Does Loss Aversion Motivate Collective Action?

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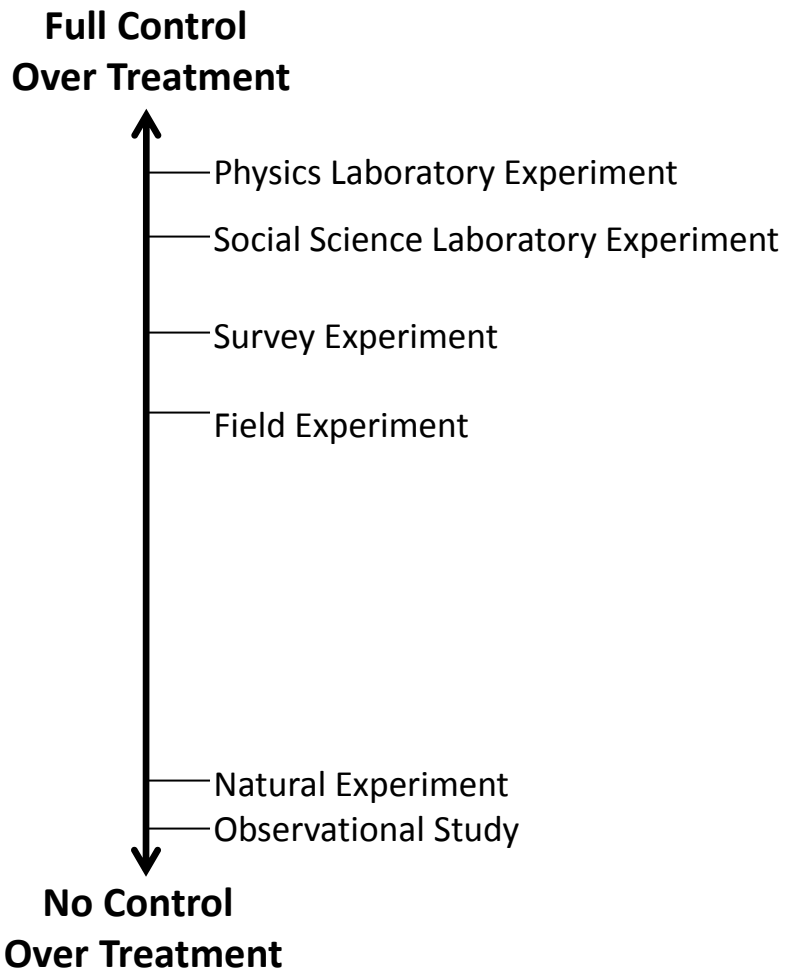

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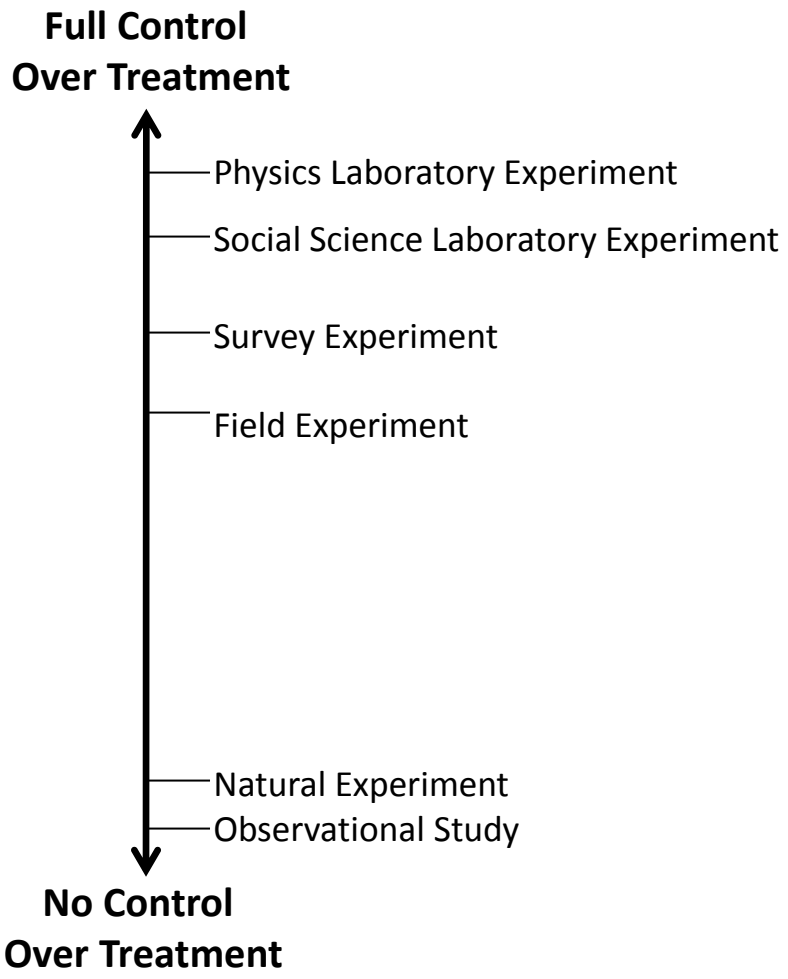
Field experiments trade control to augment external validity



