Mind Lecture 2022:

The Psychology of Ineffective Altruism

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Annual global giving: ~ $700,000,000,000

How much is $700 billion?

- Eradicating malaria: $90–120 billion (Gates Foundation)
- Ending world hunger: $7–265 billion annually (IFPRI)
- Reducing CO_2 emissions by 2/3: $200–360 billion annually (McKinsey)

Why haven’t these things happened?

Altruistic acts vary widely in effectiveness

$350 million AI research institute

$150 million student center

Effective altruism

- A philosophical movement devoted to solving world problems by channeling resources more *effectively*

Peter Singer

Will MacAskill

Bill & Melinda Gates

Three principles

- *Benefit principle*: Maximize benefits, not sacrifice
- *Specialization principle*: Seek your comparative advantage
- *Offsetting principle*: Balance costs and benefits

Why do people donate?

- To *do* good (utilitarianism)
- To *feel* good (“warm glow”)
- To *look* good (signaling)

Possible sources of *ineffective* altruism

- To *do* good (utilitarianism)
  - Donors may be misinformed, biased, or deny that some causes are objectively "better" than others (e.g., Berman et al., 2018)
- To *feel* good ("warm glow")
  - Ineffective donations might nonetheless *feel* good (e.g., Small et al., 2007)
- To *look* good (signaling)
  - What *looks* good may diverge from what *does* good (this talk)

Signaling motives are powerful

- Donations to public organizations are rarely anonymous (Glazer & Konrad, 1996)
- Donors typically give the minimum to be publicly listed in a given category (Harbaugh, 1998)
- People are less generous when they believe their motives will be perceived as extrinsic (Ariely, Bracha, & Meier, 2009)
- Environmentally conscious behaviors are motivated by status (Griskevicius Tybur, & Van den Bergh, 2010)

The $700,000,000,000 question: Does doing the most good *look* the most good?

- If so, then signaling motives are aligned with utilitarianism
  - Fabulous news! We can all go home.

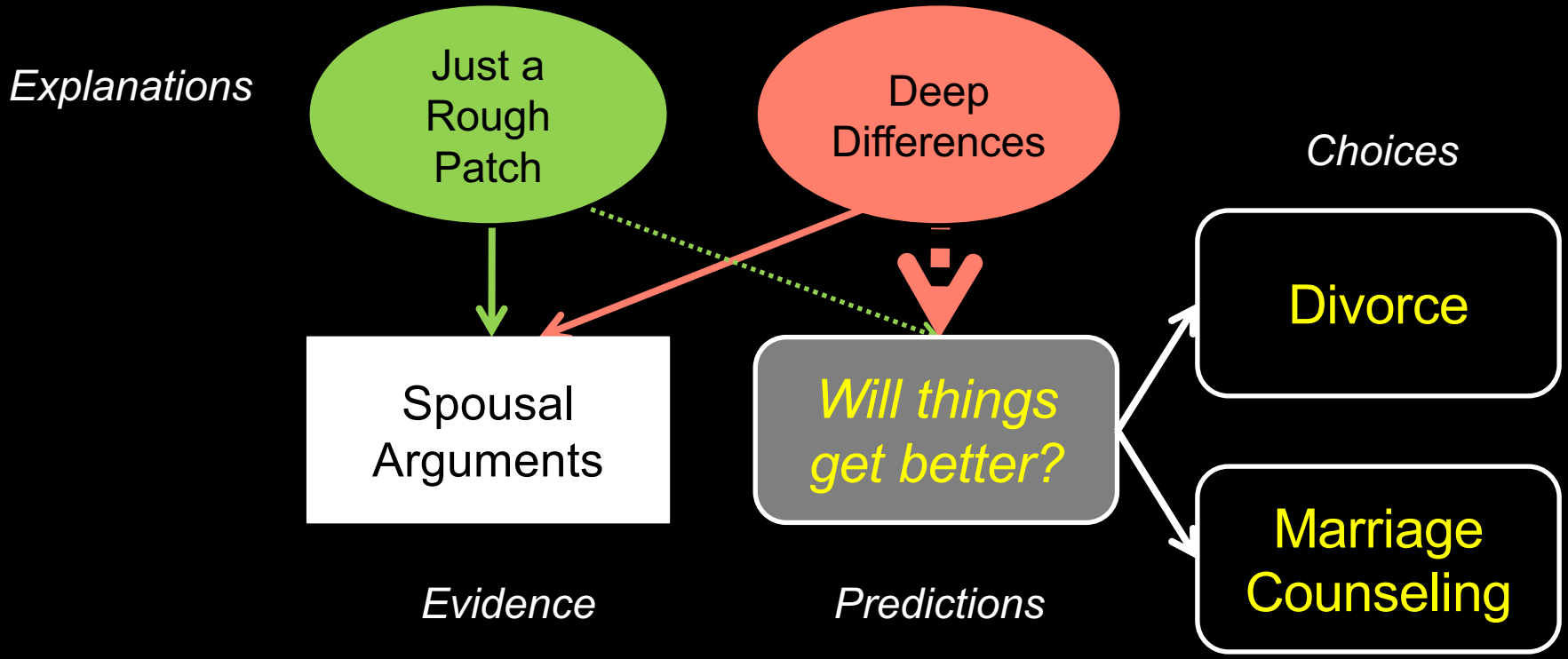
- If not, this will produce market failures
  - *We need to understand the reputational incentives*

Theories of moral judgment

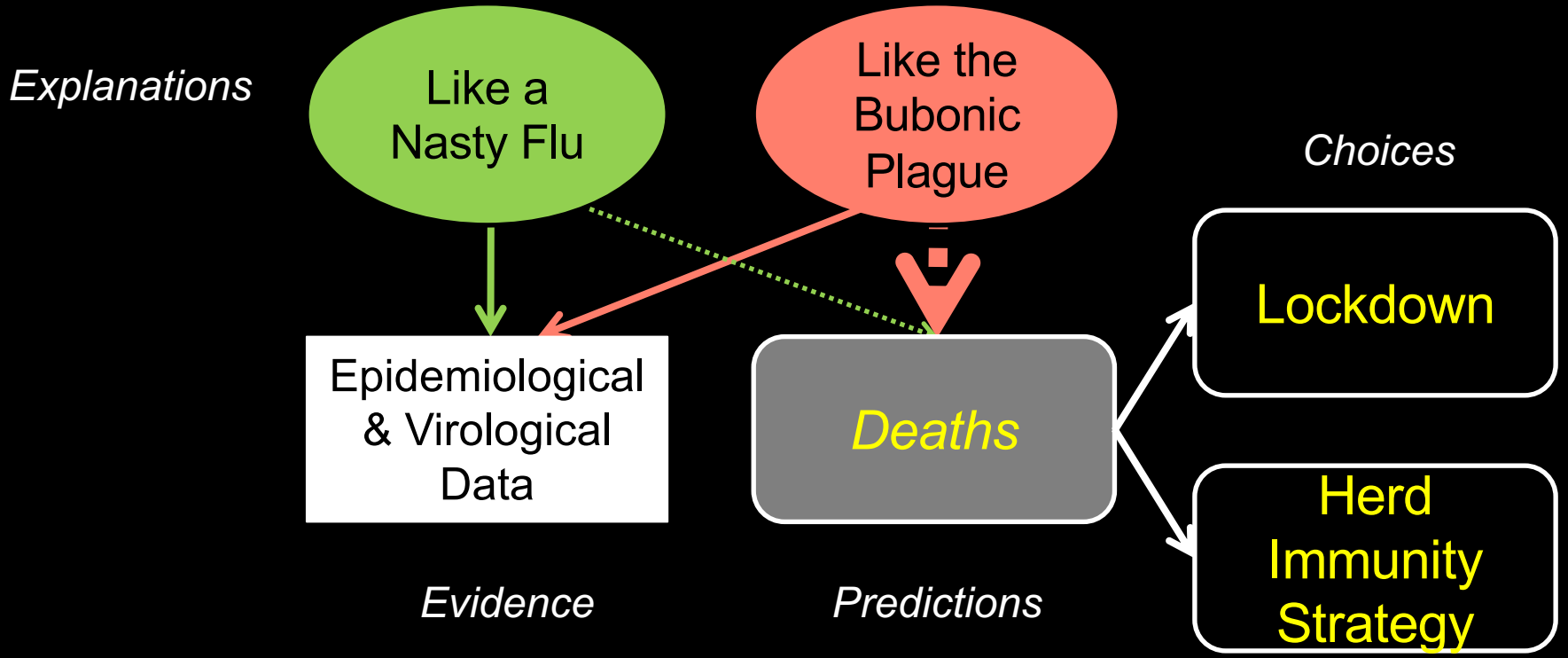
- Traditional dichotomy: Utilitarianism vs. deontology
  (Baron & Ritov, 2009; Conway & Gawronski, 2013; Greene et al., 2008; among many others)

- Newer approach: Character-based accounts
  (Goodwin et al., 2014; Uhlmann et al., 2015)
  - Acts are praiseworthy/blameworthy to the extent they provide positive/negative diagnostic information about *moral character*
  - Evolutionary grounding: *Reputation-tracking* (Nowak & Sigmund, 2005)
  - Cognitive grounding: *Sense-making*

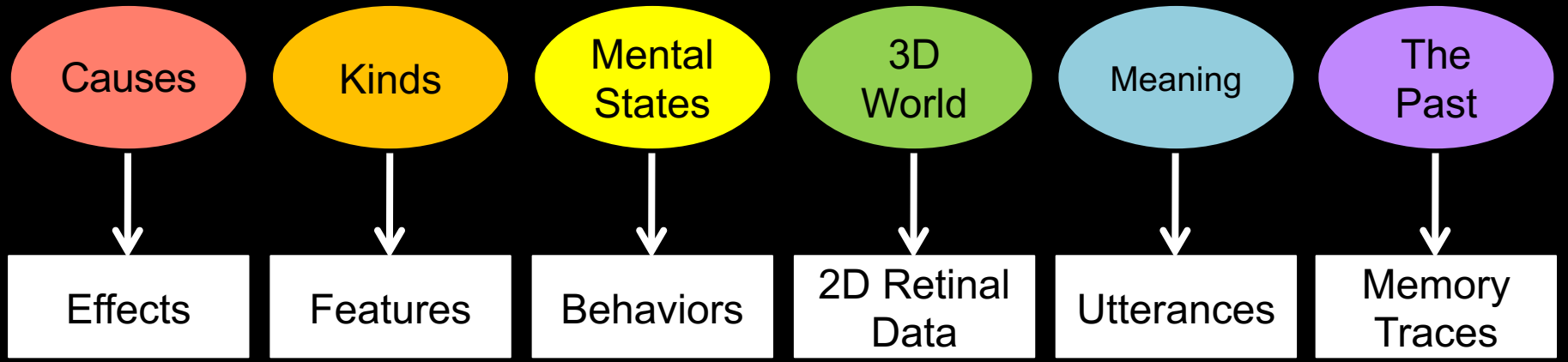
Sense-making problems are ubiquitous in everyday life…



Sense-making problems are ubiquitous in everyday life…

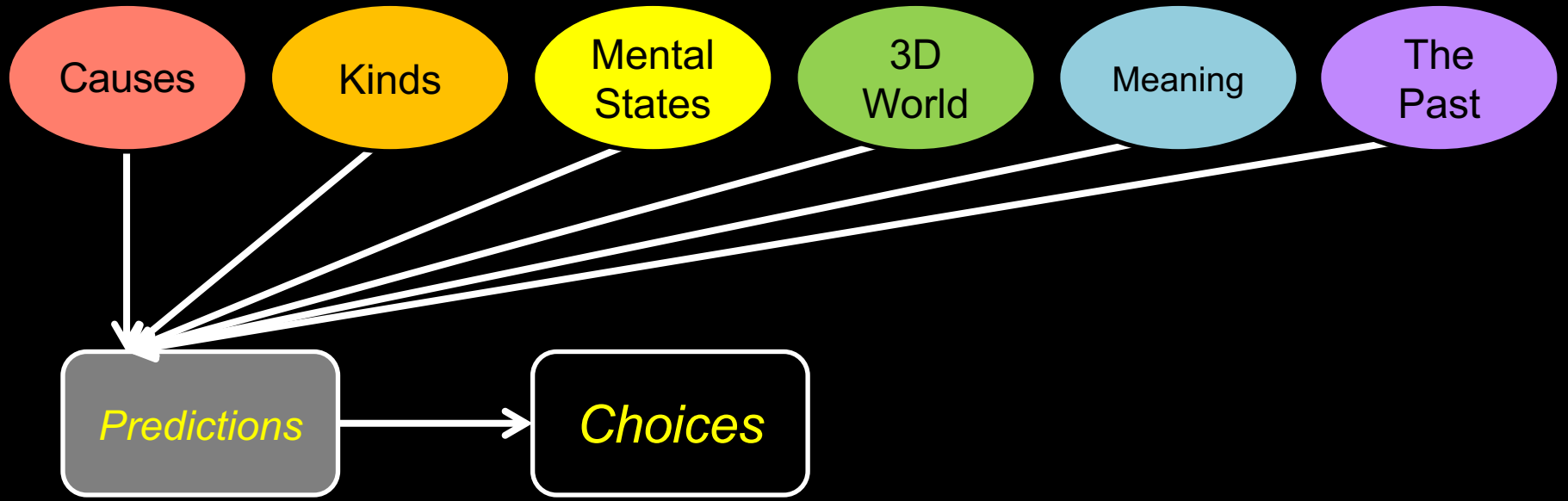


…and much of our minds are devoted to solving them…



Fodor & Pylyshyn (1981); Lombrozo (2016); Murphy & Medin (1985); Gopnik & Wellman (1992); Grice (1989); Johnson & Sherman (1990); Von Helmholtz (1867)

…because their solutions govern our actions.



