Reciprocating Trust or Kindness

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Trust and Kindness

Trusting a person typically involves giving some of one's resources to that person, with the understanding that the recipient will return the resource to the giver in the future.

Giving some of one's resources to another person may not necessarily be motivated by expectations of future returns. It may simply be an act of kindness.

Reciprocity

Would a recipient be more or less likely to reciprocate when she receives the resource as a pure act of kindness, or part of a social understanding in which she would be expected to reciprocate?

Does the giver's motivation matter to the recipient?

Reciprocity theories include other players' actions as well as the intention behind the action, as determinants of reciprocal behavior. It is commonly assumed that the inclination of trustees to reciprocate depends on how they perceive the trusting behavior of the trustor.

Trust and reciprocity were studied largely by using the Trust Game, varying aspects of the game, including parameters of efficiency and risk. Results indicate that trustees reciprocate more on the basis of the benefits the trustor has provided to them, and assign relatively less weight to the trustors' risks.

We ask more generally, does the perceived motivation of the trustor affect inclination to reciprocate?

Do people reciprocate trust more or less than they reciprocate pure kindness?

Does the motivation for giving affect reciprocity?

We compare recipients' responses to the same monetary allocation in two fundamentally different situations:

- The giver expects reciprocity (Trust game)
- The giver could not have expected reciprocity (one shot Dictator game). In this case we introduce, after the game, an unexpected reciprocation opportunity.

We compare recipients decisions in modified versions of Trust and Dictator games.

At the reciprocation stage:

- The total amount each player has is the same in both games.
- The possibility to reciprocate is known to both players at the response stage.
- There is no continued interaction after the reciprocation decision.

The only difference between the Trust Game and the Unexpected Reciprocation Opportunity is whether Player 1 could have expected reciprocity.

Experiment 1
Unexpected Opportunity to Reciprocate

The instructions for the initial stage read: "Participants are randomly assigned to one of two roles: Player 1 and Player 2. Player 1 receives an endowment of 80¢ and Player 2 receives nothing.

Player 1, if he or she wishes, can give Player 2 15¢ of the 80¢ he/she received. If Player 1 decides to give 15¢ to Player 2 that amount is **quadrupled** by the experimenter, so Player 2 actually receives 60¢."

Experiment 1- cont.

Trust : After Player 1 decides on his/her allocation "Player 2 gets to decide if and how much of the money he/she received to allocate back to Player 1. The rules of the game are explained to all participants (both Players 1 and Players 2) prior to starting the game."

Unexpected Reciprocation Opportunity : "Now, after the initial game is over we inform you and all other participants (both Players 1 and Players 2) of the additional following stage: Players 2 are given the chance to give some of the money they received back to Players 1, if they wish to do so."

Experiment 1- cont.

Control :

Player 1 receives an endowment of 65¢ and Player 2 receives an endowment of 60¢ .

Players 2 (and only they) are given the chance to give Players 1 some of the money they received, if they wish to do so. They can allocate to Player 1 any amount between 0¢ and the sum they received.

The rules of the game are explained to all participants (both Players 1 and Players 2) prior to starting the game.

Experiment 1- cont.

	Player 1	Player 2
Initial Allocation	80	0
After Player 1 sends 15	65	15
Allocation quadrupled	65	60

Experiment 1- cont.

304 MTurk workers were assigned the role of Player 2 and received an allocation from Player 1.

Manipulation check:

“When Player 1 decided how much money to give to Player 2, did he/she know that Player 2 would have the opportunity to allocate some of the money back to him/her?”

247 out of 304 answered the question correctly.

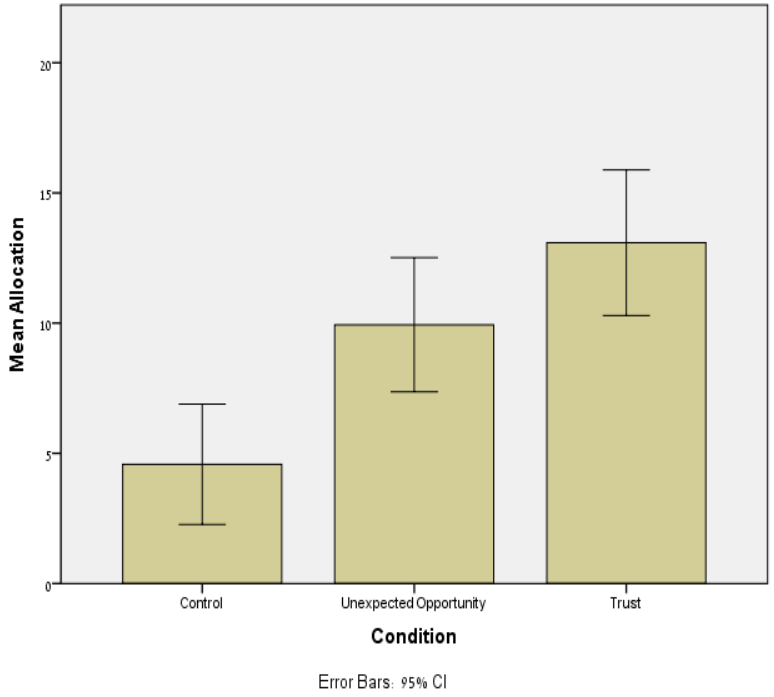
Experiment 1- cont.

