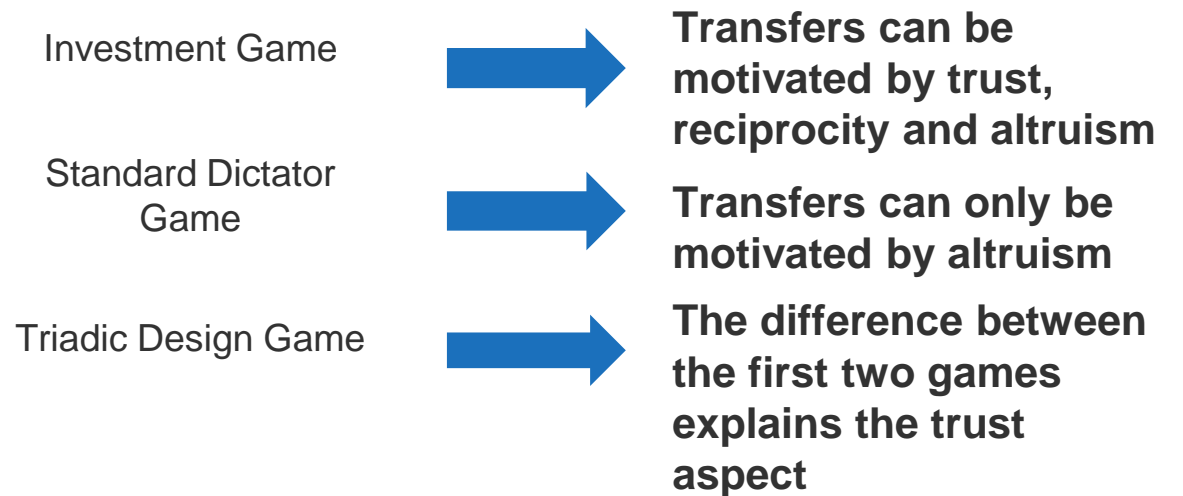
Using experimental paradigms to investigate drivers of charitable giving in Kenya

ALTRUISM, TRUST AND RECIPROCITY

How do we test hypotheses regarding altruism, reciprocity, and trust in a Kenyan charitable giving context?

Experiment 1

The first experiment uses a three-game (triadic) design to explore trust, altruism, and reciprocity towards others in an in-group-in-group, an in-group-out-group and team interactions



What process drives a person to give?

TRUST (Investment) GAME

Player 1

Player 1 decides to give some amount of their endowment to Player 2; knowing that the amount will be multiplied by 3; and Player 2 will have an opportunity to return.

*Possible Motivation:
Altruism, Trust*

Player 2

Player 2 has the option of returning some of the money they have got back to Player 1 (they know how much Player 1 chose to send them)

*Possible Motivation:
Altruism, Reciprocity*

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Investment Game



Transfers can be motivated by trust, reciprocity and altruism

Standard Dictator Game



Transfers can only be motivated by altruism

Triadic Design Game



The difference between the first two games explains the trust aspect

What process drives a person to give ?

DICTATOR GAME

Player 1

Player 1 decides to give some amount of their endowment to Player 2; knowing that Player 2 does not have an action after this (and therefore cannot reciprocate).

Possible Motivation: Altruism

Player 2

Player 2 has no action here

Possible Motivation: -

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TRIADIC GAME

Player 1

Endowment amounts are inherited from TRUST GAME results of the respective Player 1 and Player 2. Player 1 has no action here.

Possible Motivation: -

Player 2

Player 2 has the same amount as Player 2 in the TRUST GAME had. Now Player 2 can send money to Player 1, but the full amount can be attributed to 'Altruism'

*Possible Motivation:
Altruism*

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Experiment 1

There are 3 games within each Experiment 1 session:

Trust Game (2 Players)

Dictator Game (2 Players)

Triadic Game (2 Players)

Each player makes between 0 and 1 choices in Experiment 1 to keep the design simple

There are 4 treatments in this design:

Control

In Group

Out Group

Teams

Experiment 1

Hypothesis 1:

Baseline trust, reciprocity and altruism is no different in Kenya as compared to other countries/contexts

Some Implications:

Identifying that altruism is not a barrier to giving, and M-Changa platform to be aimed to maximize 'warm glow' as opposed to convincing individuals to contribute; Interesting cross cultural research on charitable giving behavior

Hypothesis 2:

Individuals have different trust, reciprocity and altruism levels when interacting with members they perceive as similar to them in some aspect

Some Implications:

Make similarities more salient in communication messaging on M-Changa; Understand on individuals on M-Changa self-select into 'In Groups'; Make campaign recommendations based on 'In Group' measure; A/B Test 'effort tasks' on M-Changa to generate feeling of groups.