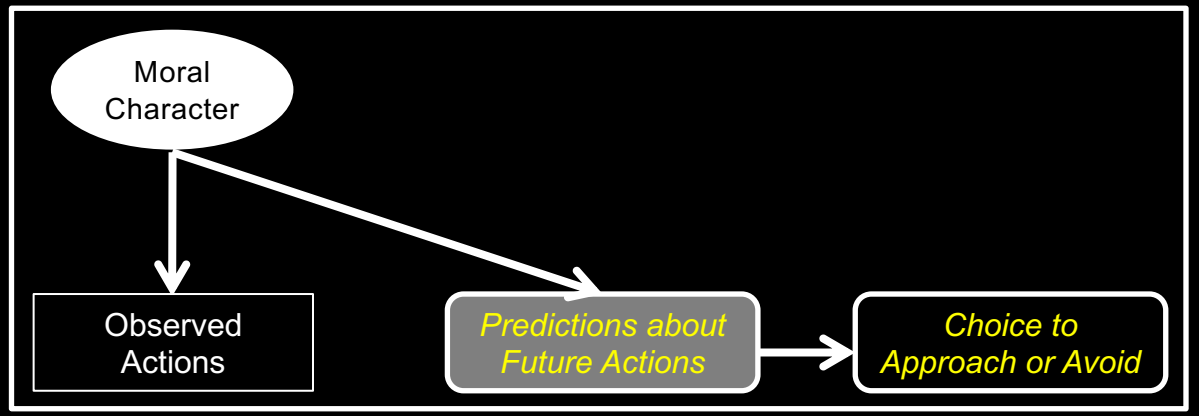
Anderson (1990); Malt et al. (1995); Murphy & Ross (1994); Sloman (2005)

‘Cognition as sense-making’ view

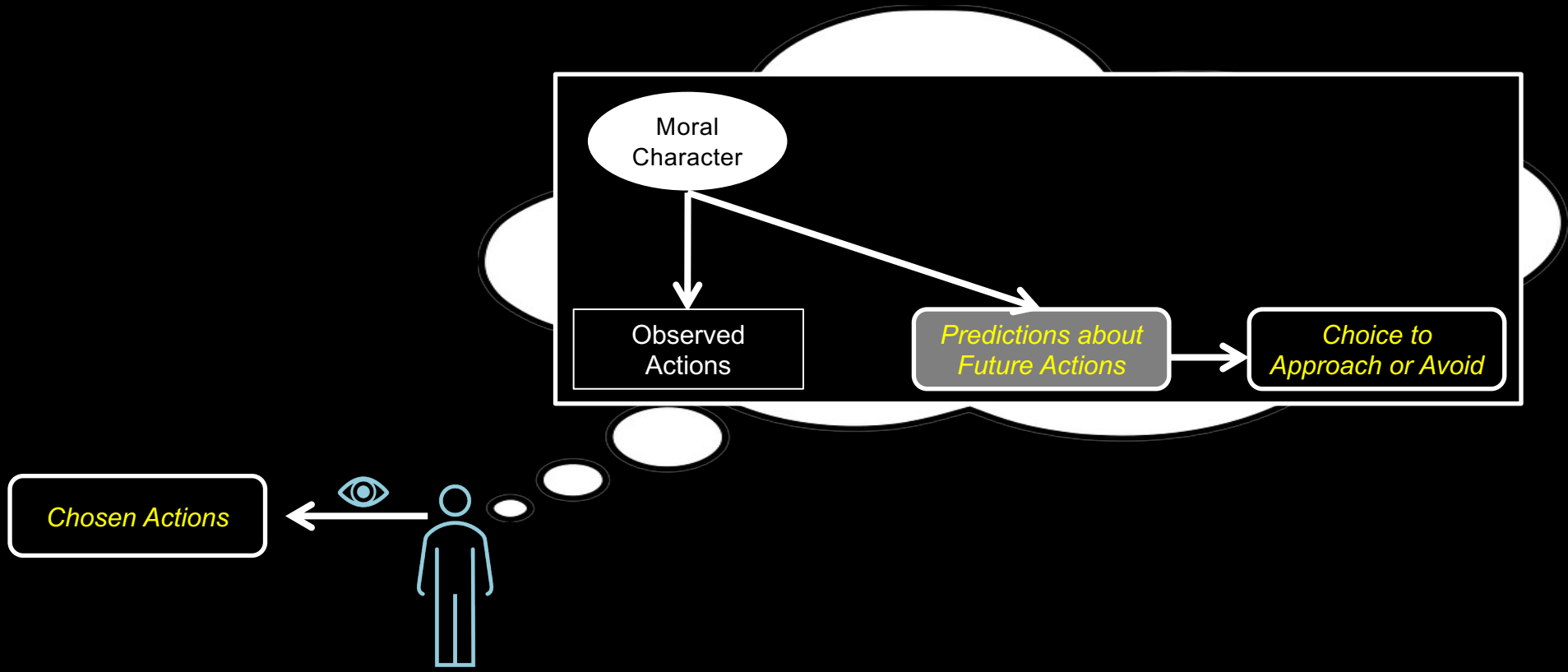
1. Sense-making requires solving *seemingly impossible problems*
2. Sense-making relies on *fallible yet sensible principles*
3. These principles are used *across cognition*
4. Sense-making has an *affective phenomenology*

Johnson, Bilovich, & Tuckett (in press). Conviction narrative theory: A theory of choice under radical uncertainty. *Behavioral & Brain Sciences*.

Moral *judgment* as explanatory inference



Moral *action* as explanatory signaling



Three principles?

- *Benefit principle*: Maximize benefits, not sacrifice
  Part 1: Dimensions of altruism

- *Specialization principle*: Seek your comparative advantage
  Part 2: Time and money donations

- *Offsetting principle*: Balance costs and benefits
  Part 3: Moral accounting

Three principles?

- *Benefit principle*: Maximize benefits, not sacrifice
  Part 1: Dimensions of altruism

- *Specialization principle*: Seek your comparative advantage
  Part 2: Time and money donations

- *Offsetting principle*: Balance costs and benefits
  Part 3: Moral accounting

Why do we admire altruists?

…because their acts produce social benefits?

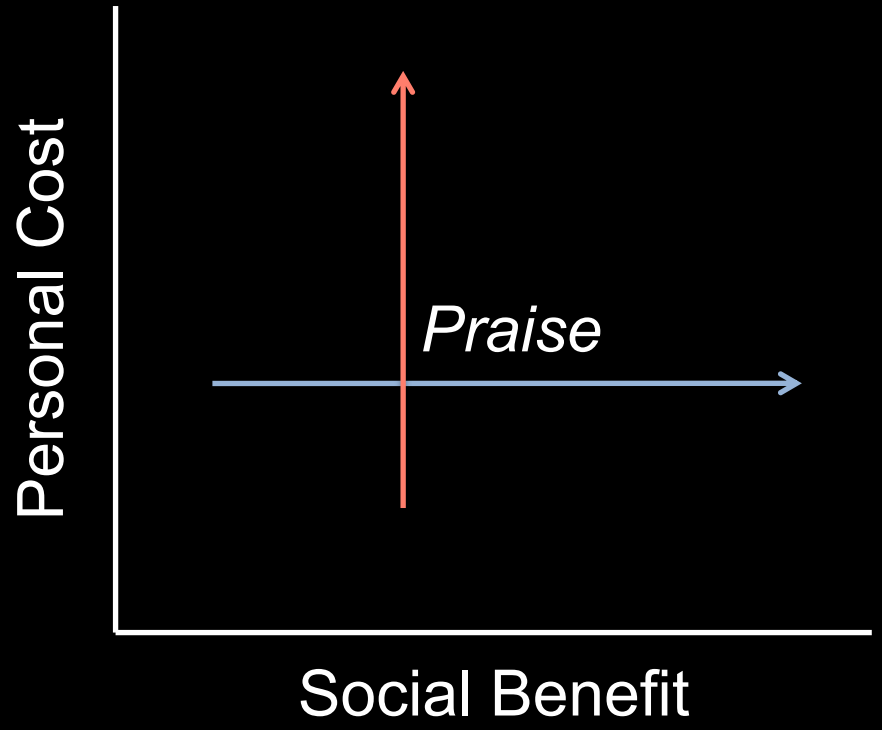
– Utilitarian judgments

…because their acts require personal costs?

– Under direct control

– Easier to observe

– Hard to "fake"



Part 1: Studies

- Do we praise based on costs or benefits?
- Character inferences about corporate philanthropy?

- Blocking character inferences?
- Can people use benefits to *infer* costs?
- Do people care about benefits parochially?

Johnson (working paper). *Dimensions of altruism.*
Shine, Simonyan, & Johnson (in prep). *Do consumers care how effective CSR initiatives are?*

Do we praise based on costs or benefits?

Julia decided to make a donation to charity. She donated *[$20 / $200 / $2000*] to a charity focused on international health. Her donation was used to cure [*a child's / 10 children's*] blindness in Ethiopia.

Rob decided to make a donation to charity. He donated *[$12.50 / $125 / $1250*] to a charity focused on disaster relief. His donation was used to provide basic shelter to [*10 / 100*] people for one month after a hurricane in Guatemala.

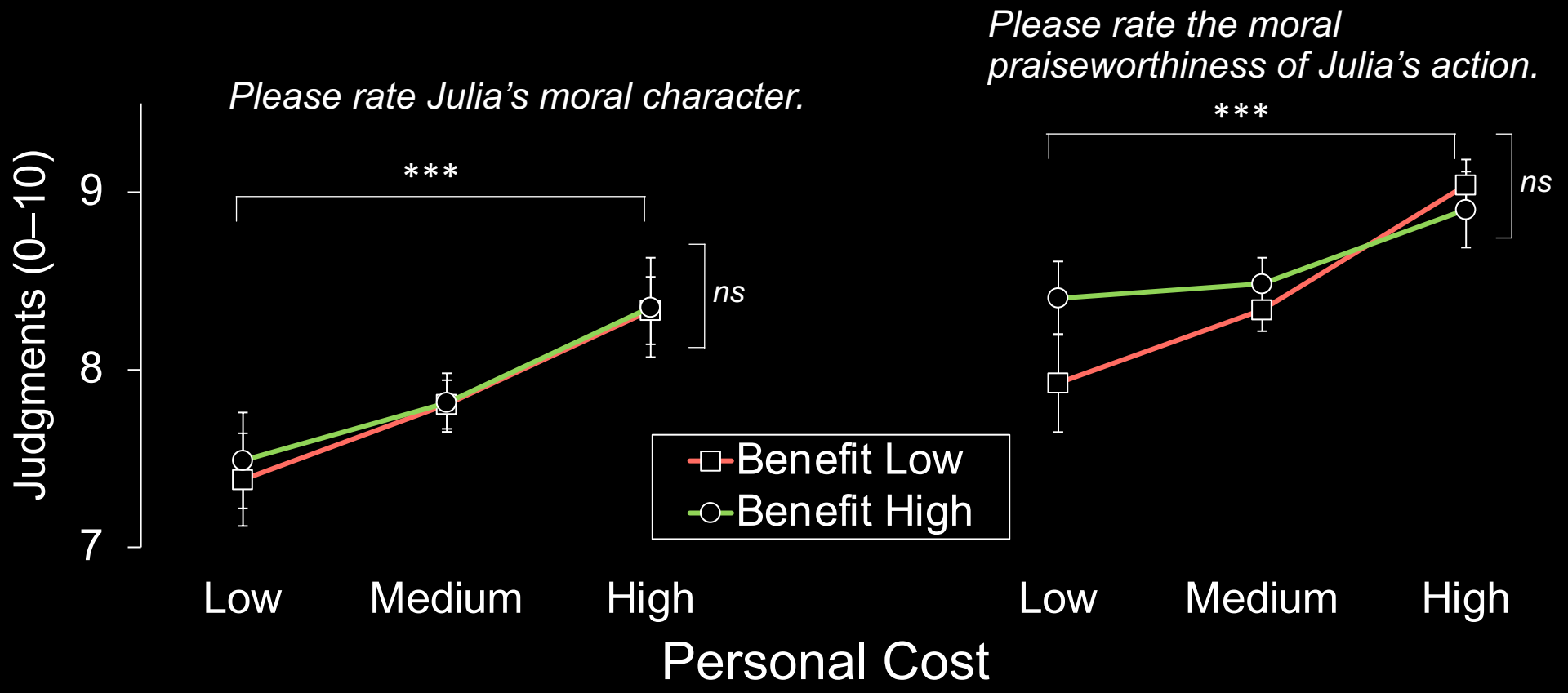
Design: 2 (Low vs High Benefits) x 3 (Low vs Medium vs High Costs) [between]

Items: 1 of 4

Measures: Character, Praise

Participants: *N*=600 MTurk workers (original + replication study)

Do we praise based on costs or benefits?



