THE DICTATOR GAME

One person decides.
The other gets no say.

Early discussion
Daniel Kahneman · Jack Knetsch · Richard Thaler

Published
1986

Classic experimental study
Forsythe · Horowitz · Savin · Sefton (1994)

> If nobody can reject your offer, how much of the money would you give away?

A friendly guide to the rules, the benchmark prediction, classic findings, and the questions researchers should ask beyond the headline.

01 / THE IDEA

Can generosity survive without strategy?

Imagine an anonymous participant gives you $10. You are told to divide it between yourself and another person. The other person cannot bargain, reject your choice, or punish you. Your decision is final.

That is the Dictator Game. It removes a key strategic feature of bargaining: the recipient has no response. So if the dictator gives something away, the transfer cannot be explained by fear that the recipient will reject a low offer.

The game is widely used to study distributional preferences—such as generosity, fairness, altruism, and concern about inequality. But the choice alone does not tell us exactly which motive is at work.

PLAYER 1 · DICTATOR	PLAYER 2 · RECIPIENT
Receives an endowment and chooses how to divide it.	Receives the amount allocated. Makes no decision.

> Core design feature: the dictator’s allocation determines both participants’ payoffs. The recipient has no veto.

02 / EXPERIMENTAL DESIGN

How the game works

A common classroom and laboratory version uses a $10 endowment. The exact amount and allowed increments vary across studies.

01 Pair participants anonymously.
One is randomly assigned dictator; the other recipient.

02 Give the dictator $10.
The endowment is available to divide.

03 Dictator chooses a transfer.
They may give $0, $1, …, or $10 to the recipient.

04 The allocation is implemented.
Dictator keeps $10 minus the amount given.

05 The recipient receives the gift.
No rejection, counteroffer, or return move follows.

> One choice, no reply. The recipient is not passive by accident; removing their action is what makes this design useful.

03 / A WORKED EXAMPLE

Divide the $10

Suppose the dictator chooses to give $3 to the recipient. The dictator keeps the remaining $7.

DICTATOR	RECIPIENT
Initial endowment: $10 Gift: $3 Keeps: $7 Final payoff: $7	Gift received: $3 No other move Final payoff: $3

PAYOFF FORMULAS

Dictator	$10 − amount given
Recipient	Amount given

Every dollar given reduces the dictator’s own monetary payoff by one dollar and increases the recipient’s payoff by one dollar. No strategic benefit is built into the standard one-shot design.

> The dictator is not deciding whether to be nice after someone is nice to them. There is no previous move to reciprocate.

What does self-interest predict?

Assume the dictator cares only about their own monetary payoff. Their payoff is $10 minus the gift. Giving $0 leaves them with the full $10; giving any positive amount lowers their own payoff.

The recipient cannot affect the outcome, and the dictator receives no strategic reward for sharing. Under this narrow self-interest assumption, the unique payoff-maximizing choice is to give nothing.

> Benchmark prediction: Dictator gives $0; dictator keeps $10; recipient gets $0.

But in laboratory studies, many dictators give positive amounts. The difference between the benchmark and observed choices is the puzzle. It suggests that some participants may value the recipient’s payoff, fairness, equality, social norms, or simply the act of giving.

The model is not “wrong” for producing a zero gift under its assumptions. The experiment helps us ask whether those assumptions describe people’s choices in this setting.

What do the data show?

Forsythe, Horowitz, Savin, and Sefton (1994) studied dictator and ultimatum games, including paid and unpaid conditions. In their paid dictator condition, the distribution of gifts was notably different from the ultimatum game: the recipient could not reject, yet many dictators still shared.

CLASSIC PAID DICTATOR GAME	RESULT	WHAT IT SUGGESTS
Dictators who gave nothing	36%	A substantial minority kept the entire amount.
Average gift	About 20% of the pie	Positive giving was common, but far from equal division on average.
Dictators who gave something	About 64%	Many shared despite having no strategic reason to do so.
Comparison with ultimatum game	Dictator gifts lower	Strategic concerns such as rejection help explain larger ultimatum offers.

Interpretation: these are results from a particular paid laboratory setup—not a universal percentage of how generous people are. Endowment size, anonymity, framing, and population can change giving.

Dictator Game vs. Ultimatum Game

DICTATOR GAME	ULTIMATUM GAME
Recipient cannot reject. A positive gift is not needed to avoid a rejection or punishment.	Recipient can accept or reject. A positive offer may be strategic: a low offer risks losing the whole pie.

The dictator game is often used as a control for strategic motives in the ultimatum game. If offers are smaller when rejection is impossible, that difference suggests that some generosity in the ultimatum game is strategic.

Still, the dictator game does not provide a pure, perfect measure of altruism. A positive transfer could reflect several motives; the experimental choice alone cannot distinguish them.

> Design lesson: remove a strategic channel, compare behavior, and be precise about what the contrast does—and does not—identify.

07 / THINK LIKE A RESEARCHER

Do not memorize the gift percentage.

01 What motive does giving identify?

Could the same gift be explained by altruism, equality preferences, social norms, or experimenter demand?

02 How does anonymity matter?

Would gifts change if the dictator knew the recipient, or knew their choice would be seen?

03 What does the endowment frame do?

Does giving differ when money is earned, assigned, or described as a windfall?

04 How would you distinguish motives?

Could a design compare giving to equalize payoffs versus giving without changing inequality? What additional treatments or measures are needed?

> Research sequence: observe a choice → list competing explanations → derive different predictions → design a treatment that separates them.

THE TAKEAWAY

The Dictator Game is simple by design: one participant divides a resource, and the recipient cannot respond. The zero-gift benchmark gives researchers a clean reference point. Positive giving is informative—but it is not a direct window into a single motive.

ORIGINAL / CLASSIC SOURCES

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986). “Fairness and the Assumptions of Economics.” Journal of Business, 59(4), S285–S300.

Forsythe, R., Horowitz, J. L., Savin, N. E., & Sefton, M. (1994). “Fairness in Simple Bargaining Experiments.” Games and Economic Behavior, 6(3), 347–369. DOI: 10.1006/game.1994.1021.

Classic results summarized from Forsythe et al. (1994) and the research review “Paradigmatic Experiments: The Dictator Game.”