Players A : T 70%, D 73%

Expected return: T 13.70, D 8.13 ($t(121)=2.985$, $p=.003$)

Recipients Allocation

(N=247)

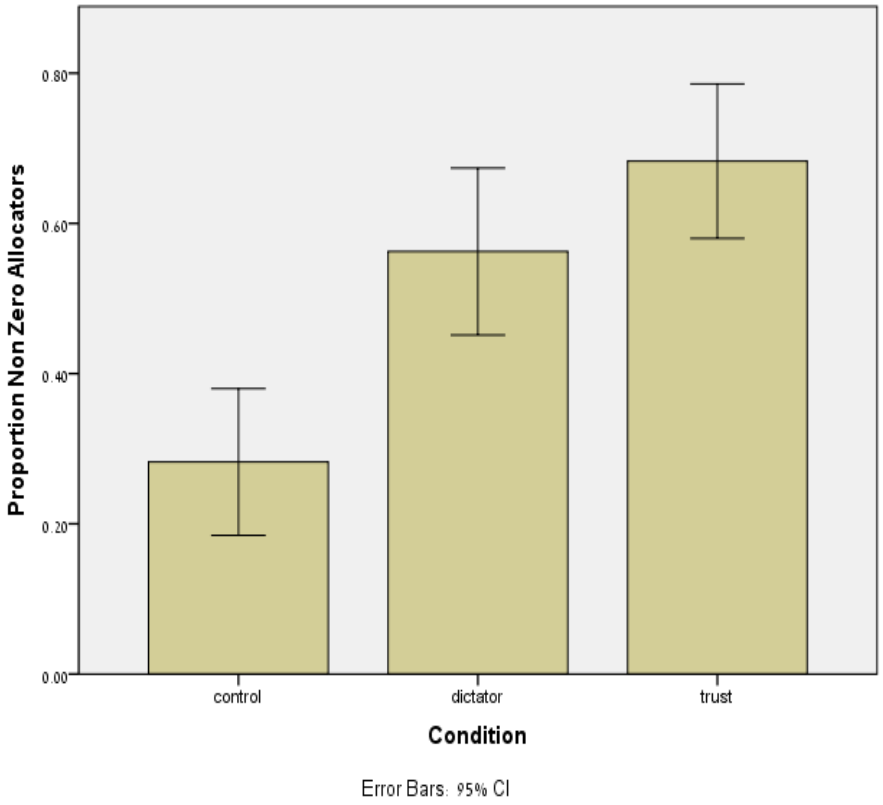


ANOVA : ($F(2,244)=11.329$, $p<.001$).

Control condition significantly lower than each treatment condition ($p<.05$ for each comparison).

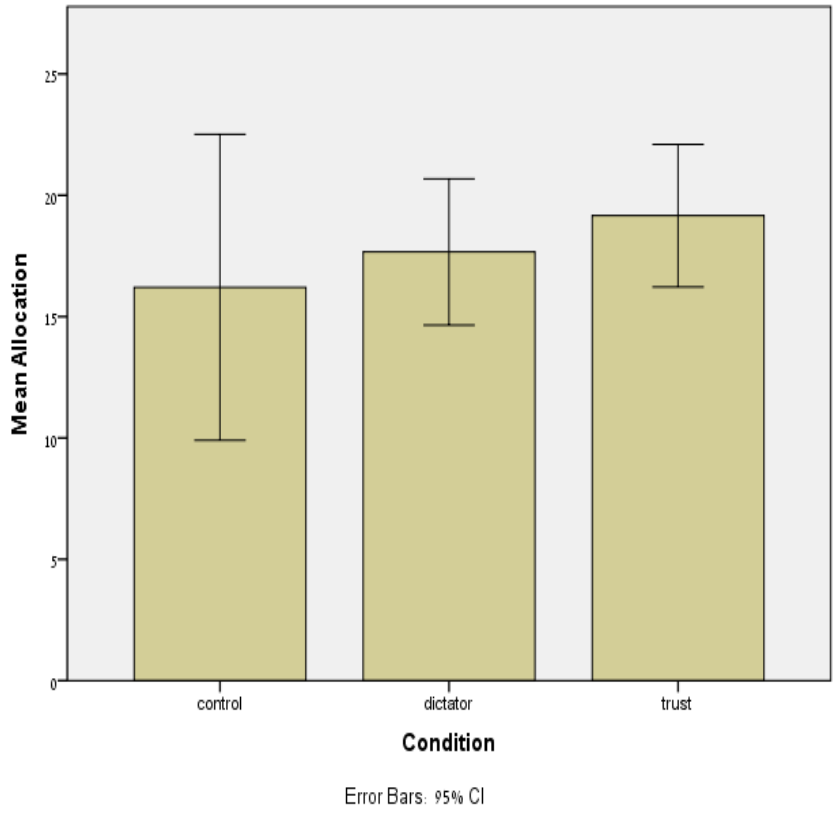
Trust and Unexpected Opportunity not significantly different ($p=.233$).