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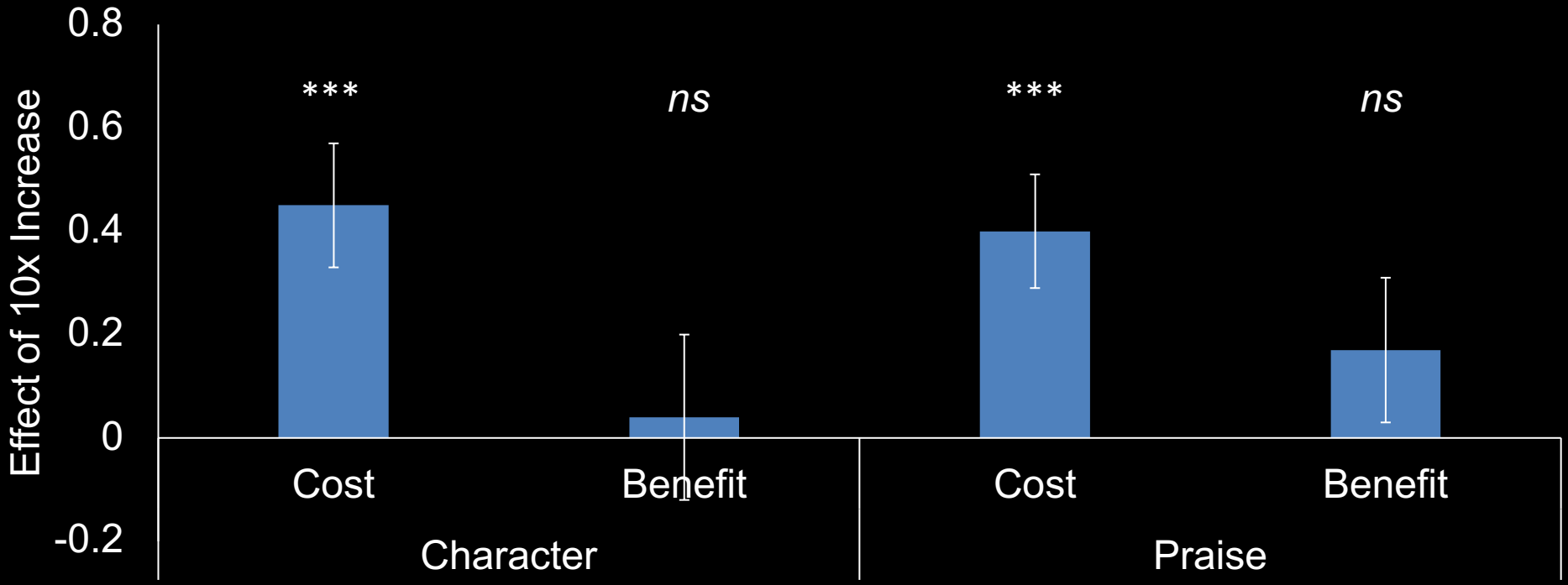


Bars represent fixed effect coefficients for condition in a multilevel model with random intercepts for participant, item, and study (original or replication)

Part 1: Studies

- Do we praise based on costs or benefits?
- Character inferences about corporate philanthropy?

- Do people care about benefits parochially?
- Blocking character inferences?
- Can people use benefits to *infer* costs?

Character inferences about corporate philanthropy?

Habbad Enterprises is a small business with 30 employees based in Lorain, OH.

Habbad Enterprises decided to make a donation to charity. They donated [*$3,000 / $90,000*] to a charity focused on international health. Their donation was used to prevent malaria in [*2 / 60*] small Nigerian villages.

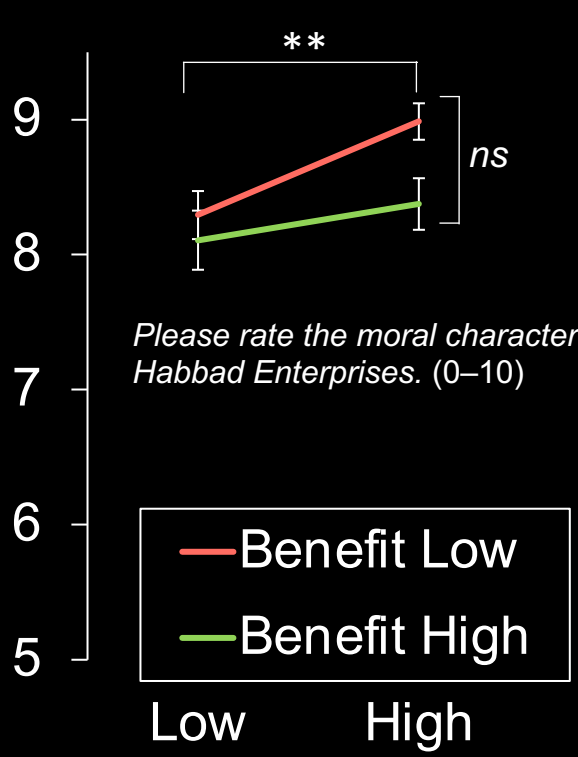
Design: 2 (Low vs High Benefits) x 2 (Low vs High Costs) [between]

Items: 1 of 4

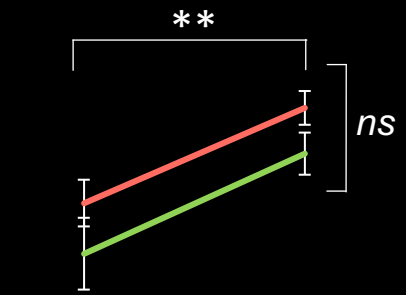
Measures: Character, Praise, Purchase Intention

Participants: *N*=300 MTurk workers

Character inferences about corporate philanthropy?

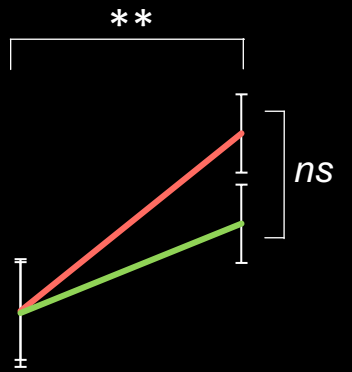


Please rate the moral character of Habbad Enterprises. (0–10)



Please rate the moral praiseworthiness of Habbad Enterprises' action (0–10)

Does this information change your willingness to purchase products from Habbad Enterprises? (0 = no more likely; 10 = much more likely)

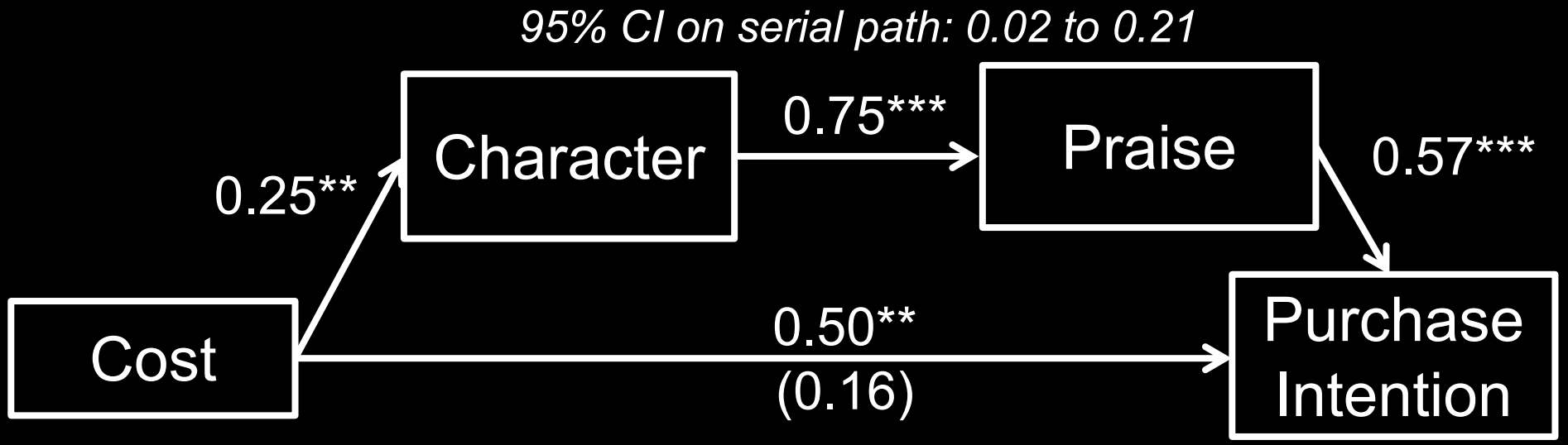


Low High

Low High

Cost

Character inferences about corporate philanthropy?



Part 1: Studies

- Do we praise based on costs or benefits?
- Character inferences about corporate philanthropy? Yes

- Do people care about benefits parochially?
- Blocking character inferences?
- Can people use benefits to *infer* costs?

Do people care about benefits parochially?

Rob decided to make a donation to charity. He donated [*$12.50 / $125 / $1250*] to a charity focused on disaster relief in the United States. His donation was used to provide basic shelter to [*10 / 100*] people for one month after a hurricane in South Carolina.

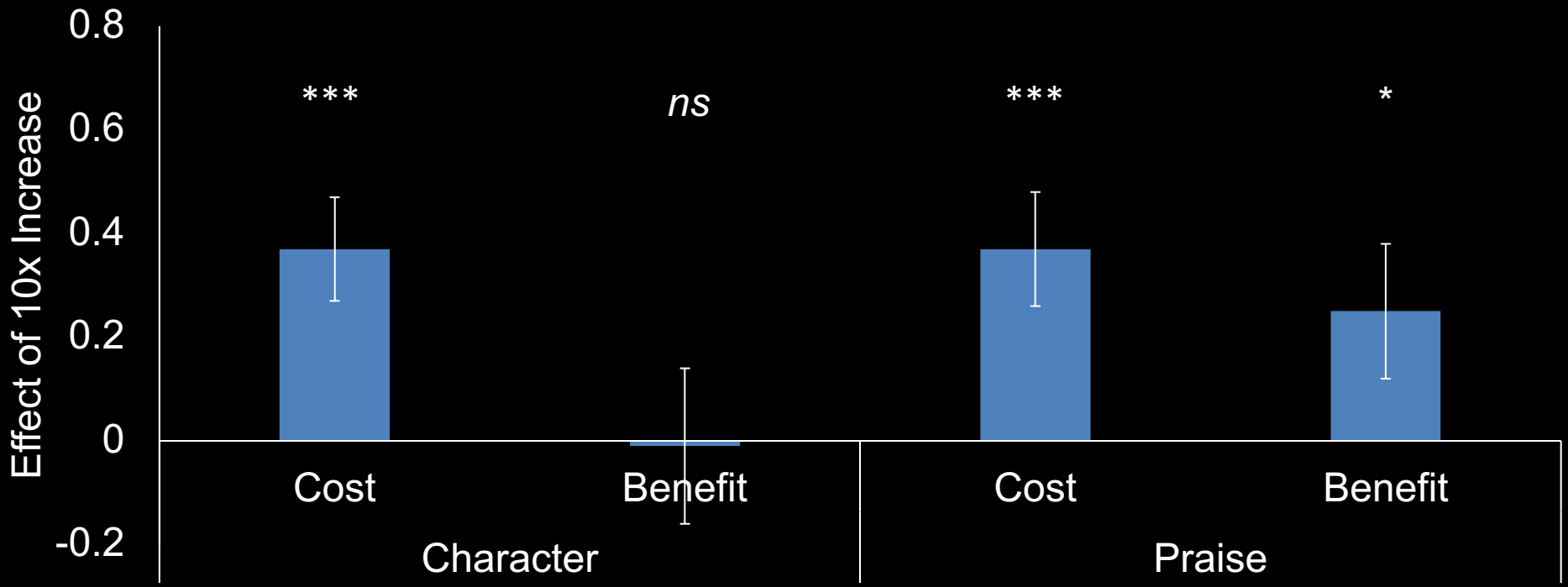
Design: 2 (Low vs High Benefits) x 3 (Low vs Medium vs High Costs) [between]

Items: 1 of 4

Measures: Character, Praise

Participants: *N*=599 MTurk workers (original + replication study)

Do people care about benefits parochially?



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Part 1: Studies

- Do we praise based on costs or benefits?
- Character inferences about corporate philanthropy? Yes

- Do people care about benefits parochially? Maybe a little
- Blocking character inferences?
- Can people use benefits to *infer* costs?

Blocking character inferences?

Rob works as a receptionist, earning about $31,000 per year. He donates about 30% of his salary each year to a variety of charitable causes.

One of the donations Rob decided to make this year was *[$12.50 / $125 / $1250*] to a charity focused on disaster relief. His donation was used to provide basic shelter to [*10 / 100*] people for one month after a hurricane in Guatemala.

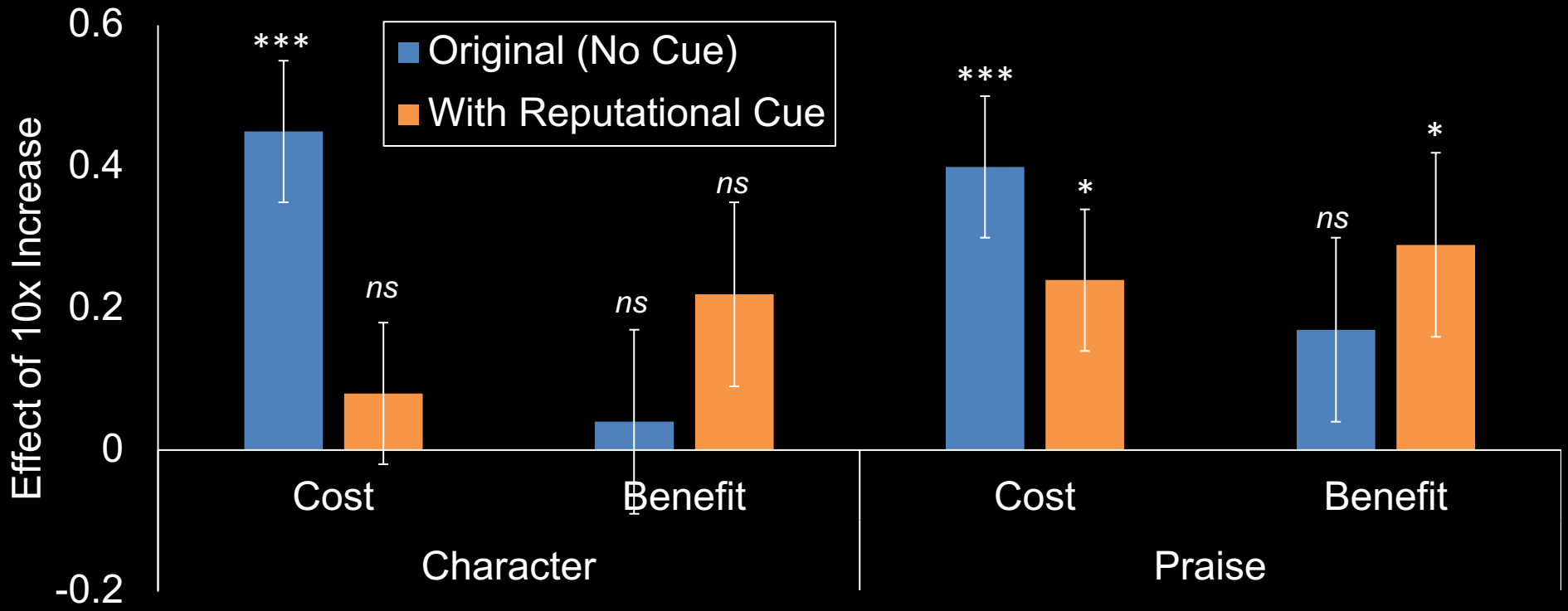
Design: 2 (Low vs High Benefits) x 3 (Low vs Medium vs High Costs) [between]

Items: 1 of 4

Measures: Character, Praise

Participants: *N*=600 MTurk workers (original + replication study)

Blocking character inferences?