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> "…even if all of the individuals in a large group are rational and self-interested, and would gain if, as a group, they acted to achieve their common interest or objective, they will still not voluntarily act to achieve that common or group interest" (Olson 1965, 2)

Motivation

Riker and Ordeshook (1968)

$$V = pB - C + D$$

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Green, Gerber, and Larimer (2008)

$$V = pB - C + \beta_1 D_I + \beta_2 D_E$$

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— Mode seems to matter more than message

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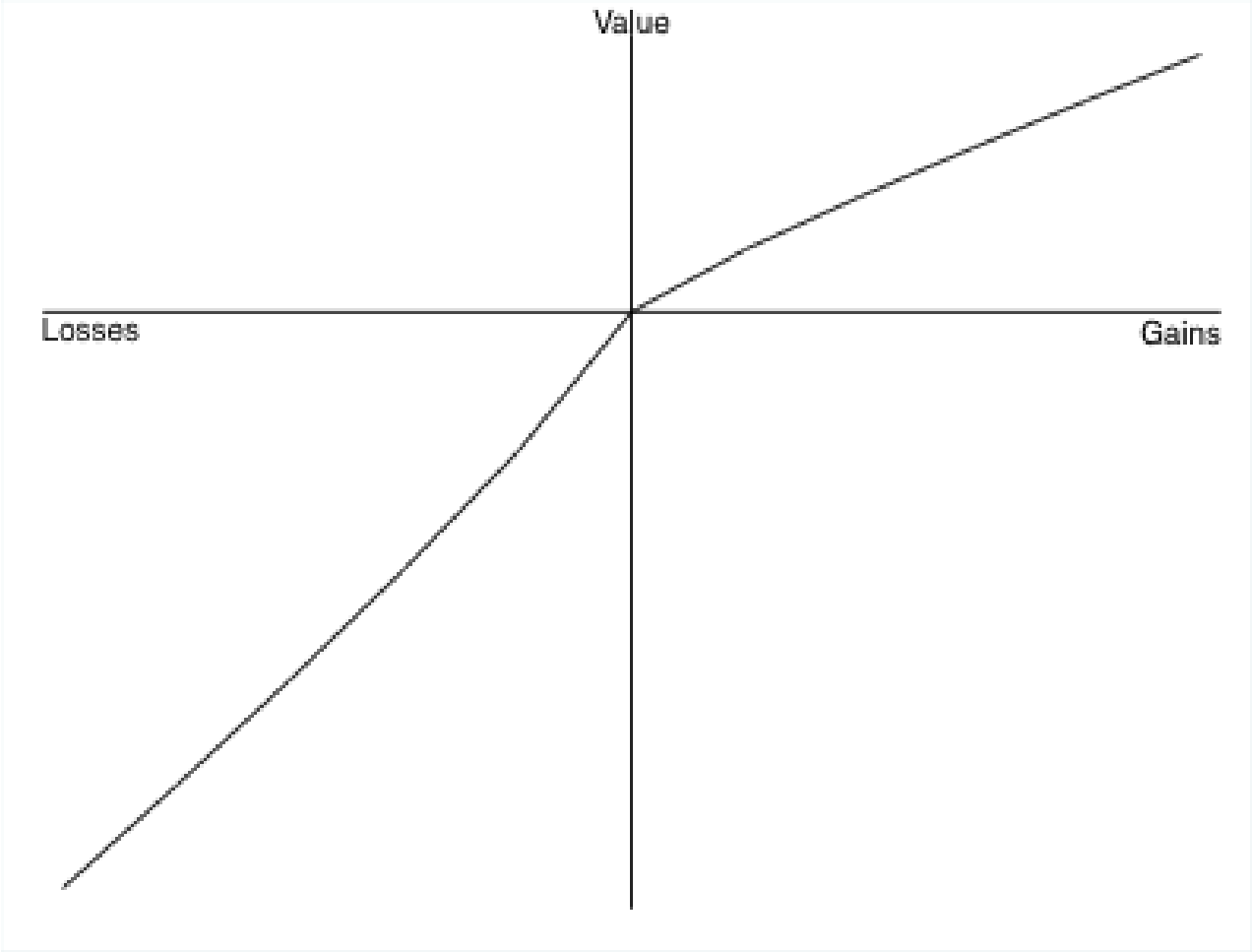
- — Exceptions show that social science theory helps