Proportion Non Zero Contributors (N=)247



Chi-squared=28.299, p<.001). The difference between the two treatment conditions not significant (p=.144)

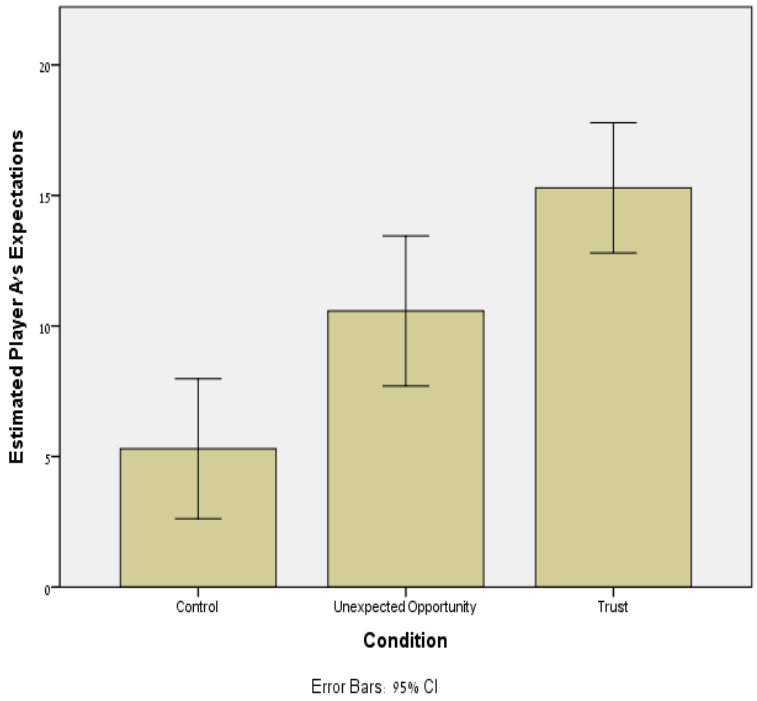
Allocation of Non-Zero Contributors (N=124)



F(2,122)=.593, p>.5)

Player 1's Expectations Estimated by Player 2

(N=247)



ANOVA : ($F(2,244)=13.938$, $p<.001$).

Control condition significantly lower than each treatment condition ($p<.05$ for each comparison).

Trust and Unexpected Opportunity marginally significantly different ($p=.051$).

- Reciprocity is correlated with perceived expectations of the giver ($r=.489$, $p<.001$)
- Reciprocity is not mediated by expectations: Including Player 1's expectations in the model yielded a significant result for expectations as well as condition.
- The two treatment conditions do not significantly differ when including expectations in the model ($p=.53$)

In sum, we find that

- Player 2 reciprocates: The amount sent to Player 1 depends on whether Player 2 was a recipient of a previous allocation by that player.

- The intentions of Player 1 regarding reciprocity do not seem to matter much.

We further examine the effect of initial allocation on reciprocation in the next experiment. Instead of reciprocating the initial allocation, participants play a repeated game.

Experiment 2
Repeated Dictator

The instructions for the initial stage read: "Participants are randomly assigned to one of two roles: Player 1 and Player 2. Player 1 receives an endowment of 60¢ and Player 2 receives nothing.

Player 1, if he or she wishes, can give Player 2 20¢ of the 60¢ he/she received.

Experiment 2- cont.

Expected Repeated Dictator : “After the first round will be completed, the game will be repeated one more (final) time. The pairs will remain unchanged, but the roles will be switched. As in the first round, the participant now assigned the role of Player 1 will receive an endowment of 60¢, and player 2 will receive nothing. At this round Player 1 can give Player 2 any sum, including 0¢ and up to the total amount he/she received in this study.”

Unexpected Repeated Dictator : “Unexpectedly, now after the initial game is over we let you and all other participants (both Players 1 and Players 2) know of the following additional stage. The game will be repeated one more (final) time. The pairs remain unchanged, but the roles are switched…”

Experiment 2- cont.

Trust : “If Player 1 decides to give 20¢ to Player 2 that amount is quadrupled by the experimenter, so Player 2 actually receives 80¢. Player 2 gets to decide if and how much of the money he/she received to allocate back to Player 1. The rules of the game are explained to all participants (both Players 1 and Players 2) prior to starting the game."

Control : “Player 1 receives an endowment of 40¢ and Player 2 receives an endowment of 80¢ .

