

Online Appendix to:

“Persistent Political Engagement: Social Interactions and the Dynamics of Protest Movements,”
by Leonardo Bursztyrn, Davide Cantoni, David Y. Yang, Noam Yuchtman, and Y. Jane Zhang

Appendix A Political context¹

A.1 Hong Kong’s antiauthoritarian movement

Prior to 1997, Hong Kong was a British colony, with limited democratic political rights, but strong protections of civil liberties and respect for the rule of law. On July 1, 1997, Hong Kong was returned to the People’s Republic of China, to be ruled as a Special Administrative Region with its own quasi-constitution — the “Basic Law” — and a promise from China that its institutions would be respected and maintained until 2047, under a policy known as “one country, two systems.” The Basic Law left ambiguous several important details that have been bargained and battled over between the so-called “pan-democracy” and “pro-Beijing” camps.

The first ambiguity to generate mass political protests was regarding Article 23 of the Basic Law, which covered the legal regulation of speech and behavior that threatened the government. Under the encouragement of Beijing, a law implementing provisions of Article 23 — the “National Security Bill” — was proposed by the Hong Kong Chief Executive (the head of government) in September 2002, and was seen by many Hong Kong citizens as deeply threatening to their human rights and civil liberties.² The proposed legislation catalyzed a massive July 1 march (in 2003) in which an estimated half million people protested. This expression of popular opposition led to the withdrawal of the bill, and no legislation on Article 23 has passed since.

More recently, political conflict has arisen from a second ambiguity in the Basic Law, regarding the method of selection of Hong Kong’s Chief Executive. Article 45 of the Basic Law of Hong Kong states the following: “The method for selecting the Chief Executive shall be specified in the light of the actual situation in the Hong Kong Special Administrative Region . . . The ultimate aim is the selection of the Chief Executive by universal suffrage upon nomination by a broadly representative nominating committee in accordance with democratic procedures.” While indicating an ultimate aim of universal suffrage, the Basic Law does not state *when* elections will be introduced, nor does it clarify the details of nomination. From Hong Kong’s return to China until today, the Chief Executive has been selected by an Election Committee, rather than by universal suffrage; currently, the Committee is composed of 1,200 members, and is widely seen as pro-Beijing.

In 2014, the Twelfth National People’s Congress proposed an election mode that would have allowed the citizens of Hong Kong a choice between two or three candidates, but these candidates would be selected by the same pro-Beijing committee as before.³ In response to this limited expansion of democratic rights, a massive July 1 march was mobilized, with hundreds of thousands of citizens taking to the streets. Further escalation and a police crackdown precipitated the even larger-scale “Umbrella Revolution,” named for the ubiquitous umbrellas carried by participants. The Umbrella Revolution persisted for months, being slowly cleared out by police by the end of December 2014. While the movement did not alter the policy proposed by Beijing, it did send a

¹This description closely follows Cantoni et al. (2019).

²For a discussion of these concerns, see the University of Hong Kong’s Human Rights Portal Page, “Research on Article 23,” online at <https://goo.gl/GdNcHY>, last accessed February 28, 2018.

³Refer to <https://goo.gl/OoyNmt>, last accessed February 28, 2018.

clear signal to the Hong Kong legislature (the “LegCo”) that a circumscribed change in institutions was unacceptable to the people of Hong Kong. In June 2015, the LegCo struck down the Chinese proposal led by the opposition of the pan-democratic camp.

Since June 2015, the democratic movement in Hong Kong has both fragmented and radicalized. Recent encroachments on Hong Kong citizens’ civil liberties, including the arrest of Hong Kong booksellers by the mainland Chinese government, have deepened some Hong Kong citizens’ fear of the CCP and their sense of a Hong Kong identity very much distinct from — even opposed to — that of mainland China. The result is that Hong Kong citizens and political parties are now much more loudly calling for independence or “self determination.” “Localist” violence has occasionally flared; new political parties, such as the student-led Demosistō, have formed and won seats in the 2016 LegCo election on platforms explicitly calling for self-determination.⁴

A.2 The July 1 marches: characteristics and achievements

Marches on the anniversary of Hong Kong’s handover to China, held each July 1, have been described as “the spirit of democratic struggle in Hong Kong.”⁵ The July 1 marches have played an important role in Hong Kong citizens’ political engagement with the Chinese government, and have achieved major policy changes and even constitutional concessions — particularly when large crowds of protesters were mobilized.⁶ Each protest march, while part of a broader anti-authoritarian, democratic movement, is organized around a specific set of issues and policy aims. The first notable achievement came as a response to the CCP’s September 2002 proposal for an anti-subversion bill under Article 23, described above. The July 1, 2003, march included around 500,000 people — the largest political gathering in Hong Kong since the Chinese Democracy movement of 1989. Not only was the proposed law withdrawn, but the march eventually forced the resignation of multiple government officials, including the Chief Executive, Tung Chee-hwa.⁷

Another success followed the 2012 march, which included up to 400,000 people, and was part of a mobilization against a CCP proposal for a mandatory “moral and national curriculum” in Hong Kong schools. This proposal, too, was withdrawn shortly after the march. The 2014 march again saw hundreds of thousands of people demanding the popular nomination of Chief Executive candidates in the 2017 election. Although the march did not achieve citizen nomination of Chief Executive candidates, it did produce the massive Umbrella Revolution and led to the rejection of the CCP’s proposal for partial democratic rights.

Our experiment is embedded in the July 1 marches of 2017 and 2018. The 2017 march was organized around the mobilization support for recently-formed political parties arising following the Umbrella Revolution. One year later, the defining themes of the march were opposition to the granting of mainland Chinese jurisdiction on Hong Kong territory in the new high-speed rail station, and a call for the release of human rights activist Liu Xia. In both years, protest participation (around 50,000) was modest by historical standards.

⁴The legislators elected on a self-determination platform were since removed from office on various technicalities regarding their oath-taking, foreshadowing future conflict.

⁵“Sixteen Years of July 1st Marches: A Dynamic History of Hong Kong Citizens’ Fight for Democracy,” *Initium Media*, June 30, 2018. Available online at <https://goo.gl/8bZDrf> (last accessed July 5, 2018).

⁶A time series of turnout in July 1 marches can be seen in Figure A.1

⁷In an opinion piece tellingly titled “July 1st March turnout size is absolutely important,” former LegCo member Margaret Ng Ngoi-yee writes, “[T]he turnout at the July 1st Marches is absolutely important. If not for 500,000 people taking to the street in 2003, Article 23 would have been legislated already.” *The Stand News*, June 29, 2018. Available online at <https://goo.gl/vgP3WP> (last accessed July 5, 2018).

Some characteristics of Hong Kong’s July 1 marches may appear idiosyncratic: they are regularly scheduled events and they are largely tolerated by an authoritarian government. In fact, these characteristics appear in other contexts. First, regularly scheduled protests are utilized by many anti-authoritarian movements, from Russia’s “Strategy 31” movement demanding rights of assembly to the “Monday demonstrations” in Leipzig that precipitated the fall of the German Democratic Republic.⁸ Second, authoritarian regimes are often surprisingly tolerant of protests, within limits. The “Monday demonstrations” in Leipzig were able to proceed in the late summer and autumn of 1989 despite the obvious feasibility of crackdown.⁹ In Russia, protesters recently organized rallies in support of opposition politician Alexei Navalny on Vladimir Putin’s 65th birthday, in October 2017, and the *Financial Times* notes that in response to a protest of around 1,000 people in Moscow, “police largely left protesters alone.”¹⁰ Even in mainland China, the Communist Party tolerates particular protests (Lorentzen, 2013). In each of these settings, there exists a threat of crackdown *ex ante*, and — including in Hong Kong — police do crack down when protests cross the line.

Thus, like other antiauthoritarian protests, Hong Kong’s July 1 marches demand (and occasionally win) fundamental political rights — civil liberties and democratic institutions — from an authoritarian regime. Like other anti-authoritarian protests, turnout is important for success. The importance of protest size can be seen in our survey data: subjects in our experiment believe there is a higher likelihood of protest success if a protest is larger (see Appendix Figure A.3). It can also be seen in the differences between July 1 march organizers’ turnout estimates and the turnout estimates of the Hong Kong police. Organizers consistently exceed independent estimates of July 1 march size (and police estimates consistently fall below), with differences between the two reaching the tens or even hundreds of thousands (see Appendix Figure A.1).

Finally, like other anti-authoritarian protests, there is a tail risk of the turnout incurring high personal cost, although the probability is very low. On one hand, Chinese authorities are deeply concerned about political instability in Hong Kong, at least in part because of potential spillovers into mainland China.¹¹ Thus, beyond the time cost and the experience of heat, humidity, and rain on a Hong Kong summer’s day, the concern of the Chinese government implies the potential for high participation costs: the possibility of arrest and forceful police crackdowns using batons and tear gas. On the other hand, we stress that Hong Kong’s high level of civil liberty and the explicit protection of public assembly by its Basic Law have made protest demonstrations a tradition of the city. The Hong Kong Government has repeatedly made statements after the July 1st Marches indicating that the “Government respects citizens’ rights to assemble, protest, and express their opinions.”¹² Among a total of approximately 1,350,000 people who have participated in the July 1st Marches during the past 15 years (2003-2018), 19 individuals were arrested and 5 people were

⁸Strategy 31 is discussed in “The Russian protesters who won’t give up,” by Luke Harding, *The Guardian*, August 30, 2010. Available online at: <https://goo.gl/vfwZro> (last accessed December 9, 2017). Weeks of modestly-sized, regularly-scheduled protests prior to the massive events that led to the fall of the Berlin Wall can be seen in Appendix Figure A.2

⁹See “A Peaceful Revolution in Leipzig,” by Andrew Curry, *Spiegel Online*, October 9, 2009. Available online at: <https://goo.gl/iUakCp> (last accessed December 9, 2017).