We turn to psychology and behavioral economics for subtle differences in framing that could have large effects

Prospect Theory



“Losses loom larger than gains” (Kahneman and Tversky 1979, 279)

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— *But not clear how laboratory game applies in real world political collective action problems*

A Model of Mobilization

Arceneaux and Nickerson (2009)

$$V^* = P + \tau M$$

$$V = \begin{cases} 0 \text{ if } V^* \leq -G \\ 1 \text{ if } V^* > -G \end{cases}$$

P = Individual-level propensity to vote
M = Mobilization message
τ = Effect of mobilization
G = Election salience

Loss Aversion Hypothesis: $\tau_{Gain} < \tau_{Loss}$

Study 1: 2010 Midterm Election

Phone call weekend before 2010 Election Day

- — Partnered with 501c(3) organization
- — Single targeted voter per household
- — IL, MI, PA, NY

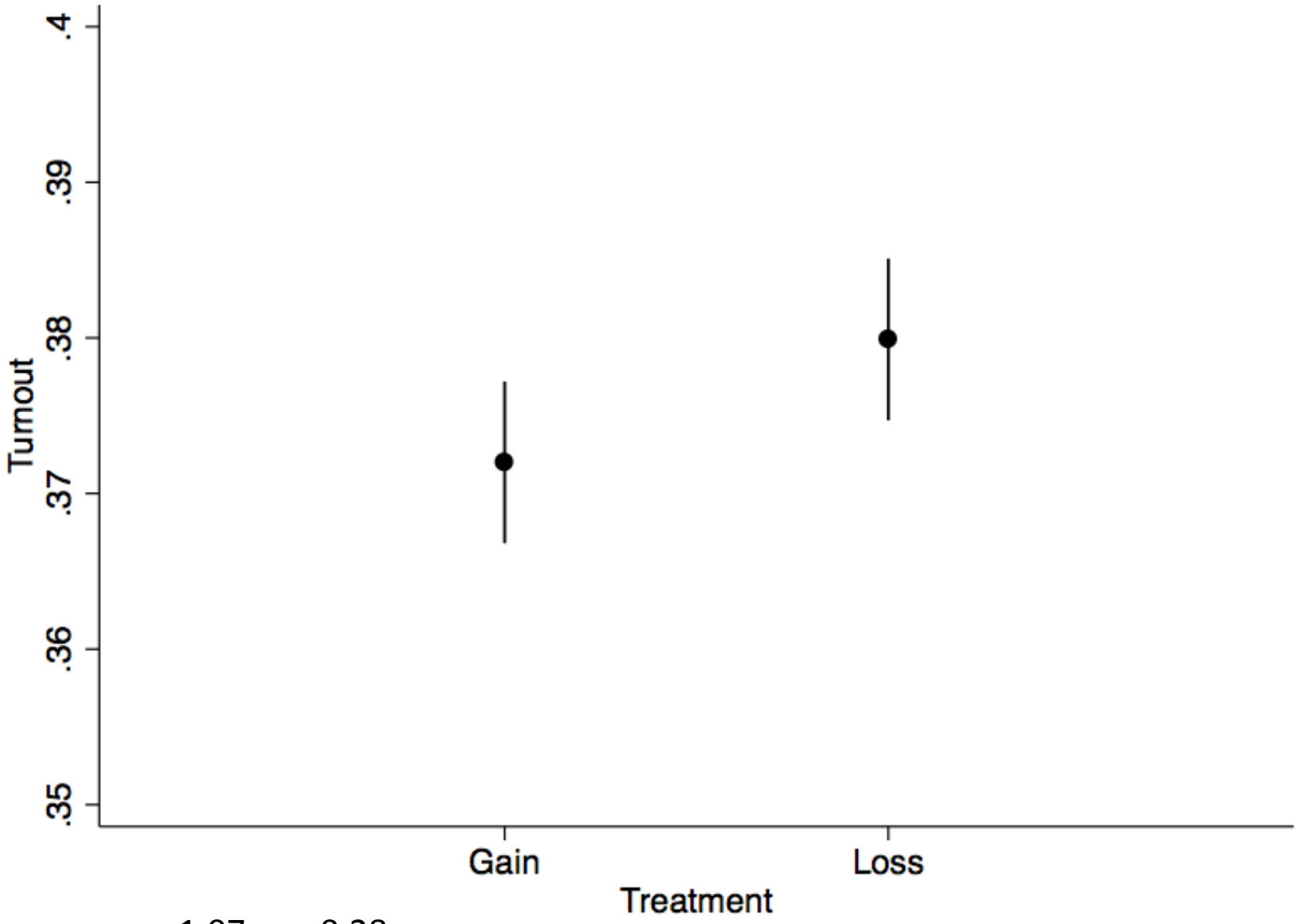
Design

Treatment	N[Assigned]	N[Contacted]
Gain Message	25,181	8,698
Loss Message	25,214	8,419
Total	**50,395**	**17,117**