Players 2 (and only they) are given the chance to give Players 1 some of the money they received, if they wish to do so. They can allocate to Player 1 any amount between 0¢ and the sum they received.

Experiment 2- cont.

	Player 1	Player 2
Initial Allocation	60	0
After Player 1 sends 20	40	20
Second game/ Allocation quadrupled	40	80

Experiment 2- cont.

401 MTurk workers were assigned the role of Player 2 and received an allocation from Player 1.

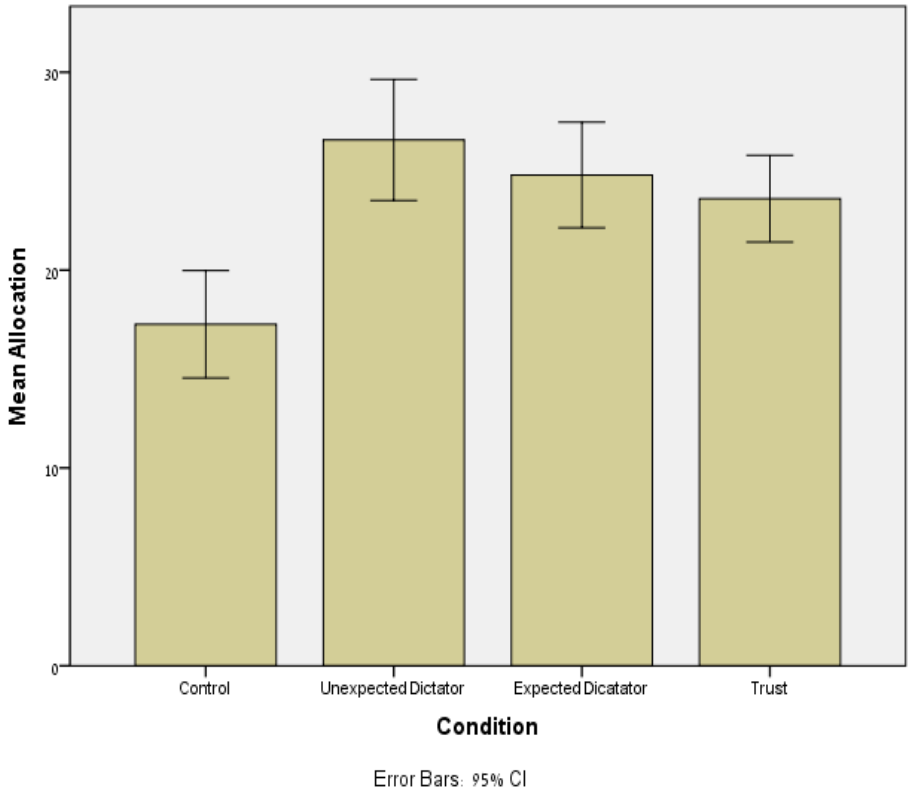
Manipulation check:

“When Player 1 decided how much money to give to Player 2, did he/she know that Player 2 would have the opportunity to allocate some money back to him/her?”

330 out of 401 answered the question correctly.

Recipients Allocation

(N=330)

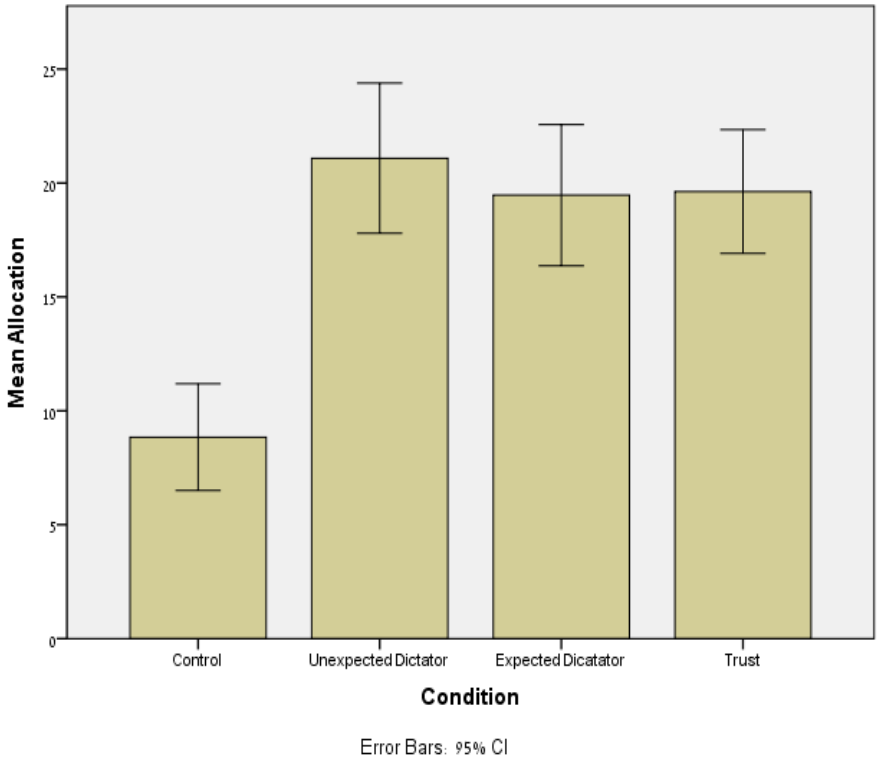


ANOVA : ($F(3,326)=14.918$, $p<.001$).