¹⁰Several dozen protesters were detained then released in St. Petersburg, which saw a protest of over 2,000 people. See “Anti-Putin protests mark Russian president’s birthday,” by Max Seddon and Henry Foy, *Financial Times*, October 7, 2017. Available online at: <https://goo.gl/4owQzA> (last accessed December 9, 2017).

¹¹The Chinese government blocked Instagram — the last major uncensored social media platform available inside the Great Firewall — when the Umbrella Revolution broke out at the end of September 2014 (Hobbs and Roberts, 2018).

¹²Source: Hong Kong Government Newsroom, <https://www.info.gov.hk/gia/general/200807/01/P200807010156.htm> (last accessed December 9, 2017).

charged for activities during the Marches.¹³ Note that 10 of the 15 Marches have 0 arrests and 0 charges at all.

¹³Protest turnout counts are based on HKUPOP July 1st Headcounting Project; arrests and convictions are compiled based on comprehensive news reporting archives from the WiseNews database.

A.3 Figures

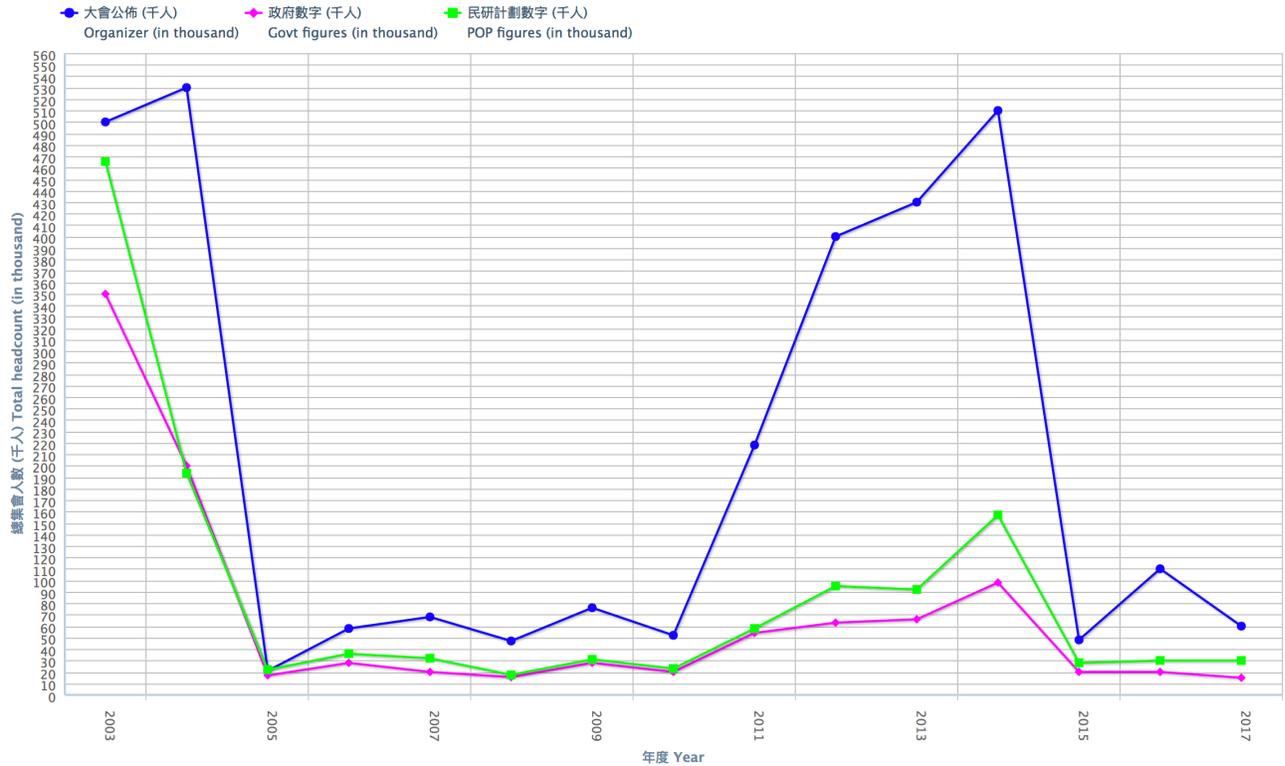


Figure A.1: Turnout at July 1st marches from 2003 to 2017, as counted by the organizers, as reported in government announcements, and as estimated by the Public Opinion Programme at the University of Hong Kong (all in thousands). Reproduced from the Public Opinion Programme, the University of Hong Kong. Source: <https://www.hkupop.hku.hk/english/features/july1/index.html>, last accessed on December 26, 2017. This figure is also shown in [Cantoni et al. \(2019\)](#).

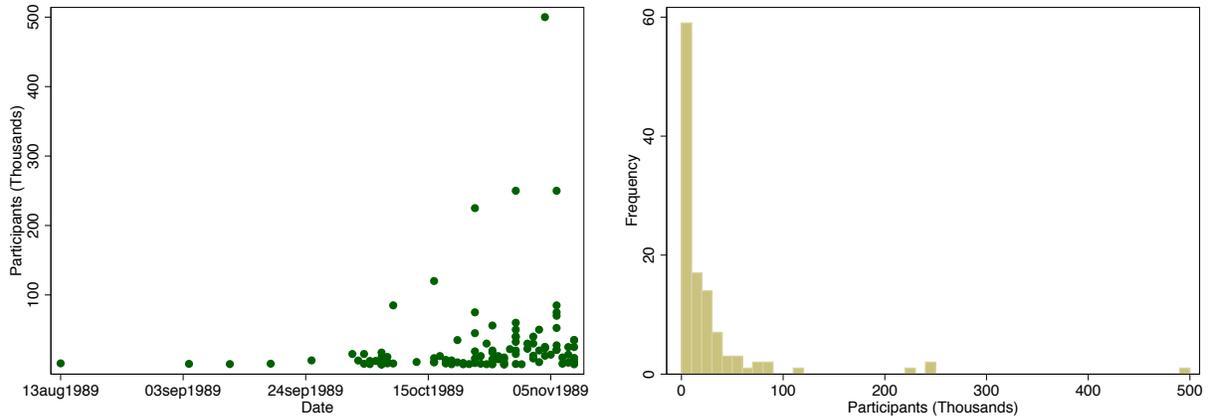


Figure A.2: Protest events in 13 East German district capitals in summer and fall 1989, through November 9, 1989 (when the Berlin Wall fell). Left panel plots individual protests' sizes by date; right panel shows a histogram of protest sizes during the entire time period. When a protest's size is estimated, we take the average of the minimum and maximum estimates. Data come from the Archiv Bürgerbewegung Leipzig. This figure is also shown in [Cantoni et al. \(2019\)](#).

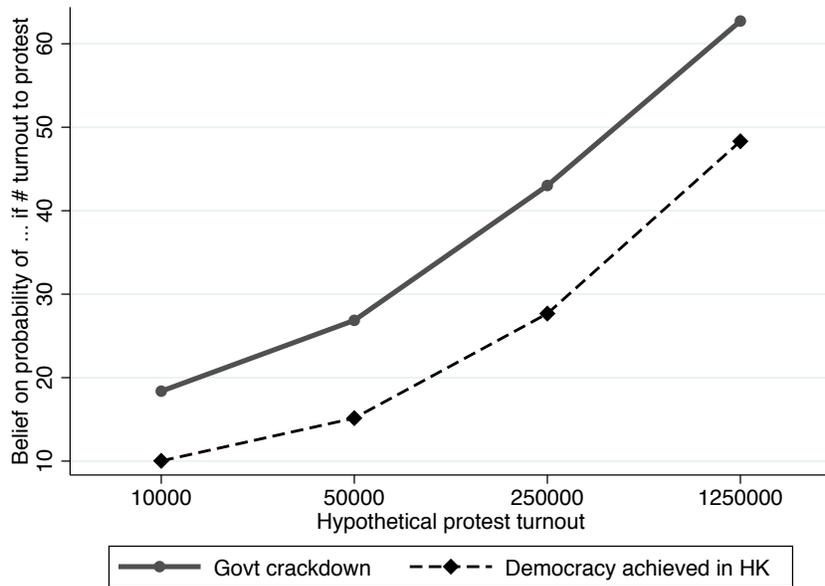


Figure A.3: Students' beliefs regarding the benefits (the chance of achieving democratic institutions in Hong Kong) and costs (the chance of a violent government crackdown) for hypothetical protests with different turnout levels, ranging from 10,000 to 1,250,000 participants. This figure is also shown in [Cantoni et al. \(2019\)](#).

Appendix B Ethical considerations

Our research design is based on a careful assessment of potential risks to our participants. One might have several specific dimensions of concern with the study, which we address in turn:

Underage participants: There are *no* underage participants in our study. We screened out minors in the first step of our online survey.

IRB approval: We sought and obtained approval from the University of Munich (economics ethics committee, protocol 2017-04), Stanford University (Institutional Review Board, Protocol 38481), and the University of California-Berkeley (Committee for Protection of Human Subjects, Protocol ID 2015-05-7571). In all of these IRB submissions, we followed all required procedures and answered questions relating to all relevant dimensions of concern, including risk. The experimental intervention in 2017 was started only after IRB approval. Outcomes and covariates from previous years were collected in the context of our continuing panel survey of Hong Kong students, which had been ongoing since 2016.

We also received IRB approval from Hong Kong University of Science and Technology prior to the experimental intervention. More than two years after our experimental intervention, on November 28, 2019, the HKUST Human Participants Research Panel (HPRP) wrote to us, requesting that we remove references to the HKUST IRB approval of our study. HKUST HPRP claimed that our study went beyond what was approved in our proposal.

We wrote back unambiguously rejecting the HKUST claim. In no way did we deviate from the proposed research approved by the HKUST HPRP. We submitted all relevant information regarding the study up front, and we received no request for any revision to our proposal. Furthermore, we executed precisely the research the committee approved.