Study 1: 2010 Midterm Election

Gain	Loss
There are a lot candidates and issues on the ballot this year, and each of them is important for our future. **It takes all of us to get involved so that we can improve the economy and enjoy clean air and clean water.** We're asking people to pledge to fill out their entire ballot. Can we count on you to try to fill out the entire ballot?	There are a lot candidates and issues on the ballot this year, and each of them is important for our future. **It takes all of us to get involved so that we can avoid job loss and protect clean air and clean water.** We're asking people to pledge to fill out their entire ballot. Can we count on you to try to fill out the entire ballot?

Results



$z = 1.07$, $p = 0.28$

Patch Through Experiments

Live phone call to recruit “patch-through” calls to Governor’s office on an environmental rule

Study 3: Climate Change

Study 3: Pit Rule (Water Supply Protection)

Study 4: Pit Rule Follow up

Patch Through Experiments

Design

	Treatment	N[Assigned]	N[Contacted]
Study 2	Gain Message	6,707	518
	Loss Message	6,732	522
	Total	**13,439**	**1,040**
Study 3	Gain Message	6,941	494
	Loss Message	6,840	480
	Total	**13,781**	**974**
Study 4	Gain Message	16,722	1,025
	Loss Message	16,677	1,032
	Total	**33,399**	**2,057**

Patch Through Experiments

Study 2

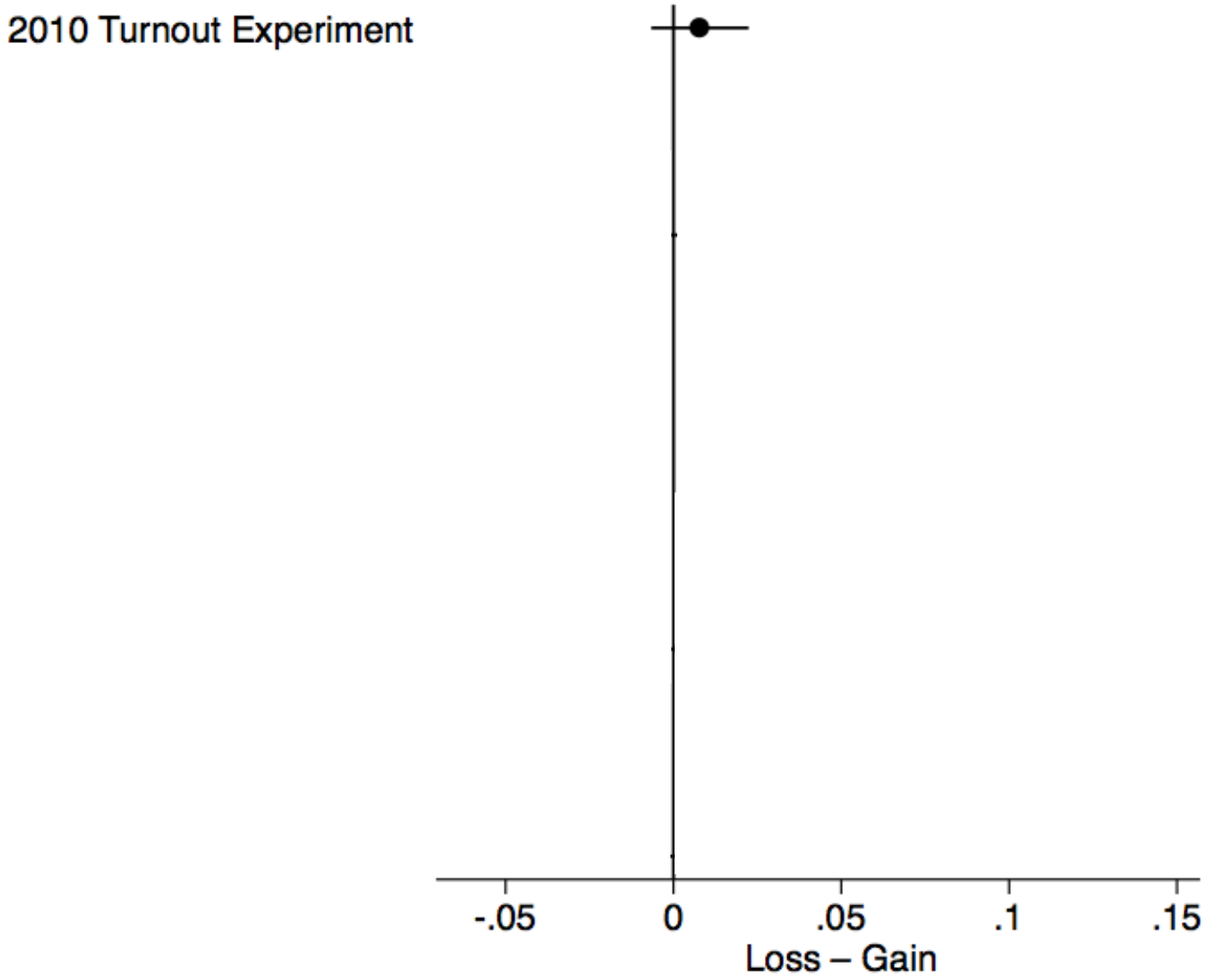
Gain	Loss
Last year, <state> adopted a strong rule that reduces carbon pollution by the biggest polluters in the state... Unfortunately, Governor <name> wants to overturn the rule that reduces carbon pollution in <state>… By keeping the rule, we can create good-paying jobs in the clean energy sector—at a time when we desperately need them. We'll also improve our air quality and become a national leader in tackling climate change.	Last year, <state> adopted a strong rule that reduces carbon pollution by the biggest polluters in the state... Unfortunately, Governor <name> wants to overturn the rule that reduces carbon pollution in <state>... If the rule is dismantled, we will lose the good-paying jobs in the clean energy sector—at a time when we desperately need them. We'll also make the threats of climate change worse—including greater risks of wildfires and drought.