Hypothesis 3:

Individuals make different contribution decisions when they are in groups (teams) and can discuss before making choice

Some Implications:

Include team capabilities into M-Changa to leverage existing connections between people; give update to 'team' members what their peers are doing; explore chat functionalities between team members;

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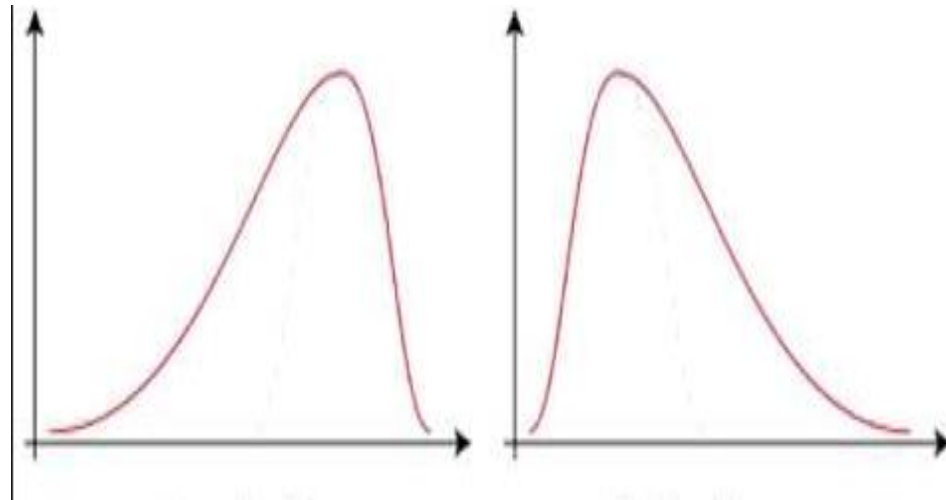
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Experimental Design 2: Range / Rank Preferences

- In this experiment we inform people that they have been awarded a certain amount of money which they can choose to keep or donate to a charity
 - They are presented with different prompts of amounts on the screen based on two principles:
 1. Rank principle (Unimodal and Bimodal contribution amounts)
 2. Range principle (Positively skewed or negatively skewed contribution amounts)
- This experiment seeks to test people's contribution based on what they think other people are contributing.



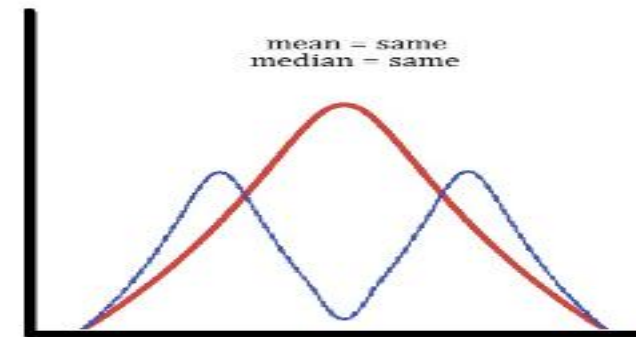
Contribution Distributions Shown to Participants



Positive and Negative Skew

Positive Skew: 0, 20, 40, 40, 60, 80, 120, 140

Negative Skew: 0, 20, 80, 100, 100, 120, 160, 180



Unimodal and Bimodal Distributions

Unimodal: 0, 20, 40, 60, 60, 60, 100, 160

Bimodal: 0, 40, 40, 50, 60, 60, 100, 150

Appendix: Pilots

What do the pilots seek to address?

Effort Tasks & Manipulation Checks

1. Which effort task works best at establishing a group identity amongst participants?
2. Does the effort task used work well at facilitating strong group identities amongst groups?
3. Are the group identities created salient enough?
4. What are some of the respondents reactions with regards to effort task earnings?

