

Protests as Strategic Games: Experimental Evidence from Hong Kong's Anti-Authoritarian Movement

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- ▶ Very likely to continue to be important around the world: billions of people live in unfree societies
- ▶ What drives individuals' participation in anti-authoritarian political movements?

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- ▶ On the other hand, in most recent theoretical work, *strategic complementarity* (e.g., Kuran, 1989, 1991, 1995; Bueno de Mesquita, 2010; Edmond, 2013; Passarelli and Tabellini, 2017; Barbera and Jackson, 2017)

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- ▶ Gehlbach et al. (2016, p. 579): strategic complementarity **“characterizes mass protests”**

Empirical challenges

As far as we are aware, no empirical work isolates a causal effect of beliefs about others' turnout on one's own

Two challenges:

1. Political movements typically studied *ex post*, generating selection issues, and making the study of beliefs nearly impossible
2. Difficult to identify causal effects of beliefs even if protests studied in real time
 - ▶ Beliefs are typically endogenous
 - ▶ Heterogeneity in priors can make it difficult to interpret average treatment effects of information shocks

This paper

We study protest participation in the context of Hong Kong's ongoing struggle for political rights:

1. A high-stakes political movement in which uncertainty about success not yet resolved
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We study protest participation in the context of Hong Kong's ongoing struggle for political rights:

1. A high-stakes political movement in which uncertainty about success not yet resolved
 - ▶ Series of protests demanding civil and political rights; customary marches on July 1 (Handover Day)
2. We conduct a field experiment among HKUST students to identify the causal effect of beliefs about other people's turnout decisions
 - ▶ University communities represent core concentration of participants in democratic movements

Anti-Authoritarian Movement in Hong Kong

July 1st March in Hong Kong

- ▶ High stakes: major achievements include –
 - ▶ withdrawal of national security law legislation
 - ▶ withdrawal of planned introduction of Chinese school curriculum
 - ▶ stepping down of 2 (out of 3) Chief Executives
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- ▶ Larger protests more effective, and perceived as such
- ▶ Potential for high costs: arrests, violence, threat of PLA intervention
- ▶ “Tolerated” protests under authoritarian regimes are not unusual
- ▶ Routinely scheduled protests are common (e.g. East Germany in 1989)

Experimental Design

Background: panel survey of HKUST students

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- ▶ We elicit preferences, beliefs, attitudes, and planned and past political behavior
- ▶ Recent wave June 20, 2016
 - ▶ Recruitment email to entire undergraduate population of HKUST
 - ▶ 1,744 completed surveys (around 1,600 “native” HK students)
- ▶ We embed experiment in 2016 wave of the panel survey

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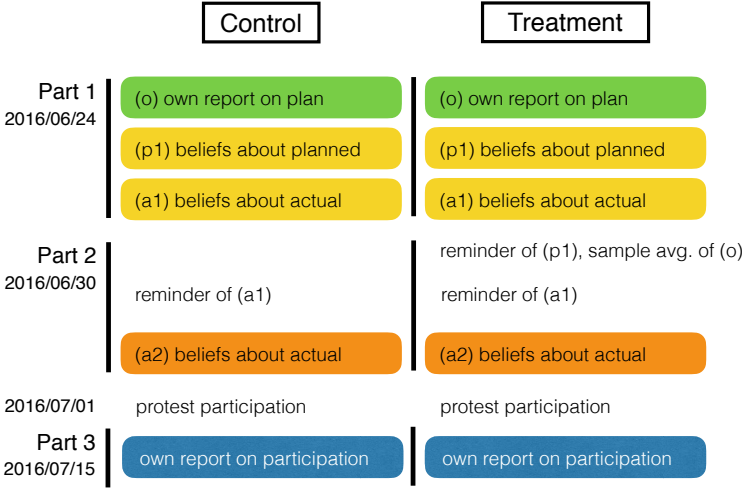
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4. **2016/07/15** – measurement of political participation