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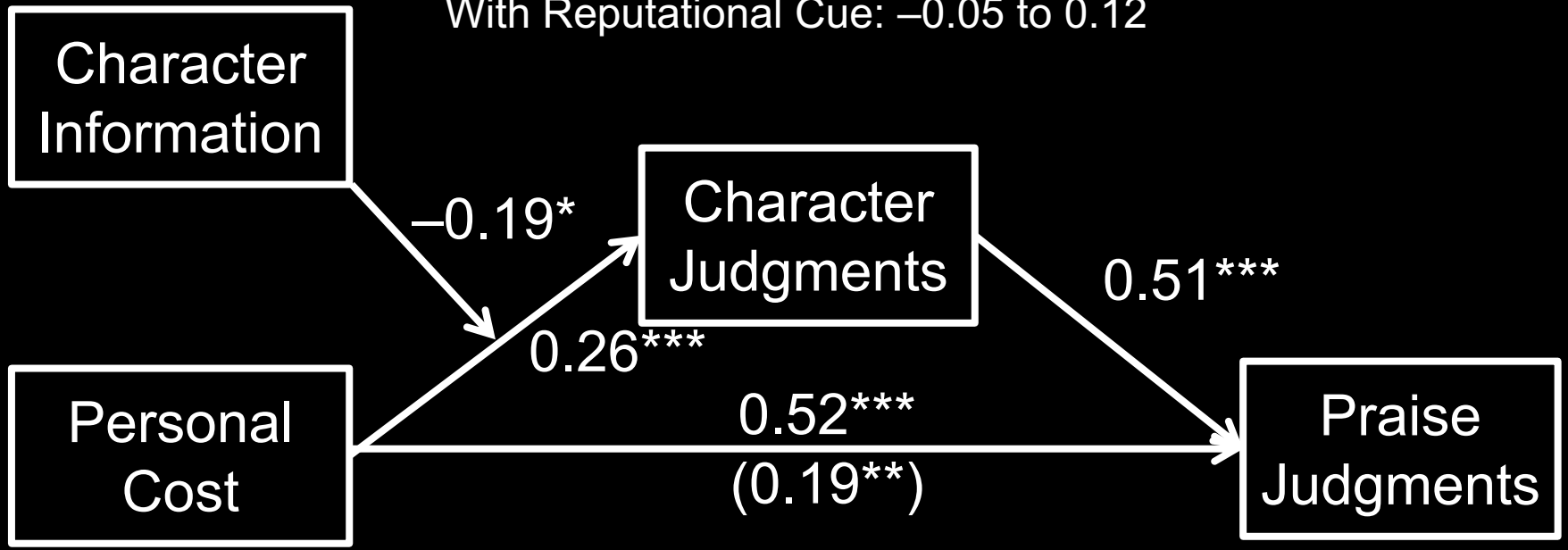
Blocking character inferences?

95% CIs on indirect path:
Original (No Cue): 0.10 to 0.36
With Reputational Cue: –0.05 to 0.12



Part 1: Studies

- Do we praise based on costs or benefits?
- Character inferences about corporate philanthropy? Yes

- Do people care about benefits parochially? Maybe a little
- Blocking character inferences? Shifts attention from costs
- Can people use benefits to *infer* costs?

Can people use benefits to *infer* costs?

Rob decided to make a donation to a charity focused on disaster relief. His donation was used to provide basic shelter to [*10 / 100*] people for one month after a hurricane in Guatemala.

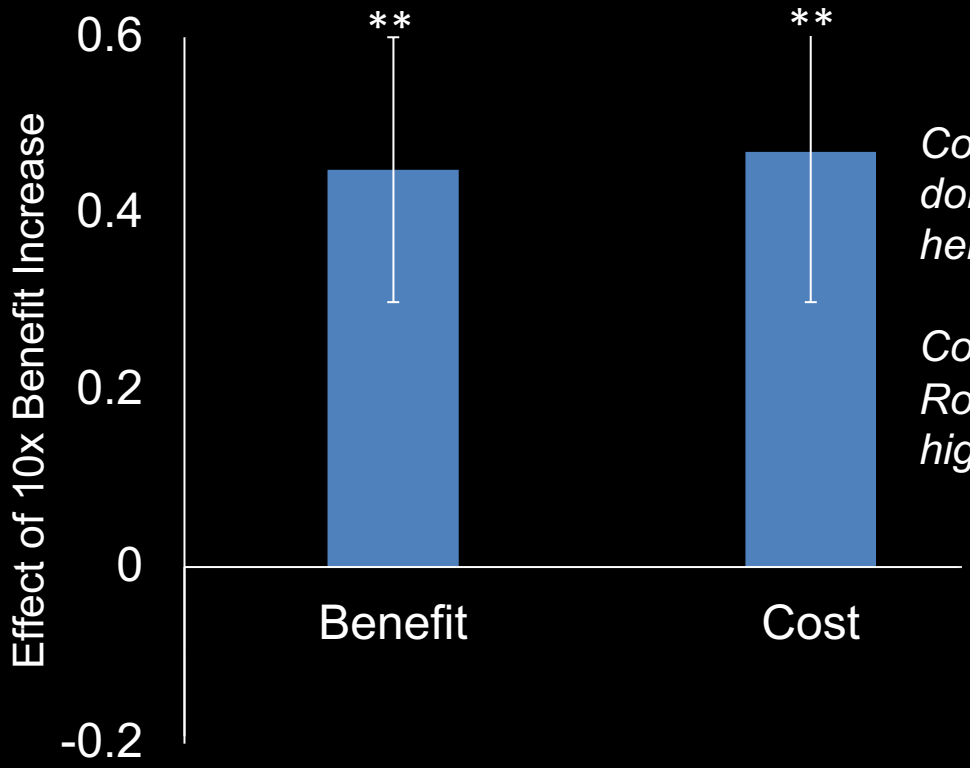
Design: 2 (Low vs High Benefits) [between]

Items: 1 of 4

Measures: Benefit, Cost, Character, Praise

Participants: *N*=600 MTurk workers

Can people use benefits to *infer* costs?

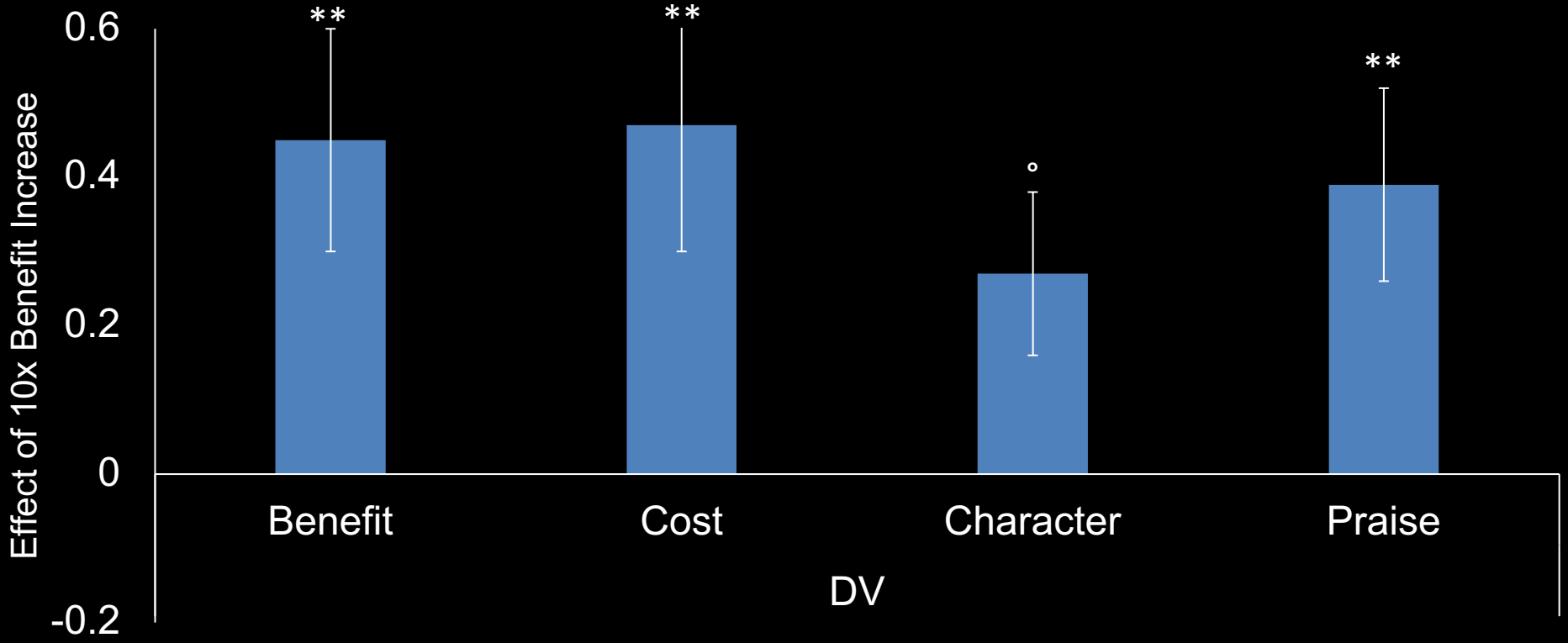


Compared to other donations, do you think Rob's donation was relatively effective or ineffective in helping people? (0–10)

Compared to other donations, do you think that Rob's donation required him to make a relatively high or low personal sacrifice? (0–10)

Bars represent fixed effect coefficients for condition in a multilevel model with random intercepts for participant and item.

Can people use benefits to *infer* costs?



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Part 1: Studies

- Do we praise based on costs or benefits?
- Character inferences about corporate philanthropy? Yes

- Do people care about benefits parochially? Maybe a little
- Blocking character inferences? Shifts attention from costs
- Can people use benefits to *infer* costs? Yes

Part 1: Further Results

- Effectiveness information used more:
  - When effectiveness information is more comparable
  - For judgments of “warm glow” (1st person) vs reputation (3rd person)
  - When effectiveness signals competence
    - For donations of time (rather than money)
    - For large (rather than small) companies
    - When companies are highly involved in the implementation

Anatomy of a Market Failure: Post Mortem, Part 1

- Reputation-signaling is *not* aligned with utilitarianism
  - Costs weighed highly; benefits weighed minimally
  - Incentives similar for individuals and firms
- What can we do?
  - Prioritizing domestic donations unlikely to help
  - Making benefits more salient than costs
  - Encouraging comparison shopping among charities (e.g., Givewell)

Three principles?

- *Benefit principle*: Maximize benefits, not sacrifice
  Part 1: Dimensions of altruism

- *Specialization principle*: Seek your comparative advantage
  Part 2: Time and money donations

- *Offsetting principle*: Balance costs and benefits
  Part 3: Moral accounting

How can Gordon do the most good?

<u>Donating time</u>

Gordon:
– Takes a week off
– Helps build homes
– Roofs 1/10 of a house

<u>Donating money</u>

Gordon:
– Gives 1 week's salary
– Hires a team of carpenters…
… who roof 10 houses

The power of specialization and trade

How can Gordon maximize his reputation?

- Time is more central to self-identity compared to money (Gino & Mogilner, 2014; Mogilner & Aaker, 2009; Reed et al., 2007, 2016; Shaddy & Shah, 2018)

- Thus, even equating objective costs, the *subjective* costs of time-donation would be seen as greater, signaling greater emotional investment

- Since emotional investment is a character cue (Barasch et al., 2014), time-donors should be seen as more praiseworthy

Part 2: Studies

- Do donors of time or money receive more moral credit?
- How does signaling translate into choices?
- Reframing money as time?

Johnson & Park (2021). Moral signaling through donations of money and time. *OBHDP*.

Do donors of time or money receive more moral credit?

Megan and Kate both work in Columbus, Ohio, and earn about $70,000 per year.