Experiments and Triadic Games

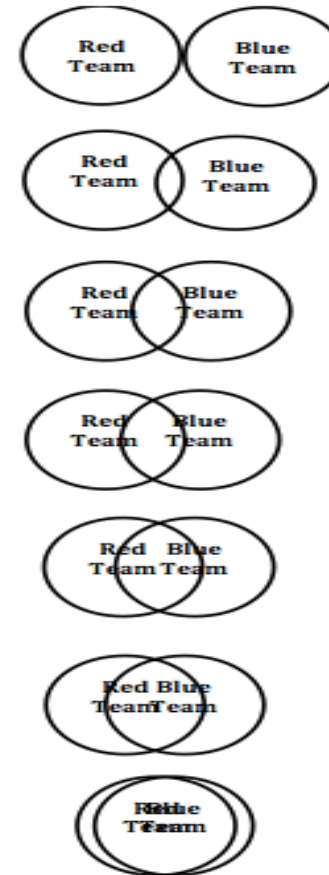
1. Does the protocol work effectively?
2. Does the programming of the games run as expected with regards to the flow of games and different players?
3. Check whether the data collected answers the question being studied
4. Analyze to see whether there is any notable relationships across strong group ties formed and the results from the game versus weak group ties

- Pilots for the effort tasks are complete. Experiment pilots are still in progress.

Manipulation Checks

- Used to check whether people were closer to in-group members than out-group members by adopting the Inclusion of Other In the Self Scale (IOS)
- Participants were asked to complete a series of questions asking them to describe their relationship with;
 1. In-group members
 2. Out-group members
 3. The in-group member they felt the closest to
 4. The in-group member the felt the least closest to

Please select the picture which best describes your relationship with the other members of Red group. (Place a tick next to the picture you choose)



Aron, Arthur, Elaine N. Aron, and Danny Smollan. 1992. "Inclusion of Other in the Self Scale and The Structure of Interpersonal Closeness.". Journal

Effort Task Pilots

We piloted the following 3 effort tasks:

1. Sorting Task (12)

Respondents from either group are given a sorting task involving a mix of rice or a mix of paper clips in different colors to sort them out within a specified time frame

2. Math Task (12)

Two different groups were asked to solve as many math questions within a set standard of time.

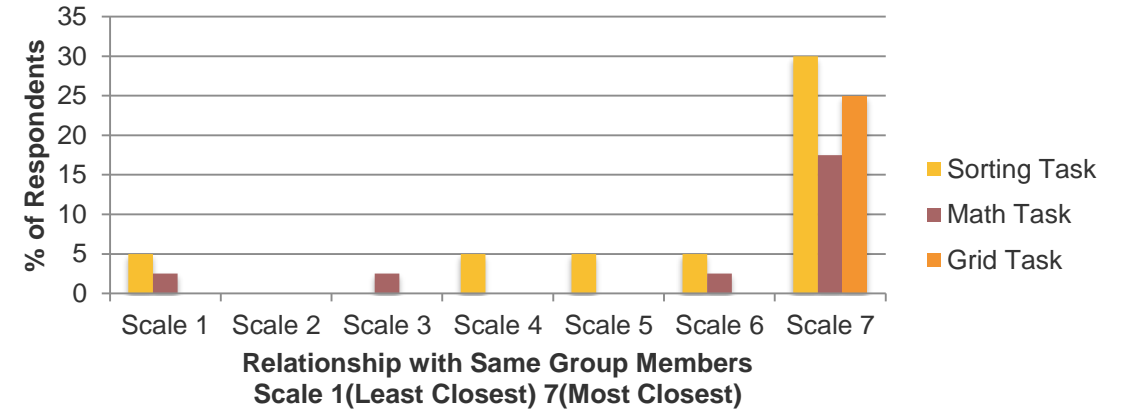
2. Grid Task (12)

Two different groups (red vs blue) were asked to count the number of 1s in a 5 by 5 grid with randomly distributed 0s and 1s within a set amount of time

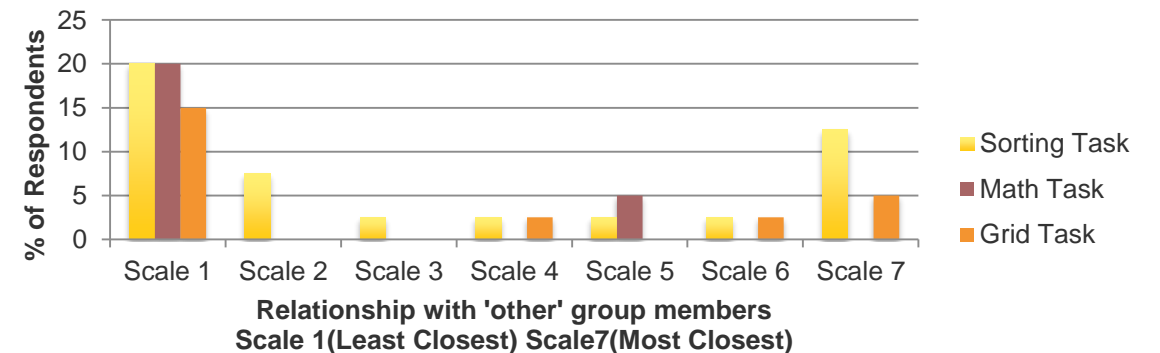
- Manipulation checks were used to identify how close the group members felt to each other and to members of the opposite group