Given our strict adherence to the proposal approved by the HKUST HPRP, we maintain our position that our research was conducted within the bounds of what was approved by the HKUST HPRP, but acknowledge that this is disputed by HKUST.

Payment: Our participants were paid HKD 350 (approx. USD 45, or EUR 40) for completing either of the two experimental modules. This payment is in line with prevailing wages in Hong Kong, the time commitment expected for completing the task, and our own payments to study participants in previous waves of our HKUST student panel.

Risks: The generally accepted principle for ethics reviews are that risks should be minimal, i.e. not larger “than those ordinarily encountered in daily life of the general population;” moreover, these risks should be reasonable in relation to anticipated benefits. We firmly believe that these criteria are met in relation to participating in Hong Kong’s July 1st protest marches.

1. Demonstrations have so far been largely peaceful. No protester outside of a radical group or leadership of the democracy movement has ever been convicted for participating. Demonstrations are an event with broad participation of all strata of society, not just a few radical students. From 2003 until today, a cumulative number of over 1.35 million participants have taken part in the July 1st marches, while the number of individuals arrested, charged or convicted in any given year were, at most, in the single digits (see table on the following page). In 10 out of 15 protests of the past not a single individual was arrested, charged or convicted.

2. The mere fact that thousands of people are participating in protests every year — even hundreds of thousands in some years — shows that these are integral part of the “daily life of the general population.”
3. Demonstrations are legal in Hong Kong. Freedom of speech is guaranteed by the current legal system.¹ This is true today, and this was true during 2017–18 when the experiment was conducted.

Discussion: Importantly, this shows how the setting of our experimental intervention differs from mainland China. As of 2019, Freedom House, an independent organization dedicated to the expansion of freedom and democracy around the world, rated Hong Kong’s civil liberties as 2 out of 7 (1 = most free, 7 = least free) for the past 10 years, the same score as France. Mainland China, on the other hand, scored 6.² Until 2019, the Hong Kong Government has repeatedly made statements after the July 1st Marches indicating that the “Government respects citizens’ rights to assemble, protest, and express their opinions.”³

Our research design illustrates that we anticipated the risks to be low, and, through revealed preference, how study participants themselves assessed the risks as low. We designed a placebo treatment with the hopes of achieving a similar take up rate at the same level of payment. When study participants were offered the exactly same monetary incentives to complete two different tasks — counting crowd size during the protest on July 1st and counting crowd size at the MTR (subway) stations one week later — the shares of students who took up the offers and completed the tasks are very similar (11% and 14%, respectively). This suggests that study participants perceived these two tasks as having similar degree of risk.

As in all social science research — from handing out conditional cash transfers, to sending out enumerators to favelas, or community organizers in reconciliation efforts after civil wars — there is always a small risk of adverse consequences: in our case, a demonstration turning violent, or a military crackdown. Our assessment was that was a very unlikely, tail (“*de minimis*”) outcome. Up through 2019, no violent crackdown has occurred in Hong Kong’s July 1st marches.

¹Article 27 of the Hong Kong Basic Law (“Hong Kong residents shall have freedom of speech, of the press and of publication; freedom of association, of assembly, of procession and of demonstration; and the right and freedom to form and join trade unions, and to strike.”) and Articles 16 (“Freedom of opinion and expression”) and 17 (“Right of peaceful assembly”) of the Hong Kong Bill of Rights.

²Source: <https://freedomhouse.org/report/freedom-world/2019/hong-kong>, last accessed July 23, 2019.

³Source: <https://www.info.gov.hk/gia/general/200807/01/P200807010156.htm>, last accessed July 23, 2019. Note that as of the writing of this final draft of the article, Hong Kong’s political environment has changed: the passage on July 1, 2020, of national security legislation in Beijing has significantly reduced Hong Kong citizens’ freedoms of speech and public assembly.

Summary of arrests, charges and convictions related to July 1 March participants during the Marches since 2003¹

(as of July 2019)

| Year | Number of attendees ² | Arrested by police | Charged by DOJ | Convicted by court | Reason of arrest/charge/conviction |
|------|----------------------------------|--------------------|----------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2003 | 462,000 | 1 | 0 | 0 | Not reported |
| 2004 | 193,000 | 0 | 0 | 0 | |
| 2005 | 22,000 | 0 | 0 | 0 | |
| 2006 | 36,000 | 0 | 0 | 0 | |
| 2007 | 32,000 | 0 | 0 | 0 | |
| 2008 | 17,000 | 0 | 0 | 0 | |
| 2009 | 34,000 | 0 | 0 | 0 | |
| 2010 | 23,000 | 0 | 0 | 0 | |
| 2011 | 63,000 | 0 | 0 | 0 | |
| 2012 | 95,000 | 2 | 2 | 2 | 2 protesters were charged with assaulting police officers. 1 was sentenced 21 days of imprisonment and the other was sentenced 6 weeks of imprisonment. |
| 2013 | 97,000 | 3 | 3 | 3 | 3 protesters were charged with unlawful assembly and sentenced for 80 hours of community service. |
| 2014 | 157,000 | 5 (organizers) | 0 | 0 | 5 march organizers were arrested on July 4 for violating the assembly permit. None of them were charged as of today. |
| 2015 | 28,000 | 0 | 0 | 0 | |
| 2016 | 30,000 | 3 | 0 | 0 | 3 were arrested for possession of weapons. None of them were charged as of today. |
| 2017 | 30,000 | 5 | 0 | 0 ³ | Arrested for common assault, criminal damage, disorder in public places and obstructing public officers. |
| 2018 | 28,000 | 0 | 0 | 0 | |

¹ Compiled by reports in HK newspapers. Source: WiseNews database. Note that there were individuals arrested, charged, or convicted for activities on July 1st but outside of the July 1st March activities.

² Source: HKUPOP July 1 headcounting project.

³ Another 8 individuals sabotaging the July 1st March were arrested and charged. 1 was charged for damaging demonstration props; 3 were fined for \$1500 each; 4 were sentenced for 18 months of imprisonment with probation; 1 was sentenced for 2 weeks of imprisonment with probation.

Appendix C Experimental materials

C.1 Full text of survey questions used for Table 2

The z-score index for own political beliefs encompasses the following questions¹

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- 1 By 2025, which of the following outcomes regarding Hong Kong's political institutions do you think is most likely? (complete integration with Mainland China vs. fully separate institutions)
 - 2 For the most likely outcome you picked in the 2025 outcome above, how certain do you think it will actually happen? (completely uncertain vs. completely certain)
 - 3 By 2050, which of the following outcomes regarding Hong Kong's political institutions do you think is most likely? (complete integration with Mainland China vs. fully separate institutions)
 - 4 For the most likely outcome you picked in the 2050 outcome above, how certain do you think it will actually happen? (completely uncertain vs. completely certain)
-

The z-score index for own political preferences encompasses the following questions:

-
- 1 How important is it for you to live in a country that is governed democratically, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole? (not at all important vs. absolutely important)
 - 2 Where do you stand in terms of your political attitudes? (pro-democracy vs. pro-establishment / pro-Beijing)
 - 3 As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong? (not at all legitimate vs. completely legitimate)
 - 4 To what extent do you think Hong Kong should be an independent nation? (Hong Kong should not be independent at all vs. Hong Kong should definitely be independent)
-

The z-score index for second-order beliefs (about the political preferences of other Hong Kong citizens) encompasses the following questions:

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- 1 Some people in Hong Kong are in strong support of its independence. To what extent do you think that these people who hold such beliefs are afraid of expressing their beliefs in public? (not at all afraid vs. extremely afraid)
 - {2-4} What is the average answer that *all citizens of Hong Kong* would have chosen in the following questions?
 - 2 How important is it for you to live in a country that is governed democratically, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole?
 - 3 As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong? (not at all legitimate vs. completely legitimate)
 - 4 To what extent do you think Hong Kong should be an independent nation? (Hong Kong should not be independent at all vs. Hong Kong should definitely be independent)
-

¹We code answers as optimistic/"anti-authoritarian" if respondents predict that full independence or separate institutions are most likely, and express a degree of certainty of 5 (out of 10) or more.

C.2 Recruitment email script (June 2017)

Dear students,

Greetings! Hope the summer is going well!

We are researchers from HKUST, University of Chicago, University of Munich, Stanford University, and University of California at Berkeley. We are conducting this research project in order to better understand attitudes and preferences among college students in Hong Kong. We'd love to invite you to participate in this study, which will take place online.

The survey consists of 2 main parts. You will start Part 1 of the survey today, which will take about 30 minutes to complete. Part 2 of the survey will start 2 weeks later, which will take another 30 minutes to complete. When you complete both parts of the survey, you will receive HKD 300 as compensation. Based on the choices you make during the survey, you may earn an additional bonus payment of up to HKD 200.

All data collected from the survey will be for academic research only. We abide by academic regulations in Hong Kong, United States, and the European Union to protect the rights and privacy of all study participants.

Please note that in order to be eligible to participate in this study, you need to be: (a) currently registered undergraduate student at HKUST; (b) above 18 years old; and (c) either a resident of Hong Kong SAR or citizen of People's Republic of China.

To begin the survey, please click on the following link: *[survey link]*

Feel free to contact us at jzproject@ust.hk if you have questions and/or concerns regarding participating in this study.

We look forward to your participation!