Control condition significantly lower than each treatment condition ($p<.001$ for each comparison).

Treatment conditions do not differ from each other ($p>.8$).

Reciprocal Allocation of Non-Zero Allocators (N=241)

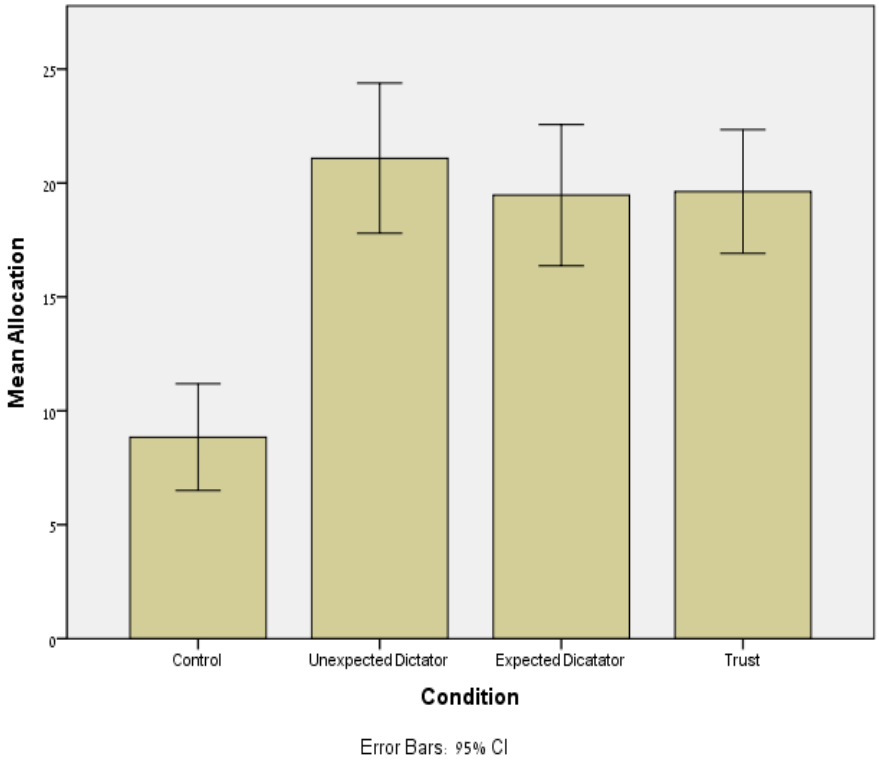


ANOVA : ($F(3,237)=7.058$, $p<.001$).

Control condition significantly lower than each treatment condition ($p<.05$ for each comparison).

Treatment conditions were not significantly different from each other ($p>.4$ for all comparisons).

Reciprocal Allocation of Non-Zero Allocators (N=241)

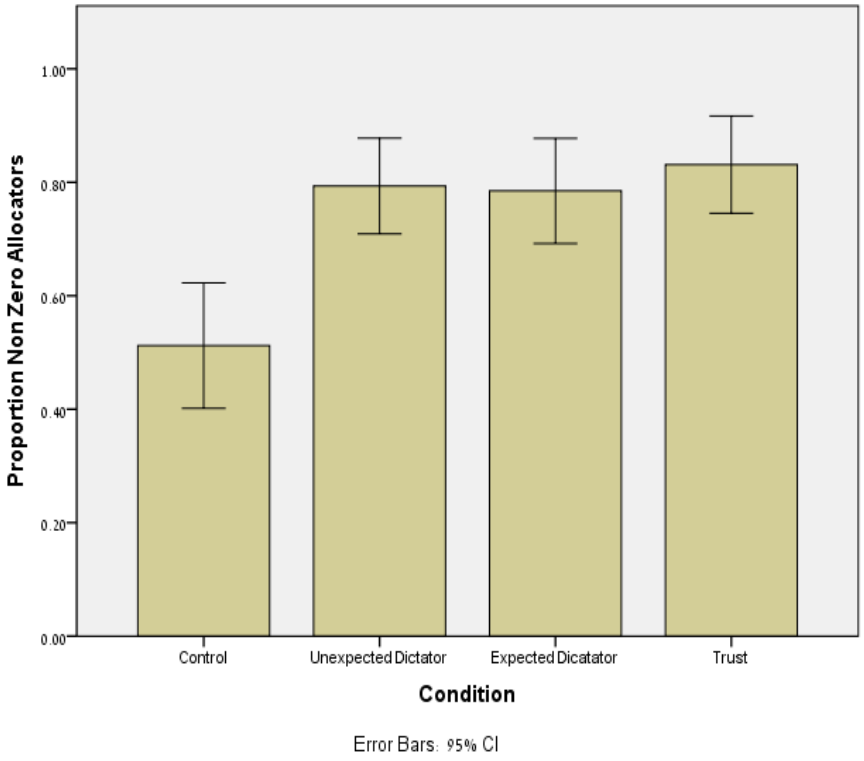


ANOVA : ($F(3,237)=7.058$, $p<.001$).