Patch Through Experiments

Studies 3 and 4

Gain	Loss
With a strong pit rule, we can make sure our water is clean and safe. If Governor <name> hears from enough people, she'll think twice about trying to dismantle the rule. She can request that her Oil Conservation Commission keep the pit rule, and make it stronger. We can patch you through to Governor <name>'s office right now. All you have to do is tell her staff that you want her to protect our water with a strong rule for oil and gas waste pits. Can we patch you through to her office right now?	Without the pit rule, our water is at risk of irreversible contamination. If Governor <name> hears from enough people, she'll think twice about trying to dismantle the rule. She can request her Oil Conservation Commission not to weaken or get rid of the rule. We can patch you through to Governor <name>'s office right now. All you have to do is tell her staff that you don't want toxic waste contaminating our water, so you want a strong rule for oil and gas waste pits. Can we patch you through to her office right now?

Results



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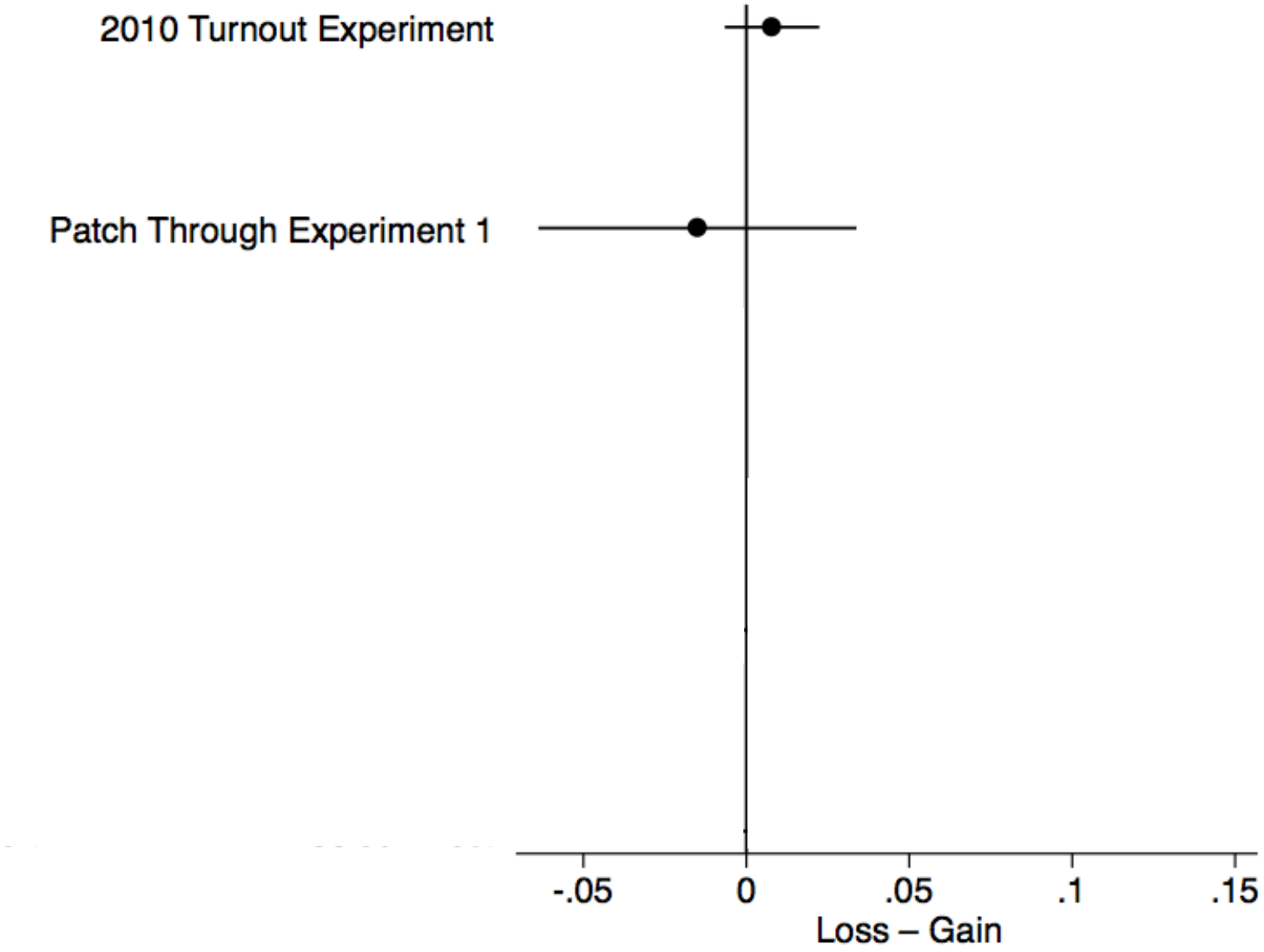
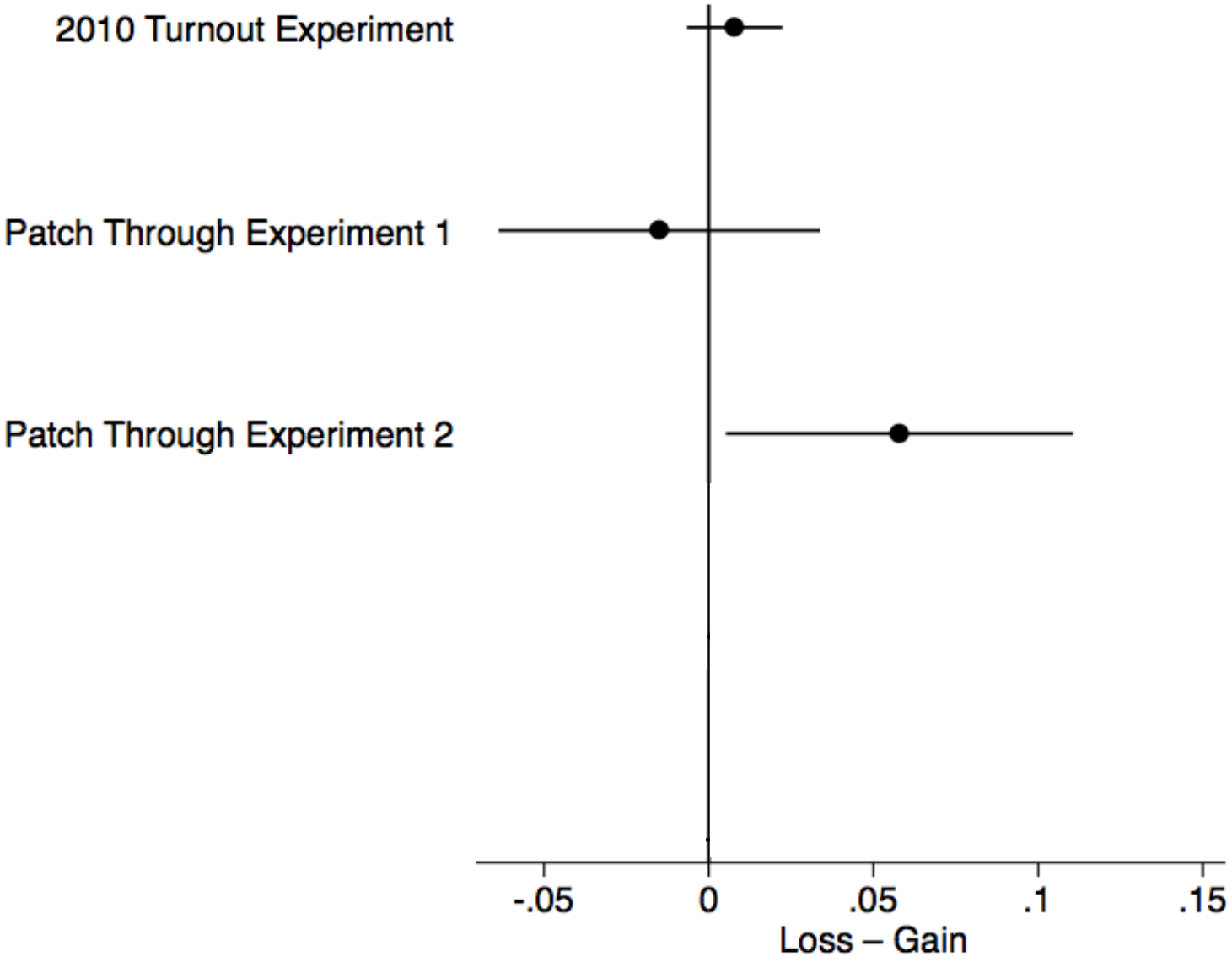
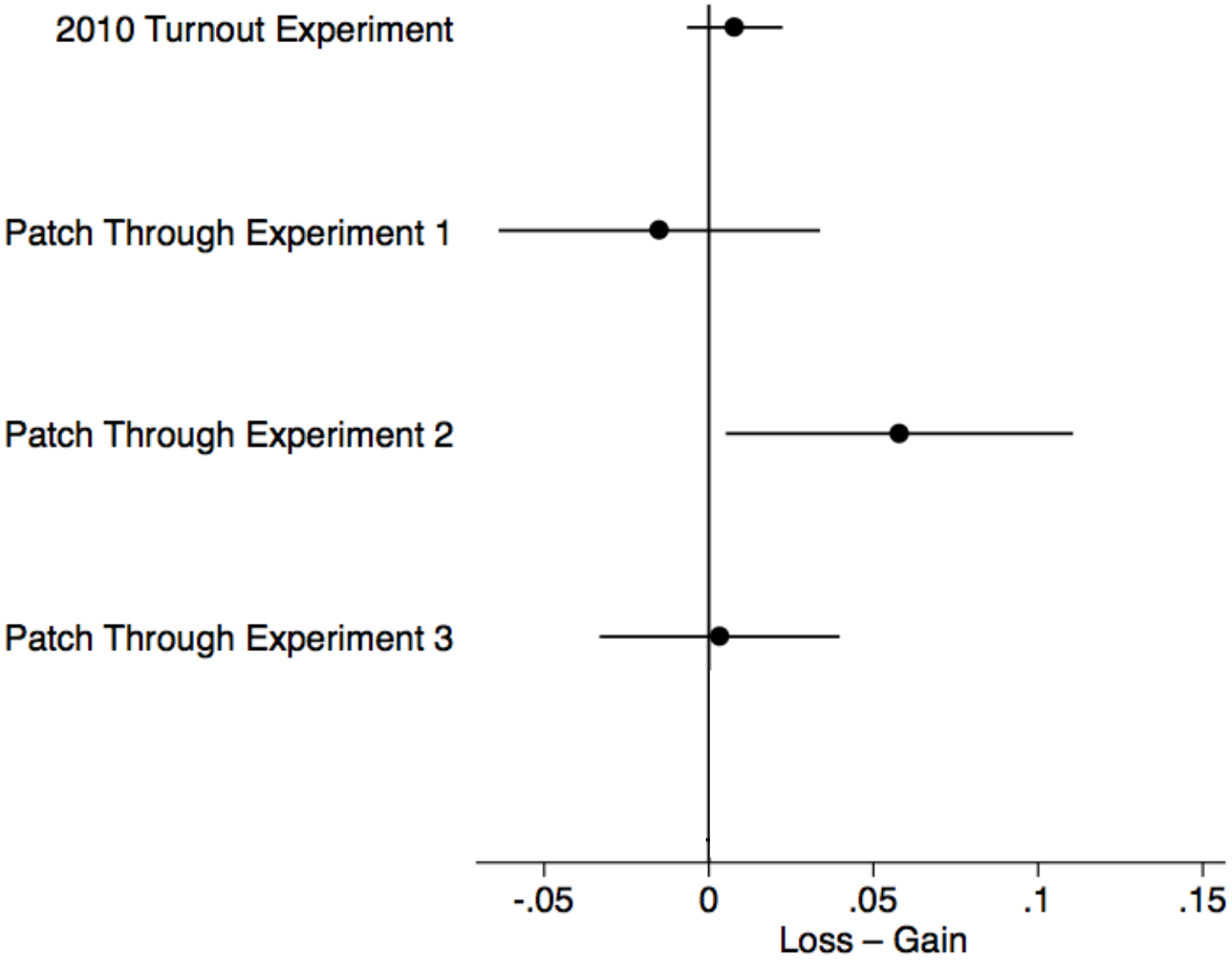