With regards,

HK Student Attitudes and Preferences Research Team:
Leonardo Bursztyn (University of Chicago)
Davide Cantoni (University of Munich)
David Yang (Stanford University)
Noam Yuchtman (University of California, Berkeley)
Jane Zhang (HKUST)

C.3 Baseline survey module (June 2017)

ANTI-AUTHORITARIANISM

Panel A: Responses to direct questions

Category A.1: *Support for democracy*

- A.1.1 How important is it for you to live in a country that is governed democratically, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole? (0 = not at all important; 10 = absolutely important)
 - A.1.2 Do you think that universal and truly democratic elections play an important role in determining whether you and your family are able to make a better living? (0 = not at all important; 10 = extremely important)
 - A.1.3 Do you think that universal and truly democratic elections are an important factor in whether or not a country's economy can develop successfully? (0 = not at all important; 10 = extremely important)
 - A.1.4 Where do you stand in terms of your political attitudes? (0 = pro-establishment / pro-Beijing; 10 = pro-Democracy)
 - A.1.5 Where do you stand in terms of the following two statements? (0 = I think that only those who demonstrate patriotism towards Beijing should be allowed to become candidates for the Chief Executive; 10 = I think that no restriction should be imposed in terms of who are allowed to become candidates during the Chief Executive election)
-

Category A.2: *Support for HK independence*

- A.2.1 Where do you stand in terms of the following two statements? (0 = I would like to see Hong Kong be fully integrated with the political institutions of Mainland China; 10 = I would like Hong Kong to be separate and have its own political institutions)
 - A.2.2 Where do you stand in terms of the following two statements? (0 = I would like to see Hong Kong be fully integrated with the economic institutions of Mainland China; 10 = I would like Hong Kong to be separate and have its own economic institutions)
 - A.2.3 As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong? (0 = completely legitimate; 10 = not at all legitimate)
 - A.2.4 If the Chinese Communist Party undergoes significant reform and Mainland China adopts truly democratic political institutions, do you think the Chinese central government can be a legitimate ruling government over Hong Kong? (0 = completely legitimate; 10 = not at all legitimate)
 - A.2.5 To what extent do you think Hong Kong should be an independent nation? (0 = HK should not be independent at all; 10 = HK should definitely be independent)
 - A.2.6 To what extent do you think Hong Kong society should discuss and debate the potential prospect of its independence? (0 = independence should not be discussed at all; 10 = important and beneficial to have open discussion on independence)
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Category A.3: *HK identity: self-reported*

- A.3.1 Where do you stand in terms of your national identity? (0 = Chinese; 10 = Hong Kongese)
 - A.3.2 Where do you stand in terms of your cultural identity? (0 = Chinese; 10 = Hong Kongese)
 - A.3.3 How important is being a Hong Kongese citizen to you? (0 = not at all important; 10 = extremely important)
 - A.3.4 How important is being a Chinese citizen to you? (0 = extremely important; 10 = not at all important)
-

Category A.4: *Unhappiness with political status quo*

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- A.4.1 How democratically is Hong Kong being governed today? (0 = completely democratic; 10 = not at all democratic)
 - A.4.2 How would you rate the political system in Hong Kong between 1997 and 2012, relative to that prior to 1997? (0 = extremely good; 10 = extremely bad)
 - A.4.3 How would you rate the political system in Hong Kong today, relative to that prior to 1997? (0 = extremely good; 10 = extremely bad)
 - A.4.4 All things considered, how satisfied are you with your life as a whole these days? (0 = completely satisfied; 10 = completely dissatisfied)
-

Category A.5: *Anti-CCP views on current events*

- A.5.1 To what degree do believe that the electoral reform package proposed by Mainland China is democratic? (0 = completely democratic; 10 = completely undemocratic)
 - A.5.2 Do you support the Legislative Council's veto decision? (0 = completely against Legco's decision; 10 = completely support Legco's decision)
 - A.5.3 Between October and December 2015, multiple booksellers from Causeway Bay Books have gone missing. Many suspect that the mainland Chinese government was involved. If this is true, what do you think of mainland Chinese government's action? (0 = completely legitimate, in accordance with Basic Law; 10 = completely illegitimate, violation against Basic Law)
-

Panel B: Self-reported behavior and real-stakes decisions

- B.1 Have you participated in the Occupy Central / Umbrella Revolution during September - December 2014?
 - B.2 Which party are you are you planning to vote for, during the 2016 Hong Kong Legislative Council Election? (0 = pro-Beijing parties; 1 = pro-democracy parties)
 - B.3 Are you planning to participate in the July 1st March in 2016? (0 = no, or not sure yet but more unlikely than yes; 1 = yes, or not sure yet but more likely than not)
 - B.4.1-4 Average amount allocated to HK local partner in national identity games, relative to the amount allocated to Mainland Chinese
 - B.5 How much money from your participation fee do you want to contribute to Demosisto? (0 = none; 1 = positive amount)
-

FUNDAMENTAL FACTORS

Panel C: Economic preferences

Category C.1: *Risk tolerance*

- C.1.1 Please tell me, in general, how willing or unwilling you are to take risks? (0 = completely unwilling to take risks; 10 = very willing to take risks)
 - C.1.2 Certainty equivalent from step-wise lottery choices (what would you prefer: a draw with 50 percent chance of receiving 300 HKD, and the same 50 percent chance of receiving nothing, or the amount of xxx HKD as a sure payment?)
 - C.1.3 Eckel and Grossman (2002) lottery decisions: for the following lottery options, please choose one that you like the most? [*incentivized*]
-

Category C.2: *Patience*

- C.2.1 How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future? (0 = completely unwilling; 10 = very willing)
 - C.2.2 I tend to postpone tasks even if I know it would be better to do them right away (0 = describes me perfectly; 10 = does not describe me at all)
-

Continued on next page

C.2.3 Patience index from a step-wise intertemporal choices (would you rather receive 100 HKD today or xxx HKD in 12 months?)

Category C.3: *Altruism*

C.3.1 How willing are you to give to good causes without expecting anything in return? (0 = completely unwilling; 10 = very willing)

C.3.2 Today you unexpectedly received 10,000 HKD. How much of this amount would you donate to a good cause? (value between 0 and 10,000)

Category C.4: *Reciprocity*

C.4.1 When someone does me a favor I am willing to return it (0 = describes me perfectly; 10 = does not describe me at all)

C.4.2 I assume that people have only the best intentions (0 = does not describe me at all; 10 = describes me perfectly)

C.4.3 When a stranger helps you, would you be willing to give one of the following presents to the stranger as a thank-you gift?

C.4.4 How willing are you to punish someone who treats you unfairly, even if there may be costs for you? (0 = completely unwilling; 10 = very willing)

C.4.5 How willing are you to punish someone who treats others unfairly, even if there may be costs for you? (0 = completely unwilling; 10 = very willing)

C.4.6 If I am treated very unjustly, I will take revenge at the first occasion, even if there is a cost to do so (0 = describes me perfectly; 10 = does not describe me at all)

Category C.5: *Preference for redistribution*

C.5.1-11 Average amount of money allocated to a fellow HK local partner in a series of dictator games [incentivized]

Panel D: Personality traits

Category D.1: *Big 5 - openness*

D.1.1-5 On each numerical scale that follows, indicate which point is generally more descriptive of you:

D.1.1 1 = no-nonsense; 5 = a dreamer

D.1.2 1 = practical; 5 = theoretical

D.1.3 1 = following authority; 5 = following imagination

D.1.4 1 = seek routine; 5 = seek novelty

D.1.5 1 = prefer things clear-cut; 5 = comfortable with ambiguity

Category D.2: *Big 5 - agreeableness*

D.2.1-5 On each numerical scale that follows, indicate which point is generally more descriptive of you:

D.2.1 1 = abrupt; 5 = courteous

D.2.2 1 = selfish; 5 = generous

D.2.3 1 = cold; 5 = warm

D.2.4 1 = independent; 5 = team player

D.2.5 1 = skeptical; 5 = trusting

Category D.3: *Big 5 - conscientiousness*

D.3.1-5 On each numerical scale that follows, indicate which point is generally more descriptive of you:

D.3.1 1 = messy; 5 = neat

D.3.2 1 = open-minded; 5 = decisive

D.3.3 1 = easily distracted; 5 = stay focused

D.3.4 1 = comfortable with chaos; 5 = a preference for order

Continued on next page

D.3.5 1 = procrastinate; 5 = on time

Category D.4: *Big 5 - neuroticism*

D.4.1-5 On each numerical scale that follows, indicate which point is generally more descriptive of you:

D.4.1 1 = calm; 5 = eager

D.4.2 1 = confident; 5 = cautious

D.4.3 1 = upbeat; 5 = discouraged

D.4.4 1 = don't give a darn; 5 = easily embarrassed

D.4.5 1 = unflappable; 5 = distractible

Category D.5: *Big 5 - extraversion*

D.5.1-5 On each numerical scale that follows, indicate which point is generally more descriptive of you:

D.5.1 1 = prefer being alone; 5 = prefer being with others

D.5.2 1 = pessimistic; 5 = optimistic

D.5.3 1 = private; 5 = exhibitionist

D.5.4 1 = cool; 5 = outgoing

D.5.5 1 = thoughtful; 5 = conversational

Panel E: Cognitive ability

Category E.1: *Cognitive reflection test*

E.1.1 A bat and a ball cost \$1.10 in total. The bat costs \$1.00 more than the ball. How much does the ball cost?

E.1.2 If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?

E.1.3 In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake?

Category E.2: *University GPA*

E.2.1 GPA at HKUST, demeaned by major/program

Panel F: Economic status

Category F.1: *Household economic & social status*

F.1.1 During the past 12 months, what's the average monthly income of your family?

F.1.2 How many properties in HK do your parents currently own in total?