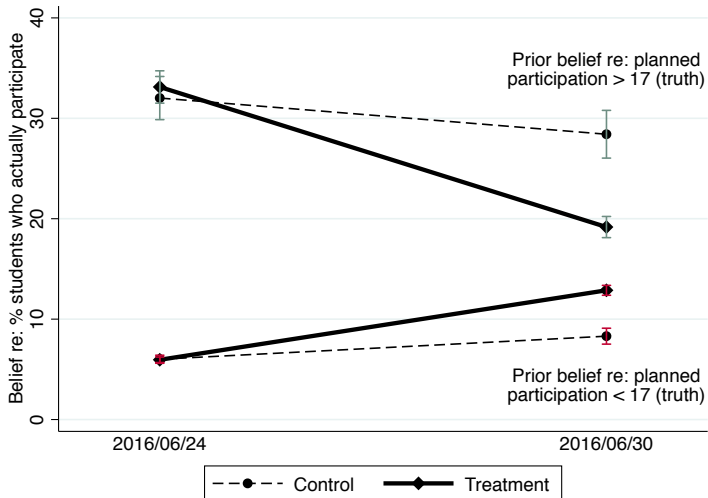
Experimental design: summary



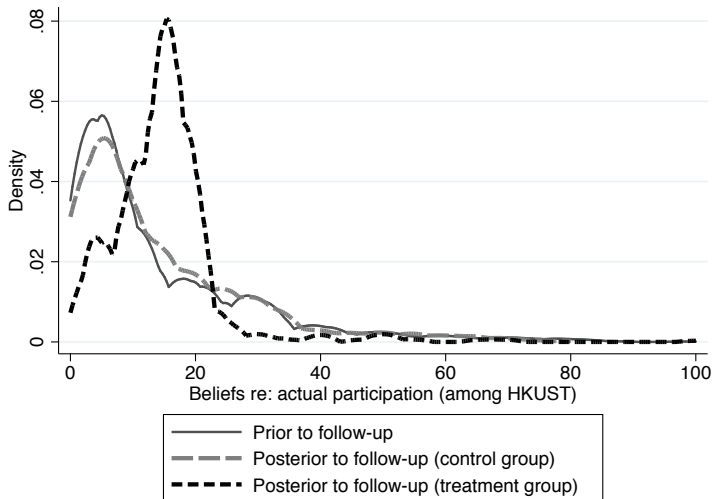
Results

1st stage: beliefs about *actual* participation

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1st stage: distributions of beliefs



Alternative 1st stage: beliefs about total HK turnout

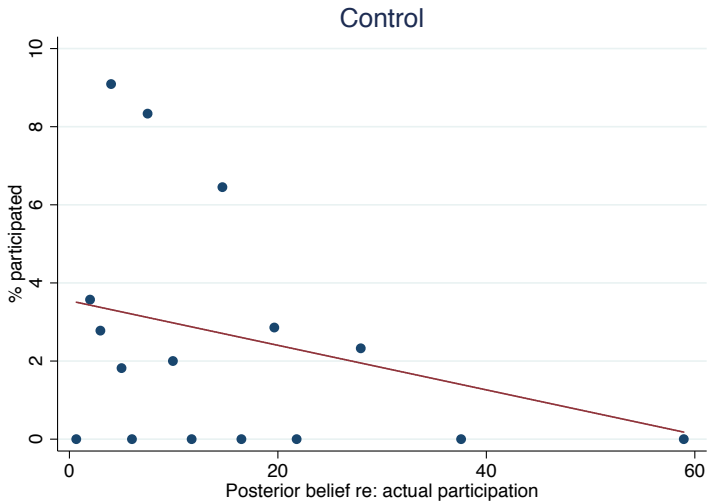
Sample:	Posterior belief on total # participation among HK population		
	All subjects	Prior <i>below</i> truth	Prior <i>above</i> truth
	(1)	(2)	(3)
<i>Panel A: baseline</i>			
Treatment (<i>direction adj.</i>)	5094.1 [3368.6]		
Treatment		13198.0** [6541.3]	-7013.5 [13108.6]
<i>Panel B: with controls</i>			
Treatment (<i>direction adj.</i>)	5743.5* [3442.8]		
Treatment		15181.1** [6679.9]	-11229.0 [13550.3]
Observations	1234	873	361
DV mean (control grp.)	139878	128084	169940
DV std. dev. (control grp.)	155482	147528	171162
DV mean (all)	142684	134454	162586
DV std. dev. (all)	142685	139385	148689

Reduced form: effects on one's own participation

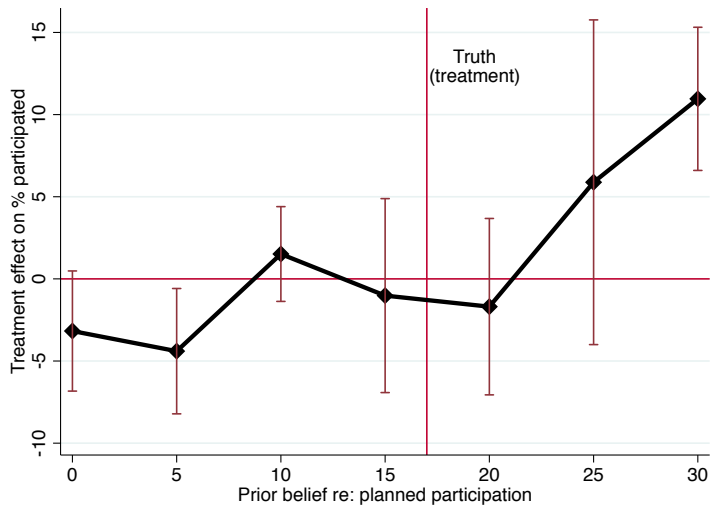
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Turnout among controls