2010 Turnout Experiment
Patch Through Experiment 1
-.05
0
.05
.1
.15
Loss – Gain

Results


2010 Turnout Experiment
Patch Through Experiment 1
Patch Through Experiment 2
-.05
0
.05
.1
.15
Loss – Gain

Results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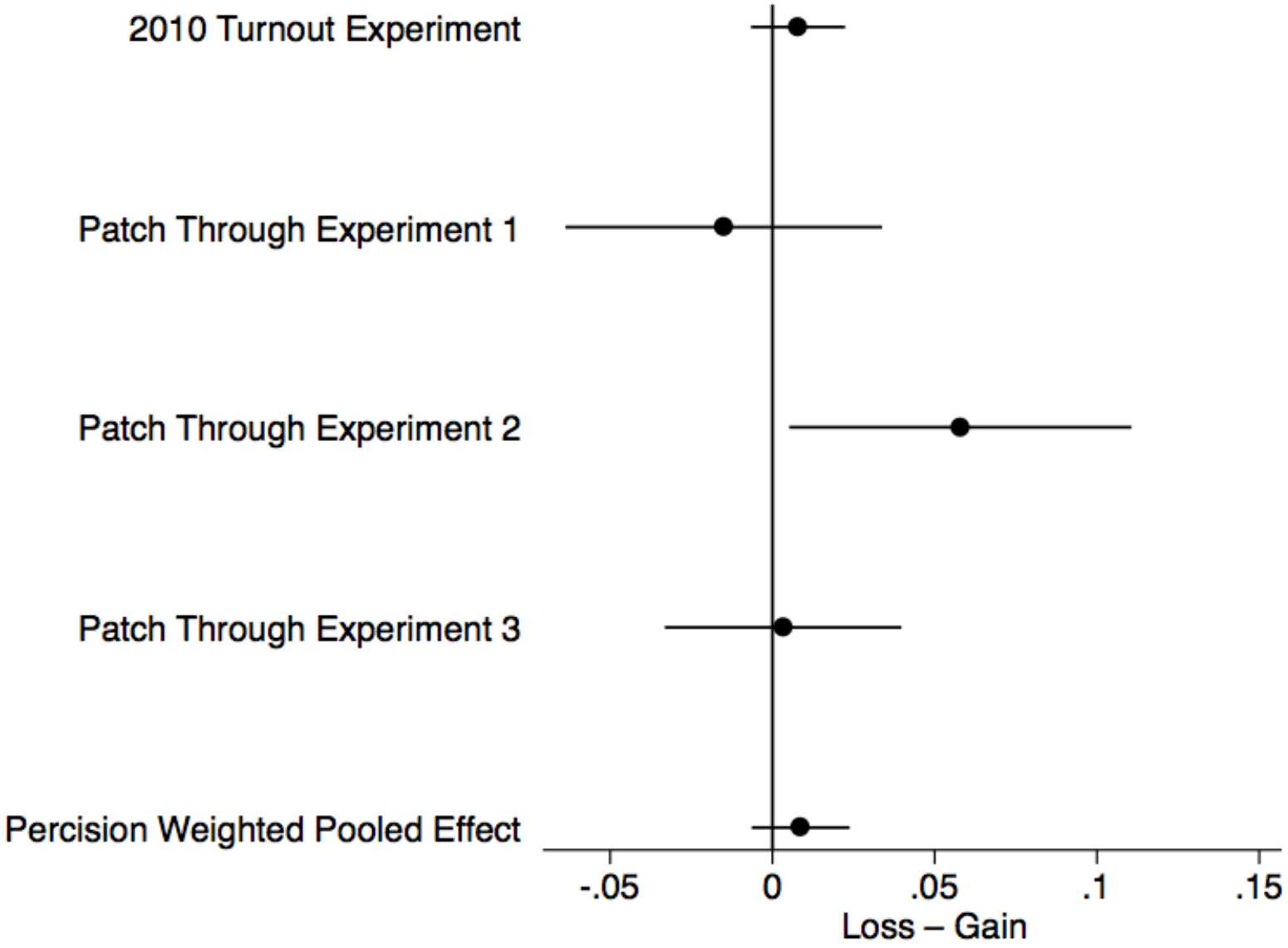
2010 Turnout Experiment
Patch Through Experiment 1
Patch Through Experiment 2
Patch Through Experiment 3
Percision Weighted Pooled Effect
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0
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Study	Cohen's d
2010 Turnout Experiment	0.016
Patch Through Experiment 1	-0.038
Patch Through Experiment 2	0.145
Patch Through Experiment 3	0.008

$$d = \frac{effect}{sd_y}$$

Concluding Thoughts

We find weak evidence, at best, that loss frames motivate participation more than gain frames

- — Could reflect differences between lab and field
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Illustrates importance of instantiating findings from lab experiments

- — Subtle framing may have less influence in practice than thought

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