F.1.3 Father's highest educational attainment is above high school

F.1.4 Mother's highest educational attainment is above high school

Category F.2: *Student's projected economic status*

F.2.1 Median income of HKUST graduates in same major/program (as of 2014)

F.2.2 At age 40, where do you see yourself financially, relative to your classmates at HKUST? (1 = at the very bottom; 7 = at the very top)

Panel G: Background characteristics

G.1 Gender (0 = female; 1 = male)

G.2 Birth year

Category G.3: *HK-oriented childhood environment*

G.3.1 Generations since family migrated to HK (1 = self-migrated; 4 = great grandparents migrated)

G.3.2 Attended HK high school using English as language of instruction

Continued on next page

Category G.4: *Religiosity*

G.4.1 Religiosity (0 = atheist; 1 = religious)

SIMULTANEOUSLY DETERMINED VARIABLES

Panel H: Beliefs about politics

Category H.1: *Beliefs about future institutions*

H.1.1 Optimistic about HK's political institutions in 2025 (believe that Hong Kong will have separate and completely different political institutions from those of Mainland China by 2025, with high certainty)

H.1.2 Optimistic about HK's political institutions in 2050 (believe that Hong Kong will have separate and completely different political institutions from those of Mainland China by 2050, with high certainty)

Category H.2: *Beliefs about protest efficacy*

H.2.1 Probability of achieving democratic institutions in HK if protests occur, relative to the probability if no protest occurs (based on separate elicitation of probability of various protest scenarios and conditional probabilities of democratic institutions under these scenarios)

Panel I: Beliefs about HKUST students

Category I.1: *Beliefs about HKUST students: support for democracy*

I.1.1-2 What is the average answer that other participants from HKUST in this study have chosen?

I.1.1 Corresponding question: A.1.4

I.1.2 Corresponding question: A.1.5

Category I.2: *Beliefs about HKUST students: support for HK independence*

I.2.1-3 What is the average answer that other participants from HKUST in this study have chosen?

I.2.1 Corresponding question: A.2.1

I.2.2 Corresponding question: A.2.2

I.2.3 Corresponding question: A.2.5

Category I.3: *Beliefs about HKUST students: HK identity*

I.3.1-2 What is the average answer that other participants from HKUST in this study have chosen?

I.3.1 Corresponding question: A.3.1

I.3.2 Corresponding question: A.3.2

Category I.4: *Beliefs about HKUST students: unhappiness with political status quo*

I.4.1-2 What is the average answer that other participants from HKUST in this study have chosen?

I.4.1 Corresponding question: A.4.1

I.4.2 Corresponding question: A.4.4

Category I.5: *Beliefs about HKUST students: aggressive pursuit of political rights*

I.5.1 What is the average answer that other participants from HKUST in this study have chosen? Corresponding question: A.6.2

Panel J: Social life

Category J.1: *Political social network*

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-
- J.1.1 When you get together with your friends, would you say you discuss political matters frequently, occasionally, or never? (0 = never; 10 = frequently)
 - J.1.2 When you, yourself, hold a strong opinion, do you ever find yourself persuading your friends, relatives or fellow schoolmates to share your views or not? If so, does this happen often, from time to time, or rarely? (0 = never; 10 = always)
 - J.1.3 Do you know any direct relative who has participated in the Occupy Central movement in 2014?
 - J.1.4 Do you know any schoolmate who has participated in the Occupy Central movement in 2014?
 - J.1.5 Do you know any friend outside of school who has participated in the Occupy Central movement in 2014?
 - J.1.6 Has any of your direct relatives, schoolmates, or friends outside of school persuaded you to support Occupy Central (or anti-Occupy Central)?
 - J.1.7 How much do you know, on average, about your direct relatives' political orientation? (0 = do not know at all; 10 = very familiar and certain)
 - J.1.8 How much do you know, on average, about your schoolmates' political orientation? (0 = do not know at all; 10 = very familiar and certain)
 - J.1.9 How much do you know, on average, about your friends' political orientation? (0 = do not know at all; 10 = very familiar and certain)
-

Category J.2: *Sociability*

- J.2.1 Total number of friends at HKUST elicited (Please list the names of your friends at HKUST, in the order from those whom you interact with most frequently, to those whom you interact with less frequently. Please list as many names as you want – there is no space limit)
 - J.2.2 Current relationship status is non-single
-

Panel K: Beliefs about close friends

Category K.1: *Beliefs about close friends: support for democracy*

- K.1.1-2 What is the average answer that 5 of your closest friends at HKUST would have chosen?
 - K.1.1 Corresponding question: A.1.4
 - K.1.2 Corresponding question: A.1.5
-

Category K.2: *Beliefs about close friends: support for HK independence*

- K.2.1-3 What is the average answer that 5 of your closest friends at HKUST would have chosen?
 - K.2.1 Corresponding question: A.2.1
 - K.2.2 Corresponding question: A.2.2
 - K.2.3 Corresponding question: A.2.5
-

Category K.3: *Beliefs about close friends: HK identity*

- K.3.1-2 What is the average answer that 5 of your closest friends at HKUST would have chosen?
 - K.3.1 Corresponding question: A.3.1
 - K.3.2 Corresponding question: A.3.2
-

Category K.4: *Beliefs about close friends: unhappiness with political status quo*

- K.4.1-2 What is the average answer that 5 of your closest friends at HKUST would have chosen?
 - K.4.1 Corresponding question: A.4.1
 - K.4.2 Corresponding question: A.4.4
-

Category K.5: *Beliefs about close friends: aggressive pursuit of political rights*

- K.5.1 What is the average answer that 5 of your closest friends at HKUST would have chosen? Corresponding question: A.6.2
-

Continued on next page

Panel L: Media consumption

Category L.1: *Frequency of news consumption*

- L.1.1 How often do you browse the internet to read about news and current events? (1 = never; 6 = multiple times a day)
-

Category L.2: *Pro-democratic source of media*

- L.2.1 What are the top 3 internet websites that you regularly browse to consume information? (Select HK local websites among the top 2 choices)
- L.2.2 What are the top 3 news outlets that you regularly read for news (including the website, hard-copies of the newspaper, etc.)? (Select pro-democracy news outlets in HK among the top 2 choices)
-

Panel M: Political interest and knowledge

Category M.1: *Political interest*

- M.1.1 How interested would you say you are in politics? (0 = not at all interested; 10 = extremely interested)
-

Category M.2: *Political knowledge*

- M.2.1-4 Able to answer the following questions correctly:
- M.2.1 Which of the following is a Democratic Party Legco member?
- M.2.2 Which of the following is a pro-Beijing Legco member?
- M.2.3 Which of the following is a leader of a newly founded party in HK that focuses on self-determination?
- M.2.4 Which of the following is a leader of a newly founded party in HK that focuses on independence?
-

ADDITIONAL OUTCOME VARIABLES

Panel N: Intensity of political support

Category N.1: *Aggressive pursuit of political rights*

- N.1.1 What do you think is the consequence of this veto decision, in terms of Hong Kong adopting fully democratic political institutions in the future? (0 = the veto decision is extremely harmful in leading Hong Kong to fully democratic institutions in the future; 10 = the veto decision is extremely beneficial in leading Hong Kong to fully democratic institutions in the future)
- N.1.2 Some people support the use of violence to fight for Hong Kong citizens' political rights, while others oppose the use of violence. Where do you stand on this question? (0 = violence can never be justified; 10 = violence is currently justified)
-

C.4 Post July 1st 2017 protest module (*July 2017*)

[Section: welcome]

[add survey logo here]

Welcome screen: thank you for participating in this follow-up survey, which will take 10 minutes to complete.

You will earn an additional **HKD 50** once you complete this short survey, which will be added to your total payment you have earned from the study.

感謝您參與這次跟進調查。調查將花費約 10 分鐘完成。

完成這個簡短的調查後，你將在這個研究獲得的總報酬上，額外獲得 **50 港元** 的報酬。

[Section: July 1st March participation]

1. Did you attend the July 1 2017 March?
您有出席 2017 年的七一遊行嗎？

{IF 'NO', skip to Q6.}

2. Which political group's crowd did you join during the March?
(*please choose all that apply*)

你加入了哪一個政治團體的隊伍？（請勾選所有符合的選項）

公民黨 Civic Party
民主黨 Democratic Party
人民力量 People Power
工黨 Labour Party
社民連 League of Social Democrats
街工 Neighbourhood and Worker Service Centre
新民主同盟 Neo Democrats
青年新政 Youngspiration
香港眾志 Demosisto
熱血公民 Civic Passion
本土民主前線 Hong Kong Indigenous

科大學生會 HKUST Student Union
科大行動 ProgressUST
學聯 HKFS

普羅政治學院 Proletariat Political Institute
香港花生 HKpeanut
D100 民間電台 D100 Radio
職工盟 Hong Kong Confederation of Trade Unions
小麗民主教室 Siu Lai Democracy Groundwork
土地正義聯盟 Land Justice League
法輪功 Falun Gong
爭取全民退休保障聯席 Alliance for Universal Pension
懇請政府重訂屋宇飼養犬隻條例聯盟 Give Dogs a Home
旺角鳩鳴團 Mong Kok Shopping Revolution
良心之友 Friends of Conscience
撐傘落區 Umbrella Blossom

香港特區成立二十周年慶祝活動 HKSAR Establishment Day celebration
events

其他 Others

3. Why did you attend this year's July 1st March?

[please choose all that apply]

a = Many of my friends were attending the March, making it an enjoyable social event

b = Being politically active is an important component of my identity

c = I wanted to send a political signal to those who were not attending the March

d = I believed the March would produce political change

4. Did you persuade your friends to participate in this year's March?

[yes/no]

5. What was your general impression of the March (300 words or less)?
您對今年七一遊行的總體觀感如何？（請以三百字以內回答）

{OPEN-ENDED}

6. To the best of your knowledge, how many students your class and major（與你相同主修的同屆同學）at HKUST went to the July 1 March this year?