RESULTS

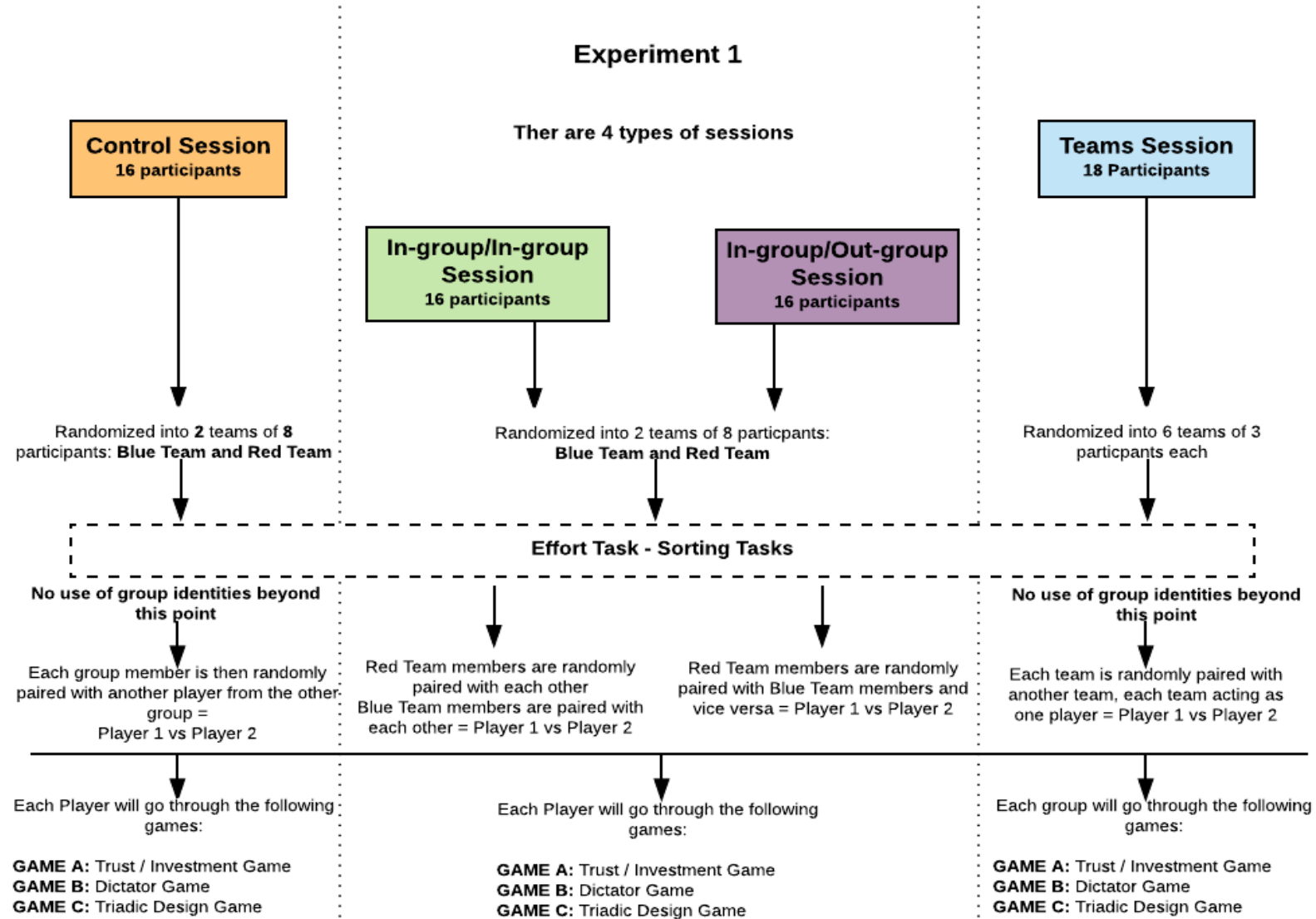
Analysis of Manipulation Check (Own Group)



Analysis of Manipulation Check (Other Group)



Experiment 1 Procedure



Experiment 2 Procedure