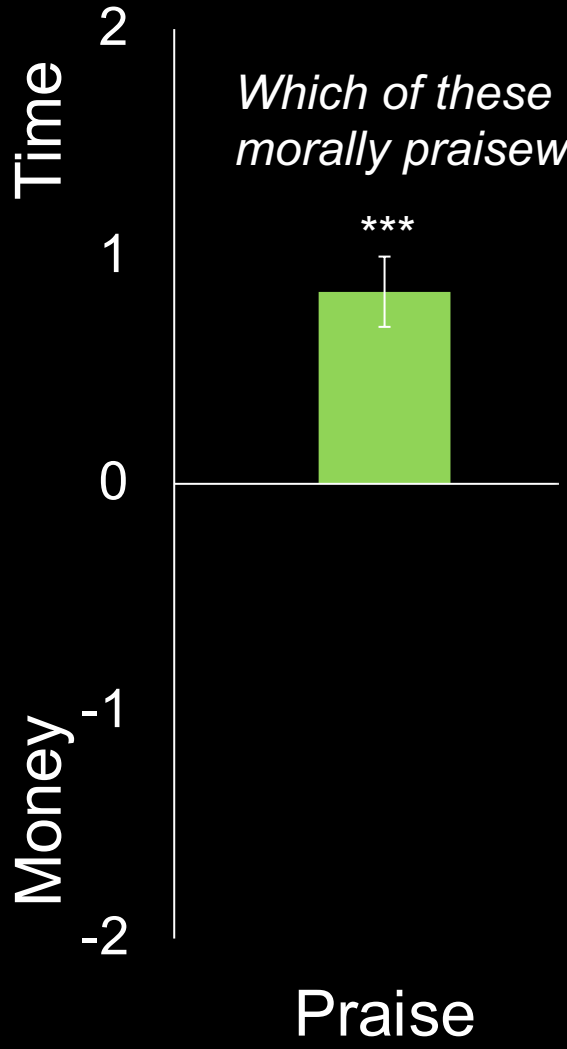
– Megan volunteered for one week with Build a Dream, a charity that transports people to Nepal to build houses for villagers.
– Kate donated $1350 to Care Builders, a charity that hires local carpenters to build houses for villagers in Nepal.

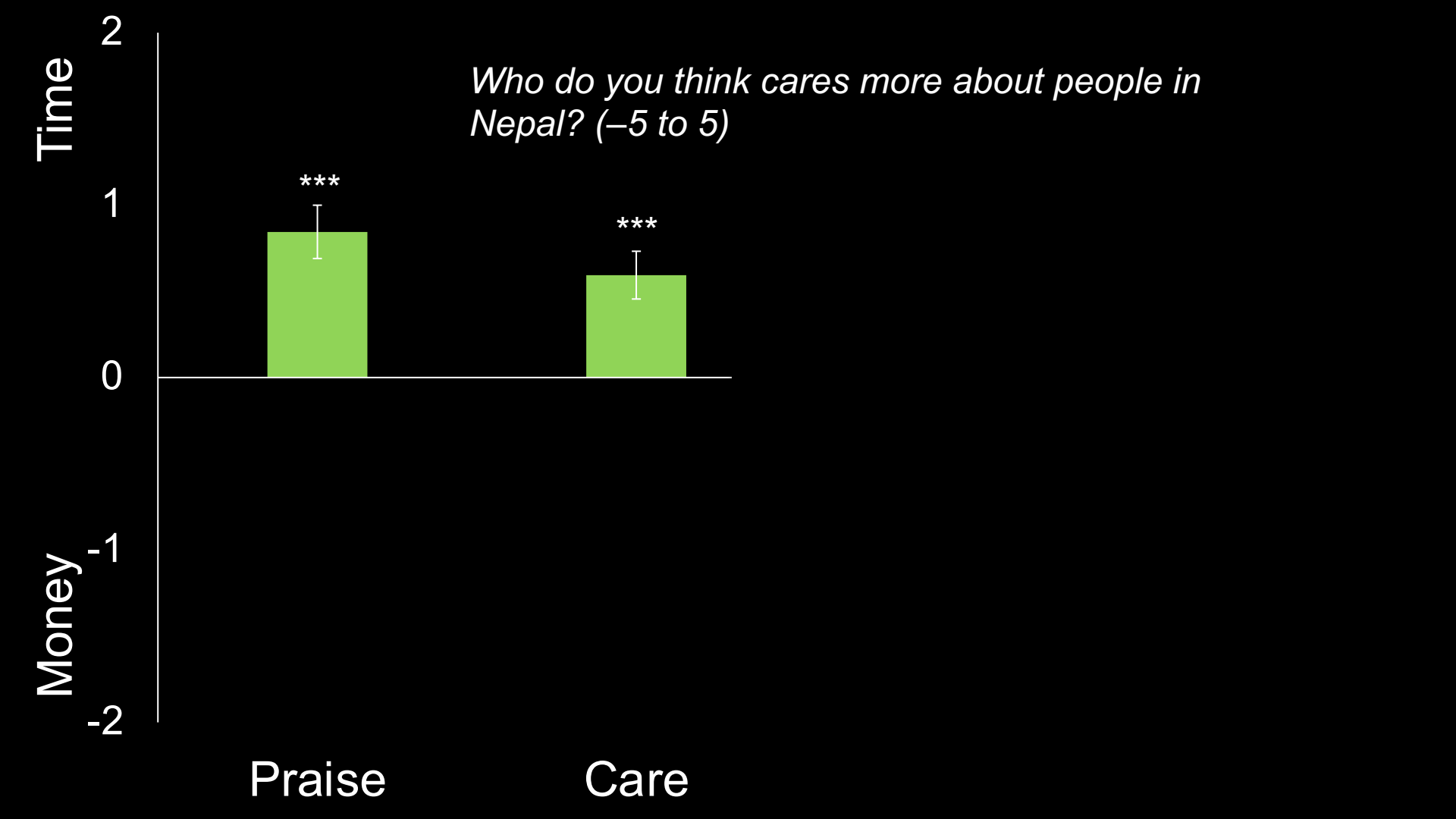
Design: Within-subjects

Measures: Praise, Emotional Investment, Character, Benefit

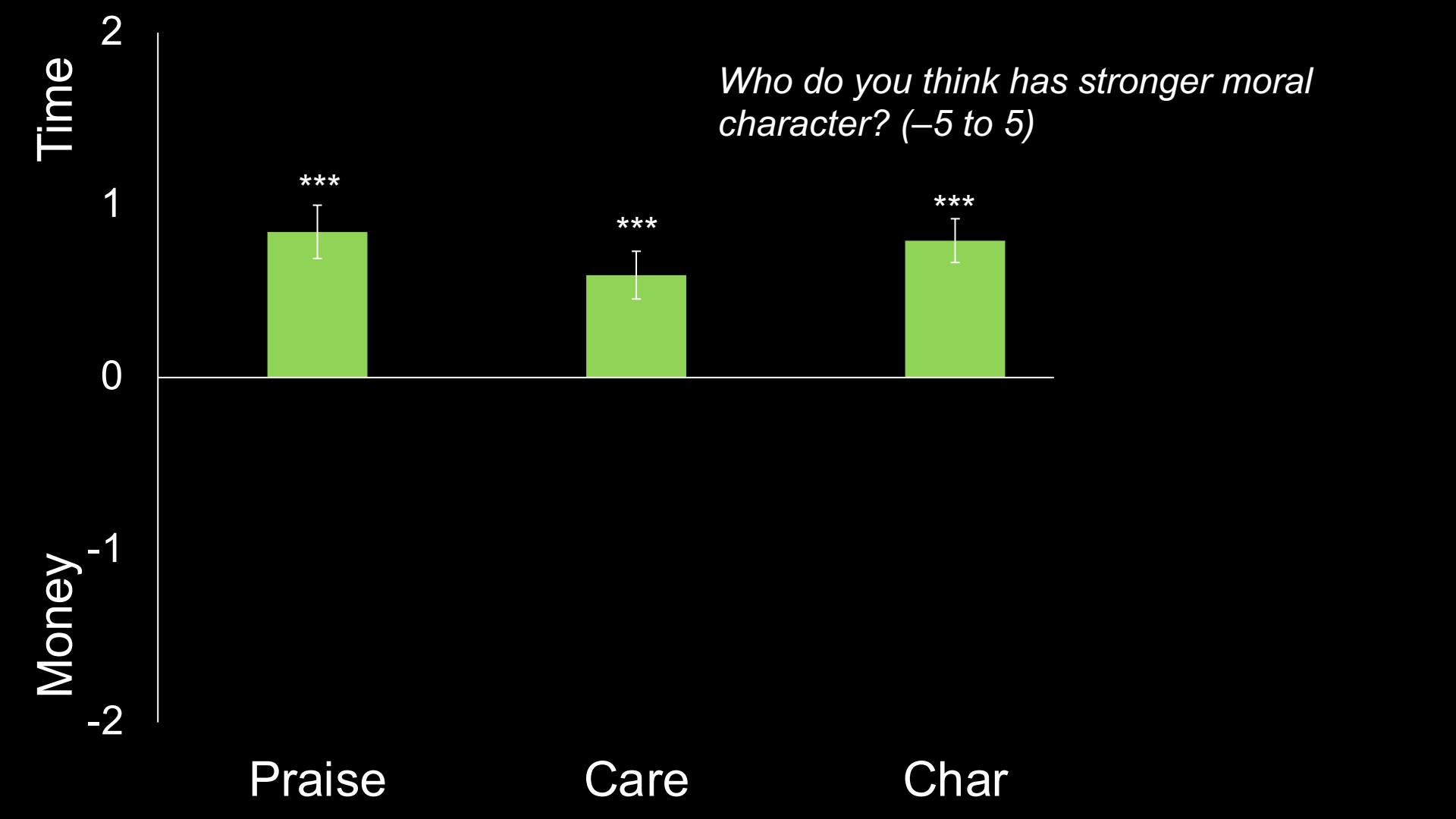
Items: 4 of 4

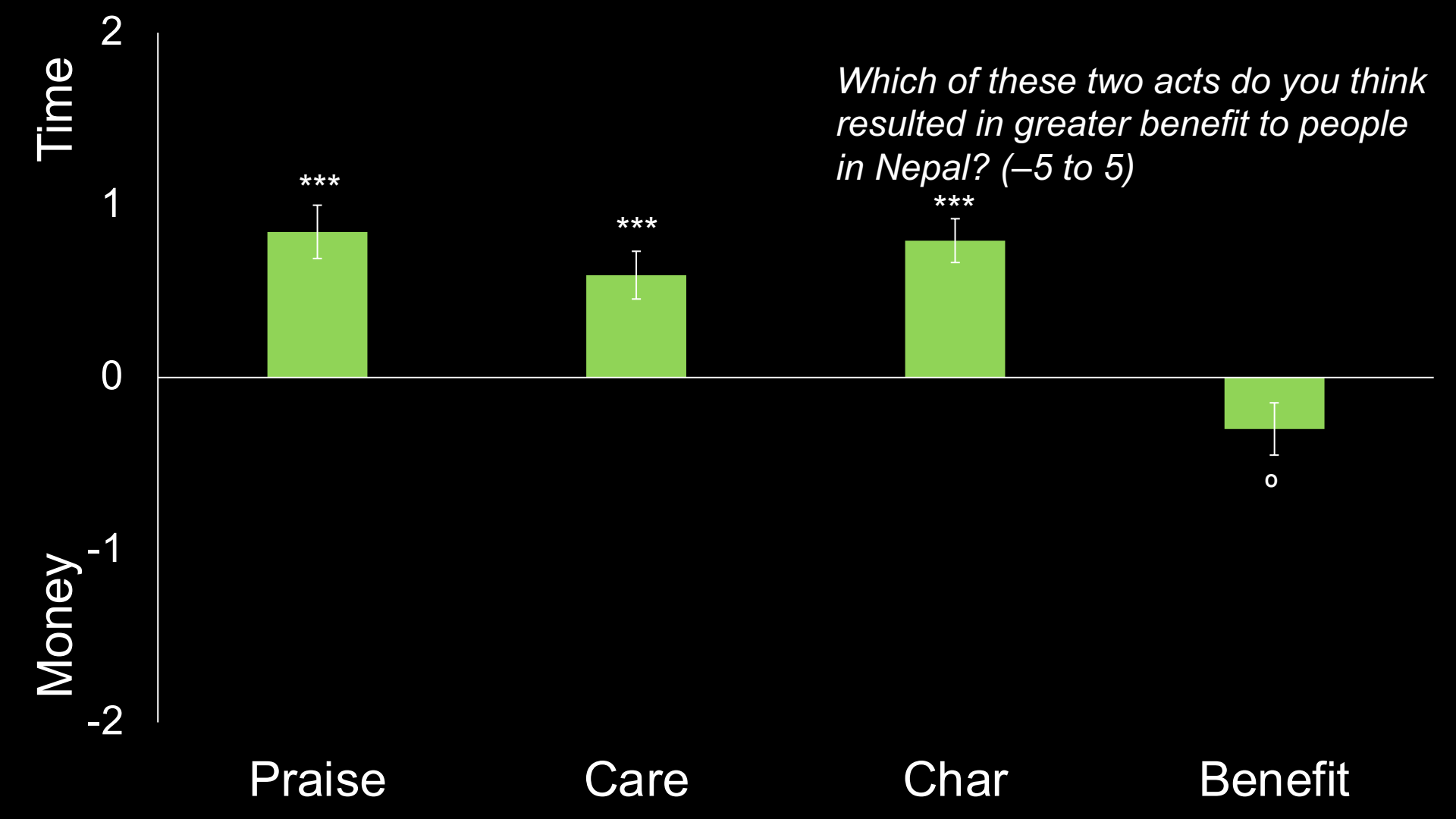
Participants: *N*=200 MTurk workers


Which of these two acts do you think was more morally praiseworthy? (–5 to 5)
***
2
1
0
-1
-2
Time
Money
Praise