{Drop down menu: from 0 to xxx}

7. To what extent did your friends' decision to participate (or not participating) in this year's July 1st March affect your decision?
0 = not affected by friends' decisions at all
10 = my decision was entirely based on my friends' decisions

[Section: information about protests]

8. How many people in total do you think *participated* in the July 1st March（七一大遊行）in 2017?

{Open-ended question; fill in integer > 0}

9. On July 14th, Hong Kong's High Court ruled that 4 directly-elected members of the Legislative Council are disqualified of their seats. Who are these 4 disqualified LegCo members?
[pick 4 out of 5]

LEUNG Kwok-hung 梁國雄

Nathan LAW Kwun-chung 羅冠聰

Eddie CHU Hoi Dick 朱凱迪

LAU Siu-lai 劉小麗

Edward YIU Chung-yim 姚松炎

[Section: political beliefs and attitudes]

10. By 2025, which of the following outcome regarding Hong Kong's *political* institutions (政治體制) do you think is the *most likely*?
 1. Completely integrated with the political institutions of Mainland China
 2. Not fully integrated with the political institutions of Mainland China, but closer to that of Mainland China than to full democracy
 3. Not fully integrated with the political institutions of Mainland China, but closer to full democracy than to the institutions of Mainland China
 4. Hong Kong has separate and completely different political institution from those of Mainland China

11. For the *most likely* outcome that you picked in previous question (2025 outcome), how certain do you think it will actually happen?
 - 0 = completely uncertain
 - 5 = somewhat certain
 - 10 = completely certain

12. By 2050, which of the following outcomes regarding Hong Kong's *political* institutions (政治體制) do you think is the *most likely*?
 1. Completely integrated with the political institutions of Mainland China
 2. Not fully integrated with the political institutions of Mainland China, but closer to that of Mainland China than to full democracy
 3. Not fully integrated with the political institutions of Mainland China, but closer to full democracy than to the institutions of Mainland China
 4. Hong Kong has separate and completely different political institutions from those of Mainland China

13. For the *most likely* outcome that you picked in previous question (2050 outcome), how certain are you that it will actually happen?
 - 0 = completely uncertain
 - 5 = somewhat certain
 - 10 = completely certain

14. How important is it for you to live in a country that is governed *democratically*, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole?
0 = not at all important
5 = neutral
10 = absolutely important
15. Where do you stand in terms of your political attitudes? (支持的政治立場)
0 = pro-democracy (支持民主派)
5 = neutral (中立)
10 = pro-establishment / pro-Beijing (支持建制派)
16. As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong?
0 = not at all legitimate
5 = in between
10 = completely legitimate
17. To what extent do you think Hong Kong should be an independent nation?
0 = HK should not be independent at all
5 = in between
10 = HK should definitely be independent

[Section: beliefs regarding others]

18. Some people in Hong Kong are in strong support of its independence (香港獨立). To what extent do you think that these people who hold such beliefs are afraid of (害怕) expressing their beliefs in public?

0 = not at all afraid
5 = somewhat afraid
10 = extremely afraid

19. How important is it for you to live in a country that is governed *democratically*, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole?

0 = not at all important
5 = neutral
10 absolutely important

What is the average answer that *all citizens of Hong Kong* would have chosen?

[Fill in a number, from 0-10]

20. As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong?

0 = not at all legitimate
5 = in between
10 = completely legitimate

What is the average answer that *all citizens of Hong Kong* would have chosen?

[Fill in a number, from 0-10]

21. To what extent do you think Hong Kong should be an independent nation?

0 = HK should not be independent at all
5 = in between
10 = HK should definitely be independent

What is the average answer that *all citizens of Hong Kong* would have chosen?

[Fill in a number, from 0-10]

[Section: donation]

Thank you for participating in our study this year.

As promised, you will receive HKD 300 for completing last month's online surveys, as well as the various bonus payments that you may earn throughout the study (including the HKD 50 for participating in today's survey).

We would like to give you the choice of receiving the HKD 300 participation fee directly, or making a contribution to one of the following organizations.

Your participation payment belongs to you, and you should feel absolutely free to receive all of it as a direct payment to you, or to contribute any amount of your payment to the organization you prefer.

We will transfer the amount you indicated to the corresponding organization on your behalf. We will provide you with a receipt from the contribution; your contribution decision will be completely private and anonymous.

Please note this research project is *not* affiliated with any of the following organizations.

感謝你參與我們今年的研究。

按照約定，你將收到 **300 港元** 作為完成上月問卷調查的報酬，以及各項你在研究中獲得的額外報酬（包含今天問卷獲得的 50 港元報酬）。

我們想讓你選擇，直接收到 300 港元的報酬，或者將其中一部分捐獻給以下團體之一。

你的報酬是屬於你的，你可以完全自由地決定直接收取全部的報酬，或者捐獻任何數目的金額予你選擇的團體。

我們會代你把你選擇的金額轉帳予你選擇的團體。我們將向你提供收據，而你的捐款決定將維持保密及匿名。

請注意，本研究計劃與所有下列的團體沒有聯繫。

22. Do you want to make a contribution to any of the following organizations from part or all the participation fee (HKD 300) that you have earned?

1 = Demosistō 香港眾志 (<https://www.demosisto.hk>)

2 = DAB 民建聯 (<http://www.dab.org.hk>)

3 = None

23. *[Display if previous question's answer is 1 or 2]*
How much of the HKD 300 participation fee do you want to contribute to the group that you chose above?
Please fill in number between 0-300.
{fill in blank, integer 0-300}

[Section: conclusion]

Thank you for participating in today's follow-up survey.

We will email you in a week to inform you the total amount that you have earned throughout the study this summer, as well as additional payment details. The payment will be *deposited directly to your bank account* via the *HKUST Student Information System (SIS)*, as soon as the study concludes.

If you have indicated that you want to make contribution to an organization, we will transfer the amount you indicated on your behalf in approximately 2 weeks, and we will email you a receipt from the contribution.

Thank you again for your support of this study. Feel free to contact us at jzproject@ust.hk if you have questions and/or concerns regarding this study.

C.5 Pre July 1st 2018 protest module (June 2018)

[Section: welcome]

[add survey logo here]

Thank you for participating in this follow-up survey, which will take less than 10 minutes to complete. Your continuous participation in this year's survey is extremely important to validity of our academic research.

You will earn **HKD 100** once you have completed today's survey. There will be a 2nd part of the survey, which will start around end of July. You will earn additional money when you complete the 2nd part of the survey.

[font: 1 size smaller] All data collected from the survey will be for academic research only. We abide by academic regulations in Hong Kong, United States, and the European Union to protect the rights and privacy of all study participants. Identifiable information will only be used to contact you as a study participant and to process study payment. The identifiable information will be de-linked from the data and stored separately, in encrypted format. We will never share the data we collected with any government bodies, organizations, or the school administration. You can click here *[insert FAQ link: stanford.edu/~dyanq1/pdfs/HKUST_Study_FAQ.pdf]* to learn about additional details of the study.

感謝您參與這次跟進調查。調查將花費約 10 分鐘完成。你的持續參與對於研究成果意義重大。

完成本調查後，您將獲得 **100 港元**作為報酬。第二部份的問卷調查將會在七月下旬開始。你完成第二部份調查後，將會獲得另外的報酬。

[font: 1 size smaller] 所有經由問卷調查收集的數據只會用於學術研究用途。我們嚴守香港、美國和歐盟的學術規定，保障所有研究參與者的權利和私隱。可用於追蹤身份的個人資訊只會用於與你就研究參與的事宜聯絡，以及安排支付研究報酬。個人資訊會與其他數據分離並加密儲存，我們亦不會把收集到的數據分享給任何政府機關、團體或校方的管理人員。你可在 *[insert FAQ link: stanford.edu/~dyanq1/pdfs/HKUST_Study_FAQ.pdf]* 了解更多有關本研究的資訊。

[Section: information about protests]

1. How many people in total do you think *participated* in the July 1st March (七一大遊行) in 2017?

{Open-ended question; fill in integer > 0}

2. Are you planning to participate in the July 1st March (七一大遊行) in 2018?

1 = Yes

2 = Not sure yet, but more likely than not

3 = Not sure yet, but more unlikely than yes

4 = No

3. On July 14th, Hong Kong's High Court ruled that 4 directly-elected members of the Legislative Council are disqualified of their seats. Who are these 4 disqualified LegCo members?

[pick 4 out of 5]

LEUNG Kwok-hung 梁國雄

Nathan LAW Kwun-chung 羅冠聰

Eddie CHU Hoi Dick 朱凱迪

LAU Siu-lai 劉小麗

Edward YIU Chung-yim 姚松炎

[Section: political beliefs and attitudes]

4. By 2025, which of the following outcome regarding Hong Kong's *political* institutions (政治體制) do you think is the *most* likely?

1. Completely integrated with the political institutions of Mainland China

2. Not fully integrated with the political institutions of Mainland China, but closer to that of Mainland China than to full democracy

3. Not fully integrated with the political institutions of Mainland China, but closer to full democracy than to the institutions of Mainland China

4. Hong Kong has separate and completely different political institution from those of Mainland China

5. For the *most likely* outcome that you picked in previous question (2025 outcome), how certain do you think it will actually happen?
0 = completely uncertain
5 = somewhat certain
10 = completely certain

6. By 2050, which of the following outcomes regarding Hong Kong's *political* institutions (政治體制) do you think is the *most likely*?
 1. Completely integrated with the political institutions of Mainland China
 2. Not fully integrated with the political institutions of Mainland China, but closer to that of Mainland China than to full democracy
 3. Not fully integrated with the political institutions of Mainland China, but closer to full democracy than to the institutions of Mainland China
 4. Hong Kong has separate and completely different political institutions from those of Mainland China

7. For the *most likely* outcome that you picked in previous question (2050 outcome), how certain are you that it will actually happen?
0 = completely uncertain
5 = somewhat certain
10 = completely certain

8. How important is it for you to live in a country that is governed *democratically*, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole?
0 = not at all important
5 = neutral
10 = absolutely important

9. Where do you stand in terms of your political attitudes? (支持的政治立場)
- 0 = pro-democracy (支持民主派)
 - 5 = neutral (中立)
 - 10 = pro-establishment / pro-Beijing (支持建制派)
10. As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong?
- 0 = not at all legitimate
 - 5 = in between
 - 10 = completely legitimate
11. To what extent do you think Hong Kong should be an independent nation?
- 0 = HK should not be independent at all
 - 5 = in between
 - 10 = HK should definitely be independent

[Section: beliefs regarding others]

12. Some people in Hong Kong are in strong support of its independence (香港獨立). To what extent do you think that these people who hold such beliefs are afraid of (害怕) expressing their beliefs in public?
- 0 = not at all afraid
 - 5 = somewhat afraid
 - 10 = extremely afraid
13. How important is it for you to live in a country that is governed *democratically*, even if democracy makes no significant difference in the socioeconomic status of you, your family, or the country as a whole?
- 0 = not at all important
 - 5 = neutral
 - 11 absolutely important

11 absolutely important

What is the average answer that *all citizens of Hong Kong* would have chosen?