Control condition significantly lower than each treatment condition ($p<.05$ for each comparison).

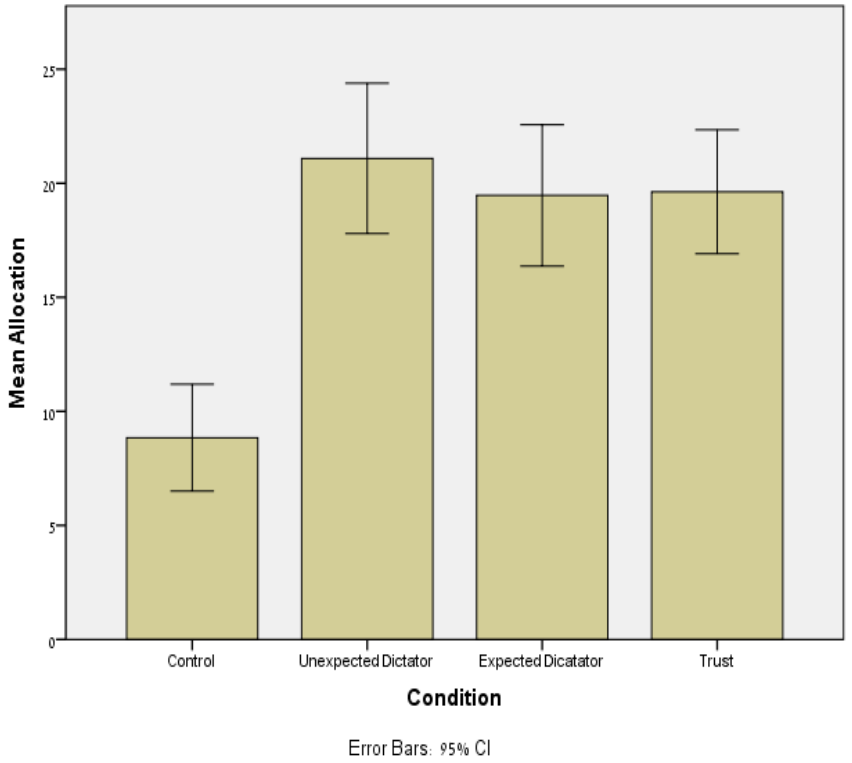
Treatment conditions were not significantly different from each other ($p>.4$ for all comparisons).

Proportion Non-Zero Contributors (N=330)



Chi-squared=26.838, p<.001).
The difference between the three treatment conditions not significant (p>.7).

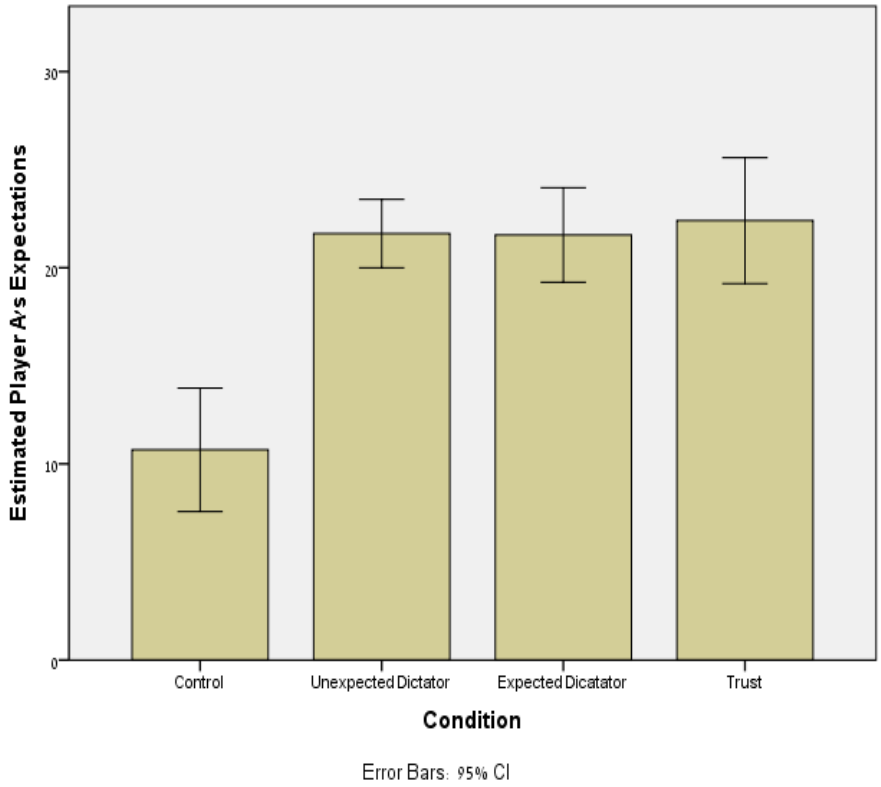
Allocation of Non-Zero Contributors (N=241)