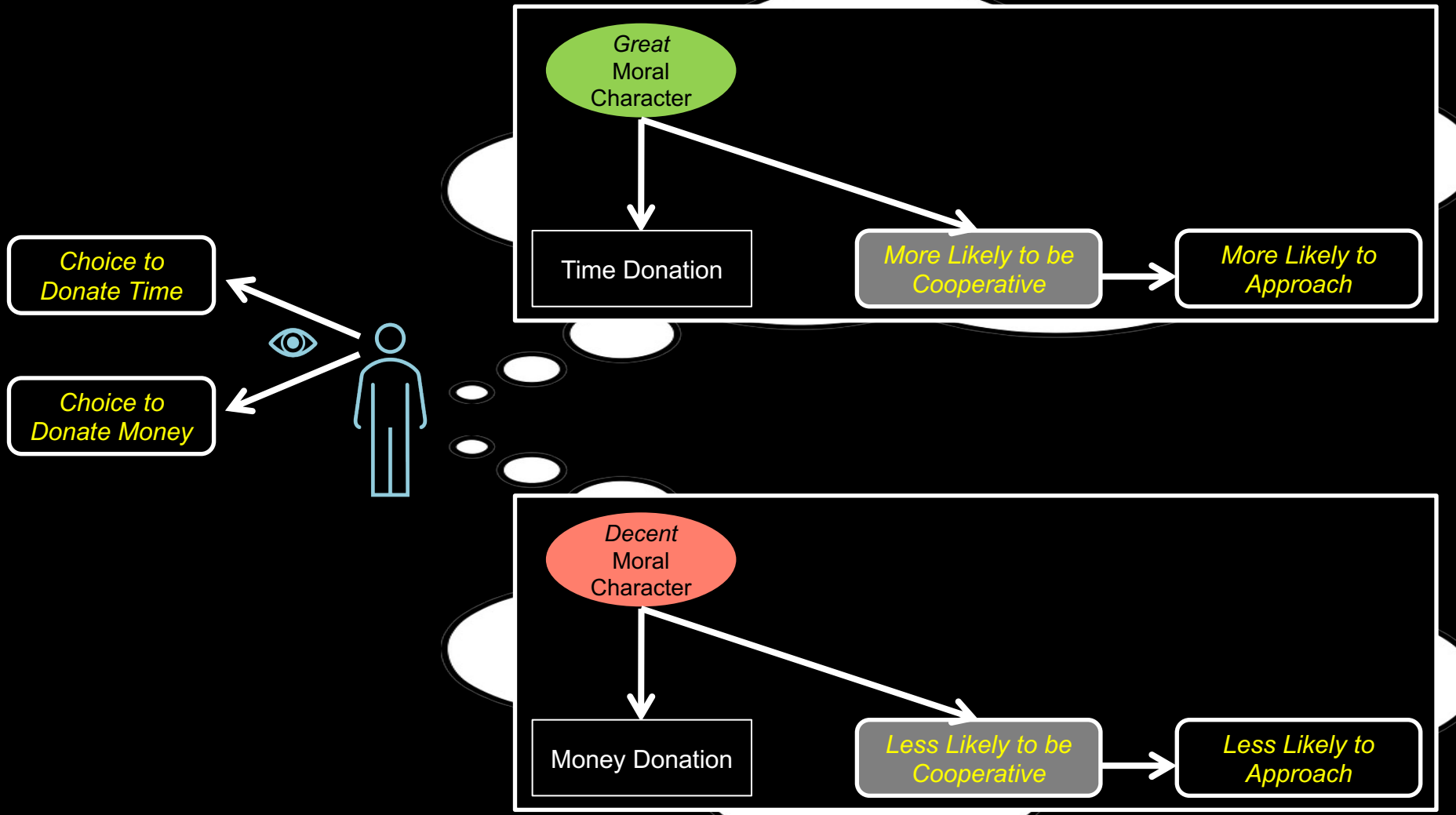
Who do you think cares more about people in Nepal? (–5 to 5)


Time
Money
2
1
0
-1
-2
***
***
***
Praise
Care
Char
Who do you think has stronger moral character? (–5 to 5)

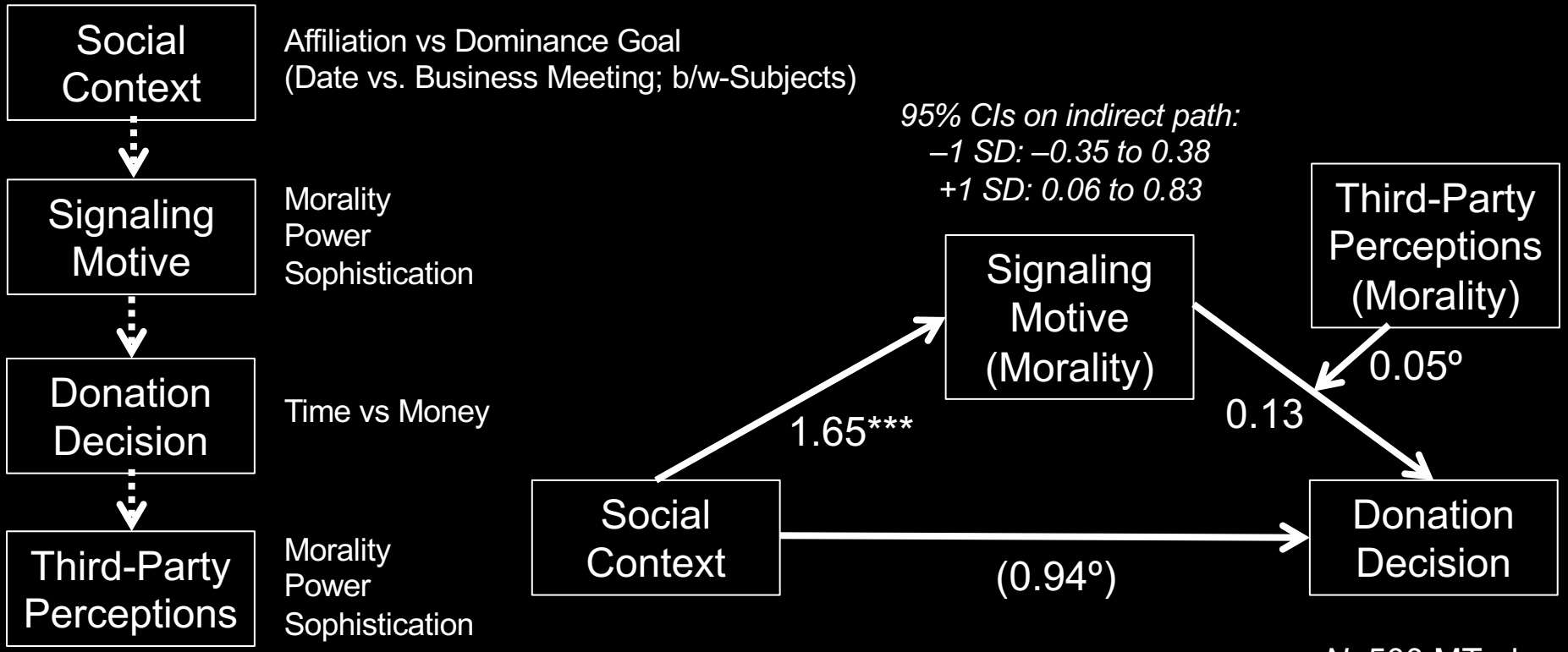

Time
Money
2
1
0
-1
-2
***
***
***
o
Which of these two acts do you think resulted in greater benefit to people in Nepal? (–5 to 5)
Praise
Care
Char
Benefit

Part 2: Studies

- Do donors of time or money receive more moral credit?
- How does signaling translate into choices?
- Reframing money as time?


Great
Moral
Character
Time Donation
More Likely to be
Cooperative
More Likely to
Approach
Choice to
Donate Time
Choice to
Donate Money
Decent
Moral
Character
Money Donation
Less Likely to be
Cooperative
Less Likely to
Approach

Time vs money donations: Moral character *signaling*



Part 2: Studies

- Do donors of time or money receive more moral credit?
- How does signaling translate into choices?
  Donors sensitive to social context and their own judgments of signals
- Reframing money as time?

Reframing money as time?

Megan and Kate both work in Columbus, OH and earn $20 per hour. They both made contributions to a charity called Build a Dream, which helps build houses for the homeless.

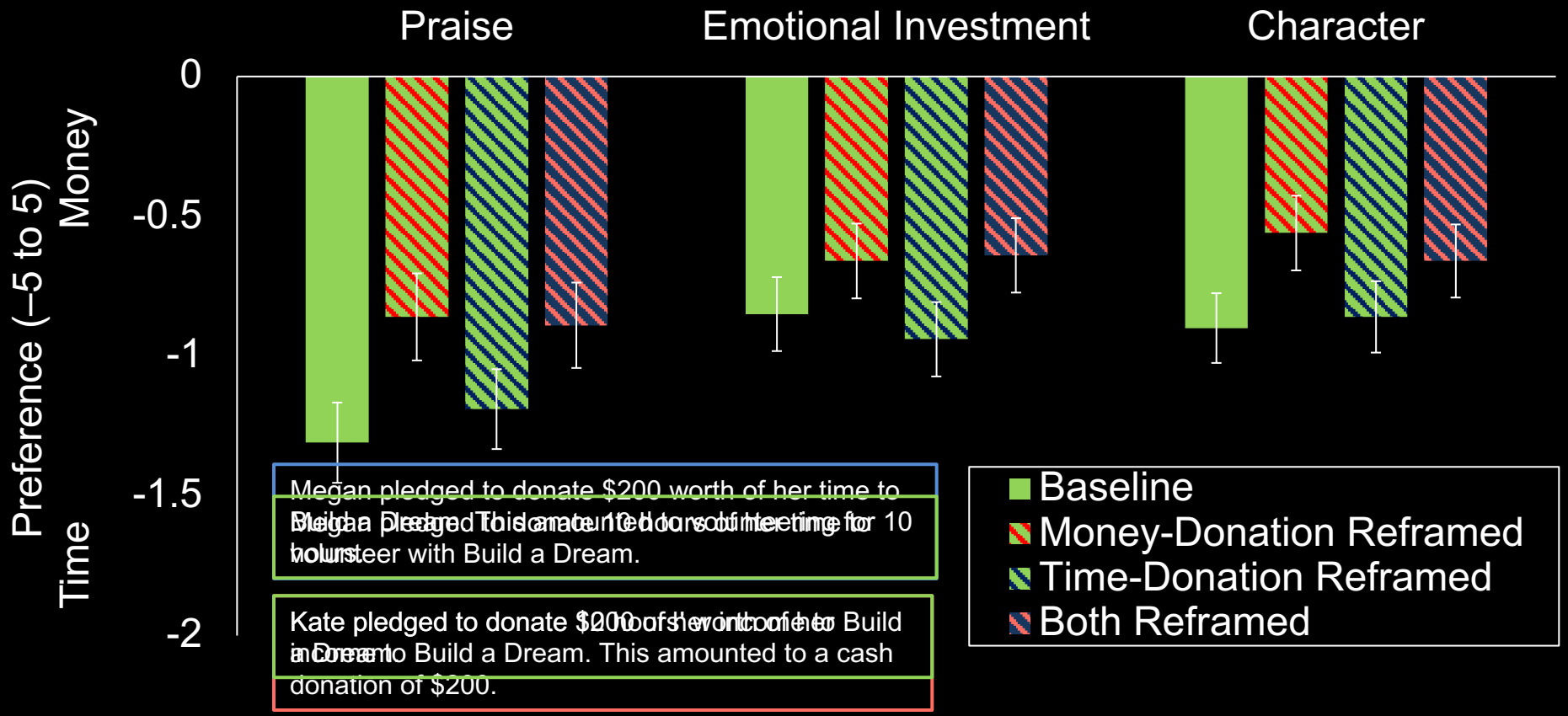
	Default	*Reframed*
Time-Donation	Megan pledged to donate 10 hours of her time to volunteer with Build a Dream.	Megan pledged to donate $200 worth of her time to Build a Dream. This amounted to volunteering for 10 hours.
Money-Donation	Kate pledged to donate $200 of her income to Build a Dream.	Kate pledged to donate 10 hours' worth of her income to Build a Dream. This amounted to a cash donation of $200.

Design: 2x2 within-subjects (Def/Def, Def/Ref, Ref/Def, Ref/Ref) across 4 items

Measures: Praise, Emotional Investment, Character

Participants: *N*=200 MTurk workers

Reframing money as time?



Part 2: Studies

- Do donors of time or money receive more moral credit?
- How does signaling translate into choices?
  Donors sensitive to social context and their own judgments of signals
- Reframing money as time?
  Can attenuate the bias

Part 2: Further Results

- Replication of basic effect
  - Eliciting participants' time/money trade-offs
  - Controlling objective costs and benefits more tightly
  - Effects linked to diffs in "time = self" lay theory (*r*s from .19 to .34)
- Volunteering is a stronger predictor of interpersonal attraction and interest in hiring

Anatomy of a Market Failure: Post Mortem, Part 2

- Reputation-signaling incentives inefficient time donations
  - This happens even though people understand money-donations actually help more people!
- What can be done?
  - Reframing money-donations in terms of time
  - Encourage specialization in volunteering

Three principles?

- *Benefit principle*: Maximize benefits, not sacrifice
  Part 1: Dimensions of altruism

- *Specialization principle*: Seek your comparative advantage
  Part 2: Time and money donations

- *Offsetting principle*: Balance costs and benefits
  Part 3: Moral accounting

We are all saints and sinners

- Business, public policy, and everyday life require us to balance “rights” and “wrongs”

Flight from London to NYC
Adds 0.83 tons of CO_2

5 meals including meat

Avoiding 5 hours of work

Paying to plant 5 trees ($15)
Removes 0.83 tons of CO_2

Donating $4 to prevent animal cruelty

Putting in 5 extra hours

How do people add up rights and wrongs?

- Utilitarian theories
  - People do a cost/benefit trade-off
- Deontological theories
  - People don’t believe moral offsets are possible
- Character-based theories
  - Depends on what information is provided about moral character
  - Predictions can be derived from person perception literature

Part 3: Studies

- What are the rules of moral accounting?
  - Rule 1: Partial offsetting
  - Rule 2: Diminishing sensitivity
  - Rule 3: Temporal asymmetry
  - Rule 4: Act congruency

Johnson & Ahn (2021). Principles of moral accounting. *Cognition*.