[Fill in a number, from 0-10]

14. As it is now, is the Chinese Communist Party legitimate in ruling over Hong Kong?

0 = not at all legitimate

5 = in between

10 = completely legitimate

What is the average answer that *all citizens of Hong Kong* would have chosen?

[Fill in a number, from 0-10]

15. To what extent do you think Hong Kong should be an independent nation?

0 = HK should not be independent at all

5 = in between

10 = HK should definitely be independent

What is the average answer that *all citizens of Hong Kong* would have chosen?

[Fill in a number, from 0-10]

[Section: donation]

Thank you for participating in our study this year.

As promised, you will receive HKD 100 for completing this part of the survey. You will also be able to earn additional compensation when you completed the 2nd part of the survey which will start in about 3 weeks.

We would like to give you the choice of receiving the HKD 100 participation fee directly, or making a contribution to one of the following organizations.

Your participation payment belongs to you, and you should feel absolutely free to receive all of it as a direct payment to you, or to contribute any amount of your payment to the organization you prefer.

We will transfer the amount you indicated to the corresponding organization on your behalf. We will provide you with a receipt from the contribution; your contribution decision will be completely private and anonymous.

Please note this research project is *not* affiliated with any of the following organizations.

感謝你參與我們今年的研究。

按照約定，你將收到 **100 港元** 作為完成本問卷調查的報酬。在你完成三星期後開始的第二部份問卷調查後，你亦會收到另外的報酬。

我們想讓你選擇，直接收到 100 港元的報酬，或者將其中一部分捐獻給以下團體之一。

你的報酬是屬於你的，你可以完全自由地決定直接收取全部的報酬，或者捐獻任何數目的金額予你選擇的團體。

我們會代你把你選擇的金額轉帳予你選擇的團體。我們將向你提供收據，而你的捐款決定將維持保密及匿名。

請注意，本研究計劃與所有下列的團體沒有聯繫。

16. Do you want to make a contribution to any of the following organizations from part or all the participation fee (HKD 100) that you have earned from today's survey?
Note that your donation decision will not affect the participation fee that you will be receiving from participating in future part(s) of the study. You will receive those amounts in entirety.

1 = Demosisto 香港眾志 (<https://www.demosisto.hk>)

2 = DAB 民建聯 (<http://www.dab.org.hk>)

3 = None

17. *[Display if previous question's answer is 1 or 2]*
How much of the HKD 100 participation fee do you want to contribute to the group that you chose above?
Please fill in number between 0-100.
{fill in blank, integer 0-100}

[Section: conclusion]

Thank you for participating in today's survey.
We will email you around late July about the 2nd part of the survey.

The study payment will be *deposited directly to your bank account* via the *HKUST Student Information System (SIS)*, as soon as the study concludes (by end of July). The payment process normally takes about four to eight weeks. There might be some delays in SIS payment processing due to summer vacation.

If you wish to receive the payment sooner, you may choose to receive the payment by bank cheque below. You will need provide us with your mailing address and payee name in order to receive the cheque. We will issue a bank cheque to process your payment approximately two weeks after the study concludes.

Please make sure to click ">>" in order for us to record your answer.

[question: "I would like to receive my payment by:

a = HKUST Student Information System (SIS)

b = bank cheque (need to provide mailing address and cheque payee info)]

If (b) is chosen, then shown 2 more questions.

- 1. Mailing address [large text box]*
- 2. Payee Name (must be identical to bank record)*

If you have indicated that you want to make contribution to an organization, we will transfer the amount you indicated on your behalf in approximately 2 weeks, and we will email you a receipt from the contribution.

Thank you again for your support of this study. Feel free to contact us at jzproject@ust.hk if you have questions and/or concerns regarding this study.

感謝你完成今天的問卷。我們將在七月下旬以電郵通邀請你完成第二部份的問卷。

研究的報酬將在研究結束後（七月底）經由香港科技大學的學生資訊系統(SIS)直接存入你的銀行戶口。一般而言，經由 SIS 支付的程序須時約四至八星期，但程序有可能因為暑假而有所延誤。

如果你希望更快收到報酬，你可以選擇收取銀行支票。你需要向我們提供你的郵寄地址和收款人姓名以收取支票。我們將在研究結束後約兩星期內備妥並寄出研究報酬的支票。請在填寫資料後點擊“>>”按鈕，以確保我們能紀錄你的回覆。

[問題：我希望用以下方式收取報酬

a = 香港科技大學學生資訊系統(SIS)

b = 支票(你需要提供郵寄地址及收款人資訊)

]

如選取了(b)，顯示兩條額外問題。

1. 郵寄地址
2. 收款人姓名（須與銀行戶口相同）

如果你已表示你希望把報酬捐獻給團體，我們將在約兩星期內替你把指定的金額轉交該團體，然後經電郵把收據傳送給你。

再次感謝你支持我們的研究。如有任何疑問或顧慮，請以電郵與我們聯絡：
jzproject@ust.hk

C.6 Post July 1st 2018 protest module (June 2018)

[Section: welcome]

[add survey logo here]

Thank you for participating in this follow-up survey, which will take about 5 minutes to complete. You will earn HKD 100 once you have completed today's survey.

Your continuous participation in this year's survey is extremely important to validity of our academic research.

You will have opportunity to participate in additional components of the study, which will take about 40 minutes. You will earn additional payment if you complete the additional components of the study. We will tell you more details at the end of today's survey.

Feel free to contact us at jzproject@ust.hk if you have questions and/or concerns regarding participating in this study.

感謝您參與這次跟進調查。調查約須 5 分鐘完成。完成本部份的問卷調查後，你將獲得 100 港元作為報酬。你持續參與今年的問卷調查，對研究成果的有效性意義重大。

你亦會得到參與研究額外部分的機會，該部份將花費約 40 分鐘。你將在完成本問卷後獲得更多有關資訊。

如你對參與研究有任何問題或顧慮，歡迎透過電郵 jzproject@ust.hk 與我們聯絡。

All data collected from the survey will be for academic research only. We abide by academic regulations in Hong Kong, United States, and the European Union to protect the rights and privacy of all study participants. Identifiable information will only be used to contact you as a study participant and to process study payment. The identifiable information will be de-linked from the data and stored separately, in encrypted format. We will never share the data we collected with any government bodies, organizations, or the school administration. You can click here *[insert FAQ link: stanford.edu/~dyang1/pdfs/HKUST_Study_FAQ.pdf]* to learn about additional details of the study.

所有經由問卷調查收集的數據只會用於學術研究用途。我們嚴守香港、美國和歐盟的學術規定，保障所有研究參與者的權利和私隱。可用於追蹤身份的個人資訊只會用於與你就研

究參與的事宜聯絡，以及安排支付研究報酬。個人資訊會與其他數據分離並加密儲存，我們亦不會把收集到的數據分享給任何政府機關、團體或校方的管理人員。你可在此 *[insert FAQ link: stanford.edu/~dyanq1/pdfs/HKUST_Study_FAQ.pdf]* 了解更多有關本研究的資訊。

[Section: protest participation]

1. Have you participated in the July 1st March in 2018?
[yes / no]
你有沒有參與 2018 年的七一遊行？
[有／沒有]
2. Since last year's July 1st march, have you formed stronger friendships with people who are politically engaged?
[yes / no]
自去年的七一遊行後，你有沒有與投入政治參與的人士結交為好友？
[有／沒有]
3. [If #1 (participated in 2018 = yes)]
Did you participate in this year's July 1st March with any of these closer friends?
[yes / no]
你今年有沒有與這些好友一起參與七一遊行？
[有／沒有]

[Section: conclusion, and introduction to panel module]

Thank you for participating in today's survey. You have earned HKD 100 additional payment.

We now invite you to participate in a follow-up survey that will take about 40 minutes to complete. You will earn an additional HKD 250 if you complete this part, as well as bonus payment up to HKD 200 depending on your answers. You can start the survey right now, or you can complete it

at a later time at your convenience. Your participation in this part of the survey is extremely important to validity of our academic research.

Please click the following link to start the additional follow-up survey:
[insert study link]

We will process your study payment as soon as the study completes, using the method you prefer. We will email you soon about the total payment you earn from this year's study, and details on the payment process. If you have chosen to receive the payment via SIS, please confirm the bank account information that you registered at the SIS. Please click here *[insert pdf link for SIS bank account info: stanford.edu/~dyang1/pdfs/SIS_Bank_Information_Instruction.pdf]* for more details.

Thank you again for your support of this study. Feel free to contact us at jzproject@ust.hk if you have questions and/or concerns regarding this study.