ANOVA : (F(3,237)=7.058, p<.001).
Control condition significantly lower than each treatment condition (p<.05 for each comparison).
Treatment conditions not significantly different from each other (p>.4 for all comparisons).

Player 1's Expectations Estimated by Player 2

(N=330)



ANOVA : ($F(3,326)=17.833$, $p<.001$).

Control condition significantly lower than each treatment condition ($p<.001$ for each comparison).

Treatment conditions were not significantly different from each other ($p>.9$ for all comparisons).

- Reciprocity is correlated with perceived expectations of the giver ($r=.228$, $p<.001$).
- Reciprocity is not mediated by expectations: Including Player 1's expectations in the model yielded a significant result for expectations as well as condition.

Would participants reciprocate even if the giver would not know that they had the opportunity to do so?

Experiment 3
Reciprocating if Player 1 does not know

Unexpected Reciprocation Opportunity : "Player 1 receives an endowment of 50NIS and Player 2 receives nothing. Player 1, if he or she wishes, can give Player 2 15NIS of the 50NIS he/she received. If Player 1 decides to give 15NIS to Player 2 that amount is doubled by the experimenter, so Player 2 actually receives 30NIS.

You were assigned the role of Player 2. Player 1 decided to give you 15NIS. Consequently you receive 30NIS.

Control : "Player 1 and Player 2. Player 1 receives an endowment of 35NIS and Player 2 receives an endowment of 30NIS.

You were assigned the role of Player 2.

Now, after the initial game is over we inform you and all other Players 2 of the additional following stage: Players 2 are given the chance to give some of the money they received to Players 1, if they wish to do so.

Player 1 is not aware of the fact that you have the possibility of sending her money, and she will find this out only if you decide to send her money."

Experiment 3- cont.

	Player 1	Player 2
Initial Allocation	50	0
After Player A sends 15	35	15
Allocation doubled	35	30

Experiment 3- cont.

233 students participating in online experiments were assigned the role of Player 2 and received an allocation from Player 1. Four pairs were randomly selected to receive their outcomes.

Manipulation check:

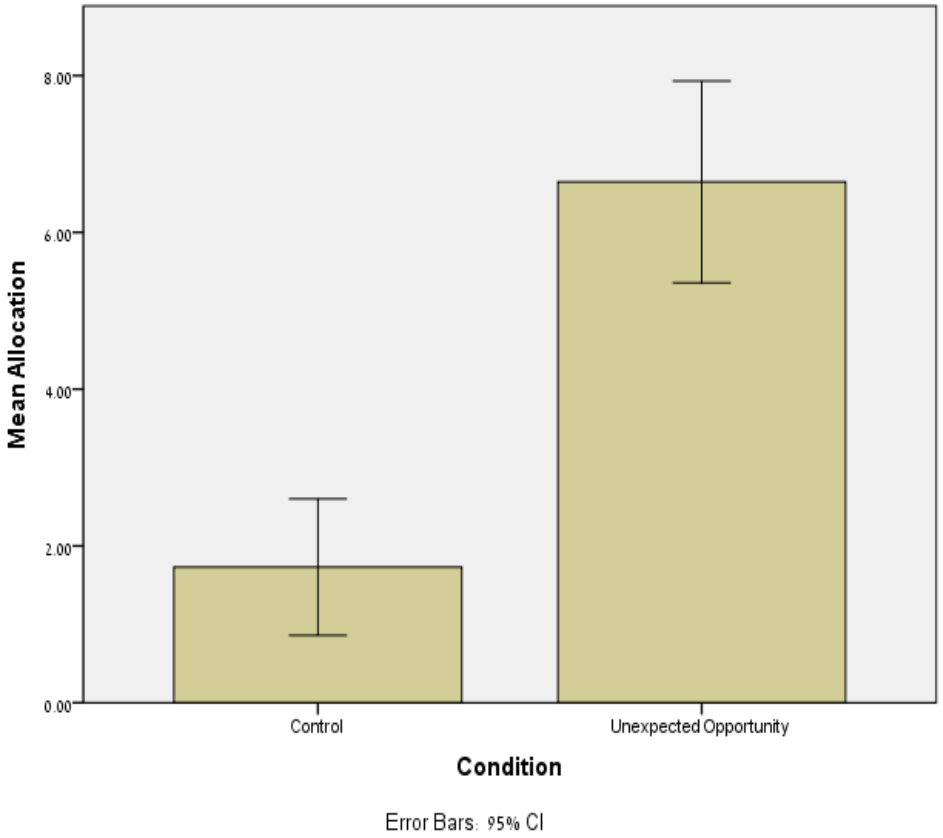
“When Player 1 decided how much money to give to Player 2, did he/she know that Player 2 would have the opportunity to allocate some of the money back to him/her?”