Heterogeneity w.r.t. prior beliefs



2SLS: The effects of beliefs on turnout

Sample:	Participated in 2016 July 1st March		
	All subjects	Prior below truth	Prior above truth
	(1)	(2)	(3)
<hr/> <i>Panel A: baseline</i>			
Posterior belief	-0.462* [0.252]	-0.468** [0.236]	-0.654** [0.264]
<hr/> <i>Panel B: with controls</i>			
Posterior belief	-0.457* [0.252]	-0.445* [0.231]	-0.657*** [0.252]
Observations	1241	877	364
1st stage DV mean (control grp.)	14.04	8.44	28.30
1st stage DV std. dev. (control grp.)	14.10	8.46	15.54
1st stage DV mean (all)	14.50	11.40	22.02
1st stage DV std. dev. (all)	10.83	7.99	14.04
2nd stage DV mean (control grp.)	2.709	3.436	0.870
2nd stage DV std. dev. (control grp.)	16.26	18.25	9.33
2nd stage DV mean (all)	2.981	2.052	5.220
2nd stage DV std. dev. (all)	17.01	14.19	22.27

Robustness exercises

Results are robust to:

- ▶ Trimming extreme priors from the data
- ▶ Control for various pre-treatment characteristics
- ▶ Considering “changed plans” as the reduced form outcome
- ▶ Conducting randomization inference
- ▶ Accounting for imbalance or selective attrition:
 - ▶ Interacting unbalanced characteristics with treatment
 - ▶ Re-weighting the data to account for attrition

Internal validity concerns

- ▶ Experimenter demand effects?
 - ▶ Strategic substitutes result seems to work against this possibility
- ▶ Other channels through which the treatment affects behavior?
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- ▶ Misreporting of turnout?
 - ▶ Fear of reporting attendance at a major event—conditional on attending—seems odd, particularly when state response is clear
 - ▶ Fear/stigma alone can't explain treatment effect *heterogeneity*; treatment might introduce differential biases, but results qualitatively similar for *controls*
 - ▶ Finally, we can examine gap between direct questions and list experiments to measure truthful self-reporting

Measured preferences with and without “cover”

Attitudes:	“Yes” in direct question	Δ when cover is provided
Support for HK independence	0.465	0.054 [0.057]
Consider self as Hong Kongese	0.879	-0.063 [0.051]
Favorable view of CCP	0.077	-0.020 [0.059]
Support violence in pursuit of HK’s political rights	0.217	0.169*** [0.050]

Source: June 2016 HKUST student survey

Theoretical Implications

“Benchmark” model

- ▶ Recent work has typically modeled protest participation as a global game (or similar), with the stage game featuring strategic complementarity
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- ▶ Complementarity on the benefits side:
 - ▶ Protests are more likely to succeed when they are larger
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- ▶ Complementarity on the costs side:
 - ▶ Cost of protest attendance may be lower when protests are successful – perhaps the regime concedes, rather than cracks down
 - ▶ Cost of attendance may be falling in protest size independent of success
 - ▶ E.g. Passarelli and Tabellini (2017)

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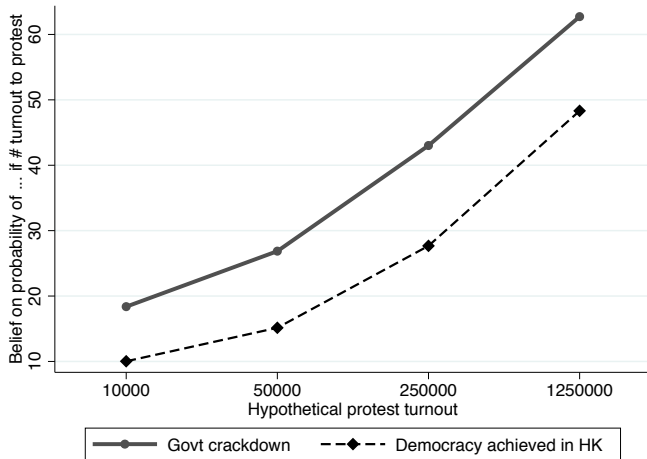
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- ▶ Two potential sources of strategic substitutability:
 1. An individual's expected costs may increase with protest size
 2. An individual's benefits from signaling her anti-authoritarian type may decrease with protest size

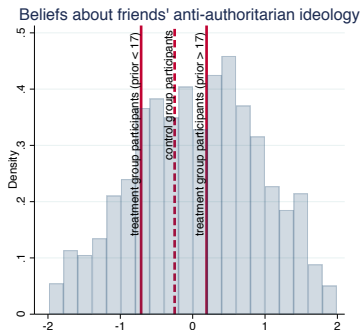
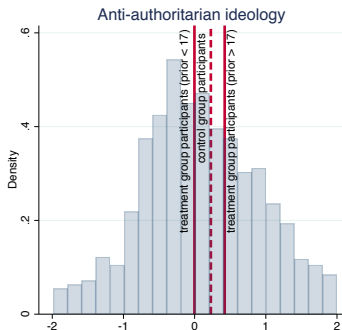
Costs, benefits, and protest size

Experimental subjects perceive a greater likelihood of *both* protest success and government crackdown as protest size increases:



Social image and protest size

Consistent with social image concerns, we find that participants in the protest who updated their beliefs about protest size negatively are relatively ideologically extreme, and have more ideologically extreme friends than control group participants:



Conclusion

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- ▶ Results suggest the importance of studying protest heterogeneity and movement dynamics
 - ▶ Do games of strategic substitutes evolve into games of strategic complements? If so, when?