Rule 1: *Partial Offsetting*

Equivalent "rights" and "wrongs" do not fully offset

Follows from negativity bias in person perception (Skowronski & Carlston, 1989)

Flight from London to NYC
0.83 tons of CO_2

Paying to plant 5 trees ($15)
Removes 0.83 tons of CO_2

Objective harm neutralized
…but "wrongs" loom larger

Rule 1: *Partial Offsetting*

Harm-Only

Last week, Riley used around five pounds of non-renewable, plastic products, such as straws and plastic bags.

Offset

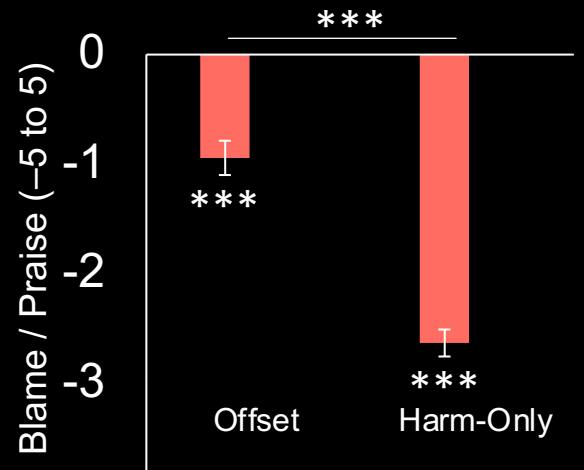
Last week, Riley used around five pounds of non-renewable, plastic products, such as straws and plastic bags. Five pounds of plastic waste can be cleaned up for $9. Knowing this, Riley donates $9 to the Ocean Cleanup project to offset the amount of plastic they produced.

Design: Within-subjects

Measure: Praise/Blame

Items: 10 of 10 (balanced with condition)

Participants: *N*=100 MTurk workers



Rule 2: *Diminishing Sensitivity*

Bigger "rights" have diminishing returns in offsetting "wrongs"

Follows from person perception findings that negative trait information can only be outweighed by large, repeated injections of positive trait information (Birnbaum, 1973; Schweitzer et al., 2006)

Flight from London to NYC
Adds 0.83 tons of CO_2

Paying to plant 5 trees ($15)
Removes 0.83 tons of CO_2

Paying to plant 10 trees ($30)
Removes 1.66 tons of CO_2

Objective harm *more* than neutralized with a double-offset
…but may be little *morally* better than a single-offset

Rule 2: *Diminishing Sensitivity*

Last week, Riley used around five pounds of non-renewable, plastic products, such as straws and plastic bags. Five pounds of plastic waste can be cleaned up for $9.

Single-Offset

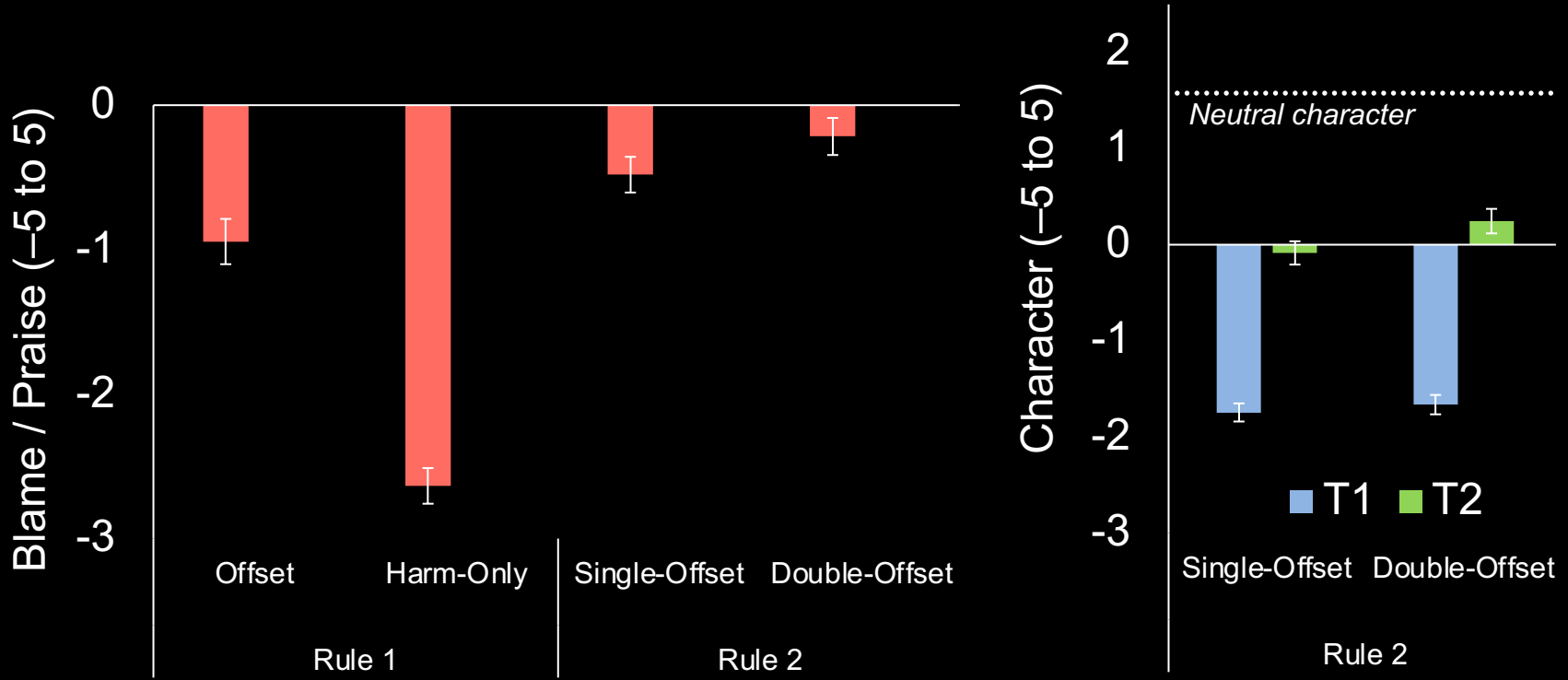
Knowing this, Riley donates $9 to the Ocean Cleanup project to offset the amount of plastic they produced – the amount needed to offset the trash produced.

Double-Offset

Knowing this, Riley donates $18 to the Ocean Cleanup project to more-than-offset the amount of plastic they produced – twice the amount needed to offset the trash produced.

Design: Within-subjects
Measures: Character (T1 = before offset; T2 = after offset); Praise/Blame
Items: 10 of 10 (balanced with condition)
Participants: *N*=99 MTurk workers

Rule 2: *Diminishing Sensitivity*



Rule 3: *Temporal Asymmetry*

"Rights" have greater offsetting power after (vs. before) "wrongs"

Evidence for both licensing and offsetting in *behavior* (Merritt et al., 2010; Tangney et al., 2007)

Person perception literature mixed – both primacy and recency (Anderon & Hubert, 1963; Lockhart et al., 2010)

Flight from London to NYC
Adds 0.83 tons of CO_2

Paying to plant 5 trees ($15)
Removes 0.83 tons of CO_2

Paying to plant 5 trees ($15)
Removes 0.83 tons of CO_2

Flight from London to NYC
Adds 0.83 tons of CO_2

Objective harm equal in both cases

…but harms may loom larger when they come after (signaling "licensing" behavior)

Rule 3: *Temporal Asymmetry*

Offset

Last week, Riley used around five pounds of non-renewable, plastic products, such as straws and plastic bags.

Five pounds of plastic waste can be cleaned up for $9. This week, Riley donates $9 to the Ocean Cleanup project, since this donation offsets last week's plastic consumption.

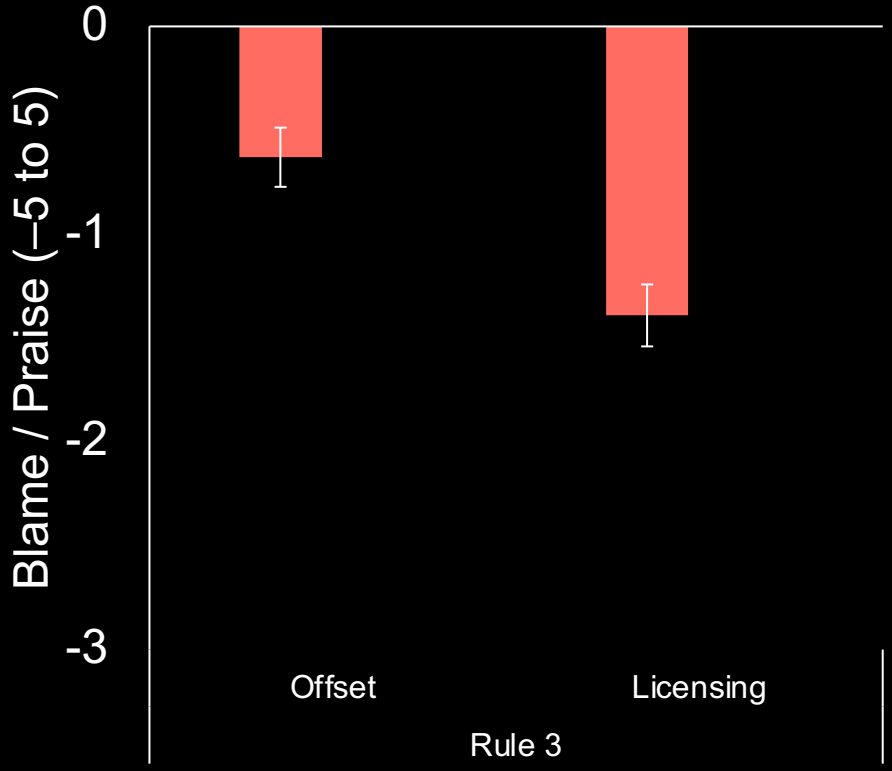
Licensing

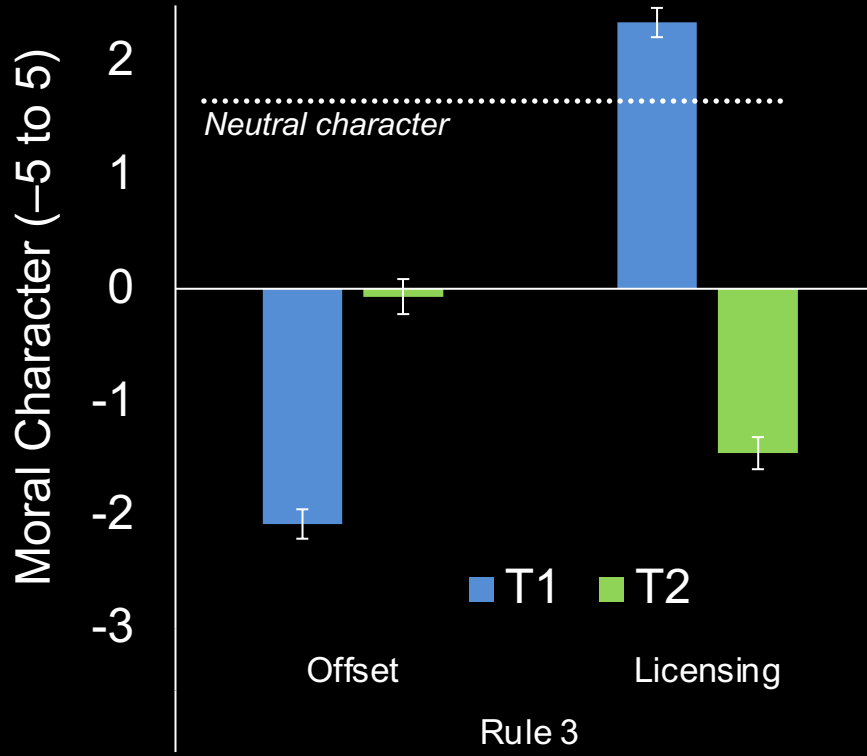
Last week, Riley donated $9 to the Ocean Cleanup project. Five pounds of plastic waste can be cleaned up for $9.

This week, Riley uses around five pounds of non-renewable, plastic products, such as straws and plastic bags, since this plastic consumption was offset by last week's donation.