“If Player 2 does not allocate money to Player 1, would Player 1 know that Player 2 had the opportunity to send her money?”

215 out of 233 answered both questions correctly.

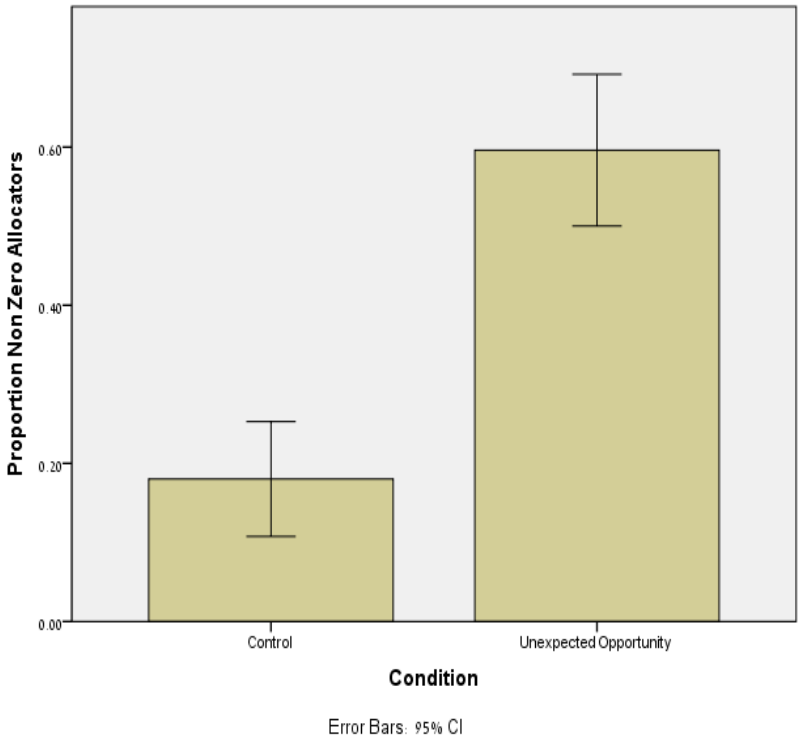
Recipients Allocation

(N=215)



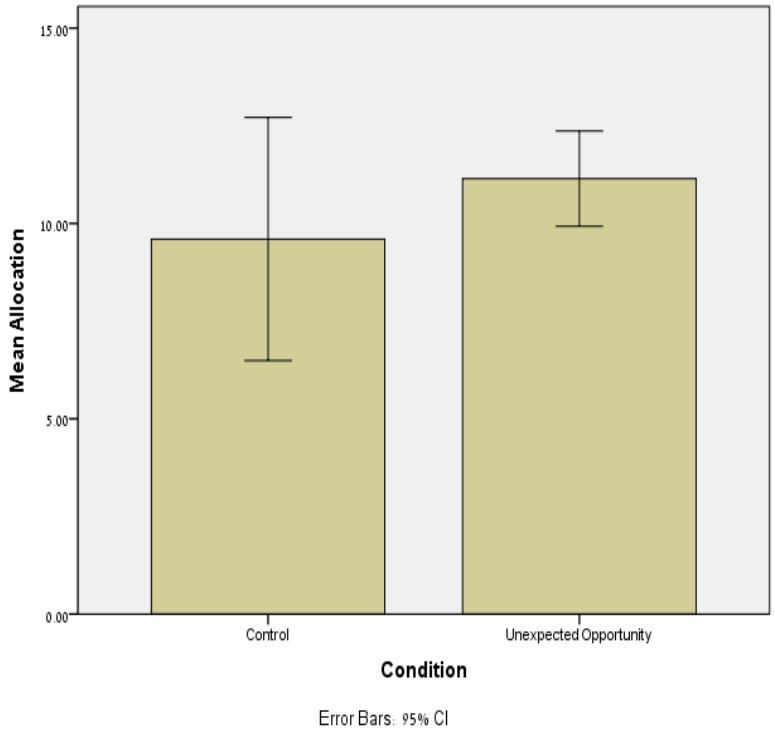
$t(213)=6.342$, $p<.001$

Proportion of Non Zero Contributors (N=215)



Chi-squared=39.379, p<.001

Allocation of Non Zero Contributors (N=82)



t(80)=1.134, p=.26

Our findings suggest that people reciprocate giving even when the giver could not expect it and would not know of their forgoing reciprocation opportunity.

At the same time people are not inclined to reciprocate trust more (or less) than they reciprocate pure kindness.

Thank You!

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