Design: Within-subjects
Measures: Character (T1 = after first act; T2 = after second act); Praise/Blame
Items: 10 of 10 (balanced with condition)
Participants: *N*=99 MTurk workers

Rule 3: *Temporal Asymmetry*





Rule 4: *Act Congruency*

"Rights" have greater offsetting power for similar "wrongs"

People may keep separate 'moral accounts' for different categories of actions (cf. Thaler, 1985)

By Rule 1, black accounts would not fully offset red accounts

Flight from London to NYC
Adds 0.83 tons of CO_2

Neutralizing carbon emissions

Neutralizing methane emissions

Buying coffee for a stranger

Equal amounts of good (social utility) in all cases
…but dissimilar offsets may be less effective

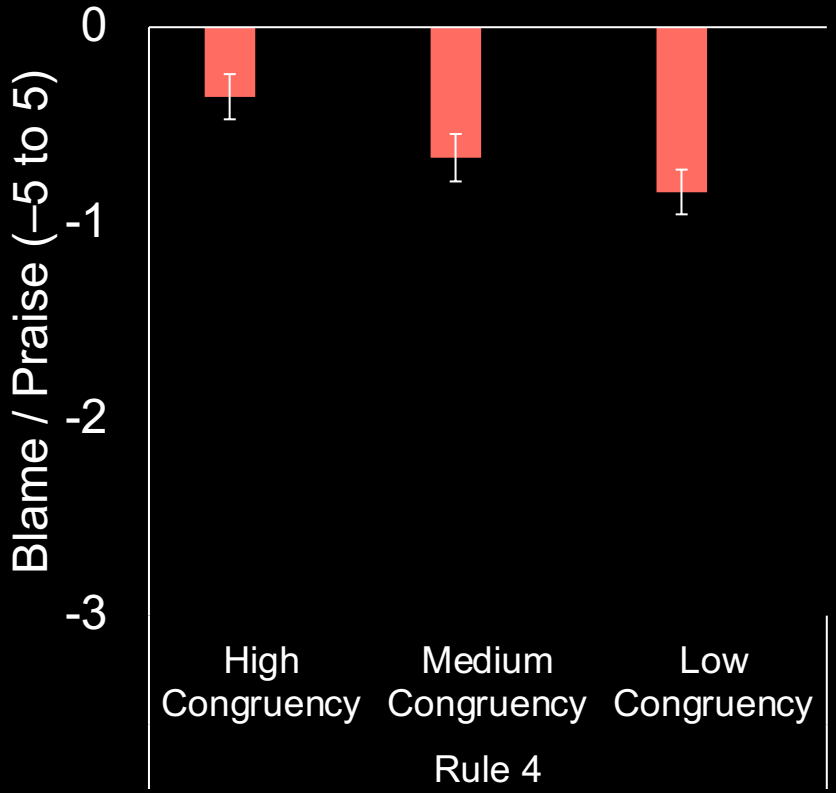
Rule 4: *Act Congruency*

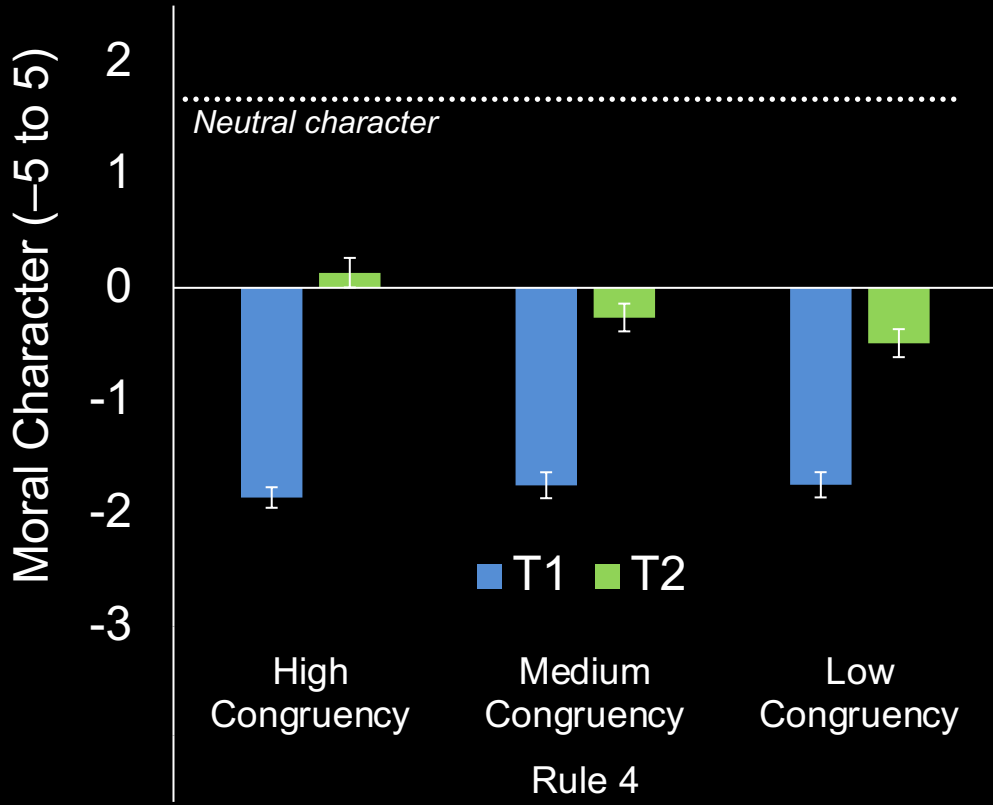
Last week, Riley used around five pounds of non-renewable, plastic products, such as straws and plastic bags, which can cause damage to the oceans.

High Congruency	*Medium Congruency*	*Low Congruency*
Later, Riley donates $9 to the Ocean Cleanup project, which helps clean up plastic in the ocean.	Later, Riley donates $9 to the Ocean Cleanup project, which helps clean up oil spills.	Later, Riley participates as a volunteer during election day.

Design: Within-subjects
Measures: Character (T1 = before offset; T2 = after offset); Praise/Blame
Items: 10 of 10 (balanced with condition)
Participants: *N*=150 MTurk workers

Rule 4: *Act Congruency*





Part 3: Studies

- What are the rules of moral accounting?
  - Rule 1: Partial offsetting
  - Rule 2: Diminishing sensitivity
  - Rule 3: Temporal asymmetry
  - Rule 4: Act congruency

Part 3: Further Results

- Differences in character inferences explain variance across items and people
- Manipulating character shifts blame for offsetting behavior
  - Direct manipulations of character
  - Abstract/concrete framing
  - Emotional motivation (guilt or shame)

Anatomy of a Market Failure: Post Mortem, Part 3

- Reputation-signaling incentivizes a suboptimal degree of offsetting
  - Good news is that *partial* offsetting is possible
- What can be done?
  - *More* than offsetting?
  - Offsetting after rather than before a harm is done?
  - Emphasizing similarity between offset and harm

Three principles

- *Benefit principle*: Maximize benefits, not sacrifice

  Reputation tracks sacrifice

- *Specialization principle*: Seek your comparative advantage

  Reputation enhanced from inefficient time-donations

- *Offsetting principle*: Balance costs and benefits

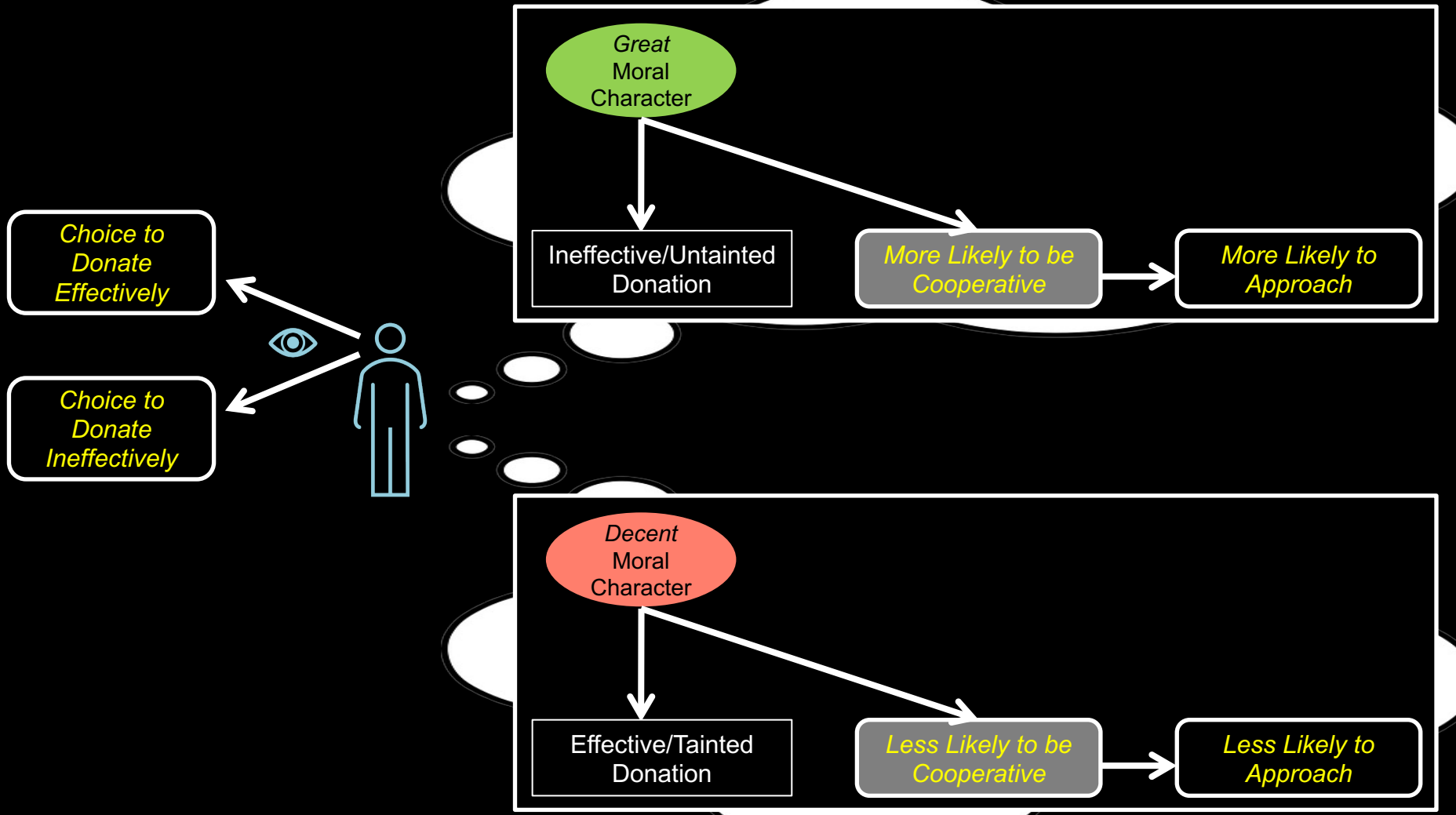
  Reputational returns from offsets are modest

Why aren’t donations more effective?

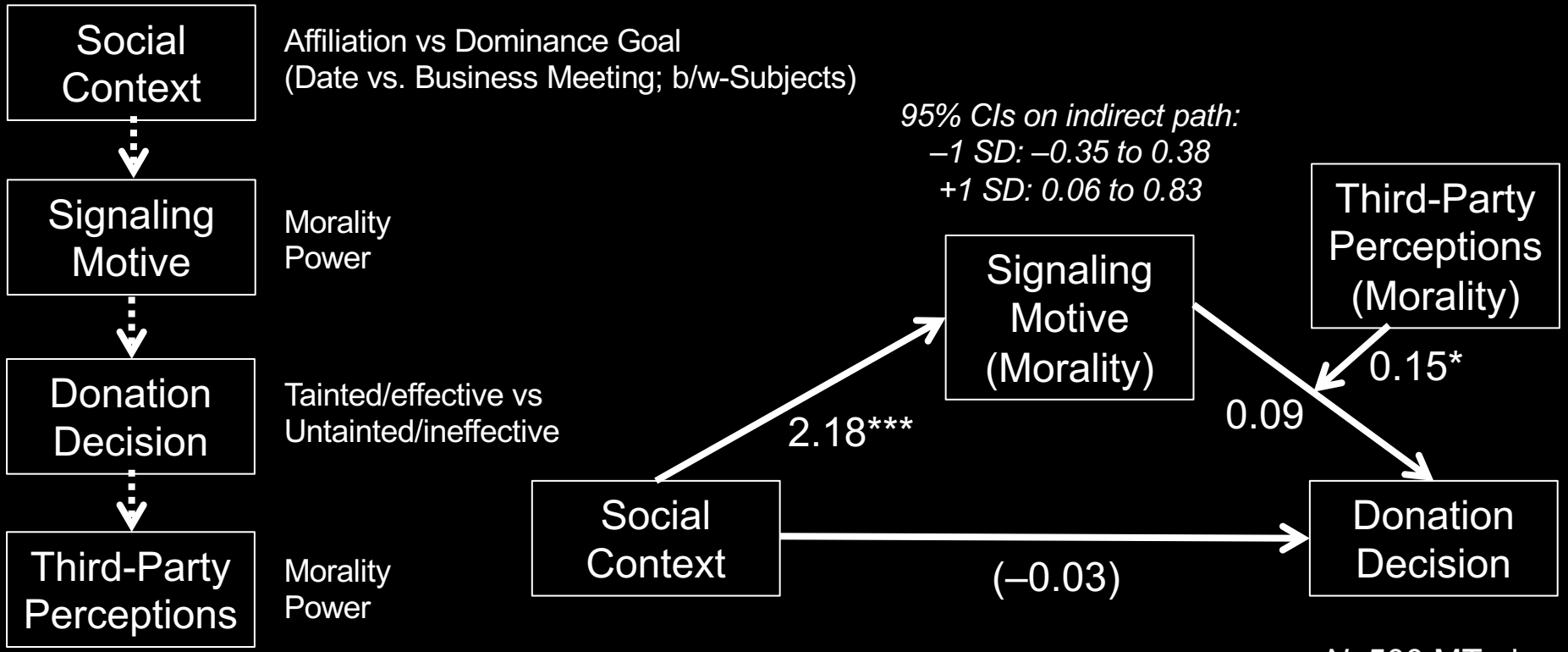
- A cornucopia of cognitive biases
  - Psychic numbing (Small et al., 2007)
  - Perceived subjectivity of charity (Berman et al., 2018)
  - Overhead aversion (Gneezy et al., 2014)
  - Parochialism (Bruneau et al., 2017)
  - Diversification bias (Baron & Szymanska, 2011)
  - Zero-sum thinking (Johnson, Zhang, & Keil, 2021; Newman & Cain, 2014)

Why aren't donations more effective?

- But donors may also respond rationally to reputational incentives
  - The market for charity is a market for reputation, and reputation does not follow the dictates of utilitarianism
- This can *amplify* cognitive biases
  - Example: 'Tainted' altruism (Newman & Cain, 2014)
  - 'Tainted' prosocial acts (i.e., helper + helped both benefit) are often seen as morally worse than neutral acts (no one benefits)


Great Moral Character
Ineffective/Untainted Donation
More Likely to be Cooperative
More Likely to Approach
Choice to Donate Effectively
Choice to Donate Ineffectively
Decent Moral Character
Effective/Tainted Donation
Less Likely to be Cooperative
Less Likely to Approach

‘Tainted’ altruism and signaling motives



Why aren’t donations more effective?

- To develop solutions, we need to understand the problems
  - Making effective donations pay reputational dividends
  - Psychological workarounds
    - Making benefits more salient than costs
    - Reframing money donations as time donations
    - Harnessing the psychology of moral accounting

Thanks!

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