感謝你參與今次的問卷調查。你將收到 100 元額外報酬。

我們現在邀請你參與一項約 40 分鐘的跟進調查。完成問卷後，你將得到 250 元的額外報酬，加上視乎你的回答獲取的多至 200 元的額外獎賞。你可以立即開始跟進調查，或留待你方便的時候再開始。你持續參與今年的問卷調查，對研究成果的有效性意義重大。

請點擊以下連結，以開始跟進調查：
[insert study link]

我們會在整個調查結束後，按你的選擇處理報酬。你將在近期收到有關你的報酬總額和付款細節的電郵。如果你選擇通過經由 SIS 支付，請確認在 SIS 註冊的銀行信息準確。具體方法請見這裡 *[insert pdf link for SIS bank account info: stanford.edu/~dyang1/pdfs/SIS_Bank_Information_Instruction.pdf]*。

再次感謝你參與本研究。如有任何問題或顧慮，歡迎透過電郵 jzproject@ust.hk 與我們聯絡。

C.7 Protest participation treatment (*June 2017*)

As researchers, we have continually been struck by how widely-varying are reports on the size of each July 1 March, depending on the information source. For example, on July 2, 2014, the BBC reported that organizers estimated attendance of 510,000 people, while police estimated 98,000 people.

We would like to do better using the wisdom of crowds: as researchers, we can provide a scientific and politically-neutral estimate.

Because many students attend the events of July 1, we are asking a subset of survey participants to help us get a better estimate of the July 1 March attendance.

The idea we have is to collect information from individuals on the number of people around them at different places, at different times of day during the March.

作為研究者，我們一直對於每年七一遊行，不同訊息來源公佈的參與人數之間的龐大差異很感興趣。例如，2014年7月2日，BBC報導民陣估計遊行參與人數為51萬人，而警方的估計數字則為9萬8千人。

我們希望可以利用群眾智慧作出更好的估算：作為研究員，我們可以作出科學而不受政治立場影響的估算。

因為有很多同學出席七一遊行，我們現在邀請部分參加者幫助我們估算一個更準確的七一遊行的參與人數。

我們的想法是收集不同的人在遊行當日不同地點、不同時間身邊的人數。

===== Page break =====

We would like to ask you to participate in this scientific endeavor. This should take only 5 minutes of your time *while you are at the March*.

If you attend the March, we would ask you to:

- a. At two points in time during the March (ideally one hour apart or more), please make a note of approximately how many people you would touch if you reached your arms straight out to the side and spun in

- a circle. Please also note the location (nearest intersection) and time.
- b. At the two times when you count the people around you, please take a photo showing the area around you.

Before July 1st, we will email you a survey link at which to upload your counts and photos.

We assure you that the information you send us will be used only for scientific purposes. We will use data from the photo that you send us (for example, counting individuals), but then we will permanently delete the photo.

Once you have uploaded all the information, we will pay you **HK\$350** for your time and effort.

Feel free to contact us at jzproject@ust.hk if you have questions.

我們希望邀請你參加這一個科學的任務。在你參與遊行期間，這只會花費你大約5分鐘的時間。

假如你將參與遊行，我們希望請你：

- a. 在遊行期間兩個不同的時間點（最好相隔一小時或以上），請記下假如你把雙手向外伸直並旋轉一圈的話，大約會觸碰到多少人。並請記下你的位置（最接近的街口）和時間。
- b. 在你兩次估算身邊人數的時候，請拍攝一張你所在地附近的相片。

在7月1日之前，我們將透過電郵給你調查的連結，用來上傳你的點算數字和相片。

我們向你保證，你傳送給我們的資訊只會用作科學用途。我們將會使用你上傳給我們的相片（例如，計算人數），但我們將永久刪除相片。

當你上載所有的資訊後，我們會向你支付**350港元**作為你花費的時間和精力的報酬。

如果你有任何問題，請透過 jzproject@ust.hk 向我們聯絡。

C.8 Protest participation reporting module (*July 2017*)

[Screen 1: welcome]

{insert survey logo}

Thank you for participating in our crowdsourcing effort to estimate the total number of people who went to this year's July 1st March.

You can upload your counts and the photos you took here.

[Screen 2]

Observation note #1

1. What time was this observation made?
July 1st 2017, hour ___ (AM/PM), minute ___
2. Where was this observation made?
Nearest street intersection: (e.g. xxxx)
3. Approximately how many people you would touch if you reached your arms straight out to the side and spun in a circle?
{fill in blank for number: integer >= 0}
4. Please upload the photo you took during this observation moment.
Please do *not* compress photo, but upload the original full-sized file.

[Screen 3]

Observation note #2

5. What time was this observation made?
July 1st 2017, hour ___ (AM/PM), minute ___
6. Where was this observation made?
Nearest street intersection: (e.g. xxxx)

7. Approximately how many people you would touch if you reached your arms straight out to the side and spun in a circle?
{fill in blank for number: integer >= 0}
8. Please upload the photo you took during this observation moment. Please do *not* compress photo, but upload the original full-sized file.

[Screen 4]

Thank you very much for your participation.

We assure you that the information you provide us will be used only for scientific purposes. We will use data from the photo that you upload to count individuals present at the event, but then we will permanently delete the photo once we process the photo.

We will add HKD 350 on top of the total amount that you have earned through completing the online surveys in June.

Once we have concluded this round of the study and calculated all the bonus payment, we will email you to notify you the total amount you have earned and payment details. We will process your participation and bonus payment through the HKUST Student Information System (SIS).

Feel free to contact us at jzproject@ust.hk if you have questions.

C.9 Subway placebo treatment (*June 2017*)

There have been many arguments that the MTR in Hong Kong is exceeding its operating capacity, primarily due to the large number of tourists visiting Hong Kong.

As researchers, we would like to use the wisdom of crowds to provide a scientific and politically-neutral estimate of the number of people at some hub MTR stations during the peak hours.

Because many students go to MTR stations in downtown Hong Kong, we are asking a subset of survey participants to help us get a better estimate of the size of crowds at these stations.

The idea we have is to collect information from individuals on the number of people around them at different MTR stations, at different times of day during the weekend of July 8th and 9th.

很多評論認為香港的地下鐵路系統已經超出了營運能力上限，主要的原因是大量旅客訪港。

作為研究者，我們希望可以利用群眾智慧，科學而不受政治立場影響地估算一些主要港鐵站在繁忙時間的人數。

因為有很多同學會去香港市區的港鐵站，我們現在邀請部分參加者幫助我們估算一個更準確的港鐵站人數。

我們的想法是在 7 月 8 日和 7 月 9 日收集不同的人在不同的港鐵站、不同時間身邊的人數。

=====
===== Page break =====

We would like to ask you to participate in this scientific endeavor. This should take only 5 minutes of your time *while you are at a downtown MTR station*.

You can go to any of the following stations listed:

- Central, Admiralty, Wan Chai, Causeway Bay, Tsim Sha Tsui, Mong Kok

When you are at an MTR station, we would ask you to:

- a. At two points in time - at least two hours apart - please make a note of approximately how many people you would touch if you reached your arms straight out to the side and spun in a circle. Please also note the station name, location within the station, and time.
- b. At the times when you count the people around you, please take a photo showing the area around you.

Before the weekend of July 8th, we will email you a survey link at which to upload your counts and photos.

We assure you that the information you send us will be used only for scientific purposes. We will use data from the photo that you send us (for example, counting individuals), but then we will permanently delete the photo.

Once you have uploaded all the information, we will pay you **HK\$350** for your time and effort.

Feel free to contact us at jzproject@ust.hk if you have questions.

我們希望邀請你參加這一個科學的任務。在你身處港鐵站時，這將只花費你大約 5 分鐘的時間。

你可以去以下**任何**一個港鐵站：

- 中環，金鐘，灣仔，銅鑼灣，尖沙咀，旺角

當你身處港鐵站時，我們希望請你：

- a. 在兩個不同的時間點——至少相隔兩小時——請記下假如你把雙手向外伸直並旋轉一圈的話，大約會觸碰到多少人。並請記下站名、你在站內的位置和時間。
- b. 在你兩次估算身邊人數的時候，請拍攝一張你所在地附近的相片。

在 7 月 8 日之前，我們將透過電郵給你調查的連結，用來上傳你的點算數字和相片。

我們向你保證，你傳送給我們的資訊只會用作科學用途。我們將會使用你上傳給我們的相片（例如，計算人數），但我們將永久刪除相片。

當你上載所有的資訊後，我們會向你支付 **350 港元**作為你花費的時間和精力的報酬。

如果你有任何問題，請透過 jzproject@ust.hk 向我們聯絡。

C.10 Subway participation reporting module (*July 2017*)

[Screen 1: welcome]

{insert survey logo}

Thank you for participating in our crowdsourcing effort to estimate the number of people at some important MTR stations in Hong Kong on weekends.

You can upload your counts and the photos you took here.

[Screen 2]

Observation note #1

1. What time was this observation made?
July ___ 2017, hour ___ (AM/PM), minute ___
2. At which MTR station was this observation made?
[drop-down menu]
Central, Admiralty, Wan Chai, Causeway Bay, Tsim Sha Tsui, Mong Kok
3. Where was this observation made in the station?
[open-ended question]
4. Approximately how many people you would touch if you reached your arms straight out to the side and spun in a circle?
[fill in blank for number: integer >= 0]
5. Please upload the photo you took during this observation moment.
Please do *not* compress photo, but upload the original full-sized file.

[Screen 3]

1. What time was this observation made?
July ___ 2017, hour ___ (AM/PM), minute ___
2. At which MTR station was this observation made?
[drop-down menu]

Central, Admiralty, Wan Chai, Causeway Bay, Tsim Sha Tsui, Mong Kok

3. Where was this observation made in the station?
[open-ended question]

4. Approximately how many people you would touch if you reached your arms straight out to the side and spun in a circle?
[fill in blank for number: integer >= 0]

5. Please upload the photo you took during this observation moment.
Please do *not* compress photo, but upload the original full-sized file.

[Screen 4]

Thank you very much for your participation.

We assure you that the information you provide us will be used only for scientific purposes. We will use data from the photo that you upload to count individuals present at the event, but then we will permanently delete the photo once we process the photo.

We will add HKD 350 on top of the total amount that you have earned through completing the online surveys in June.

Once we have concluded this round of the study and calculated all the bonus payment, we will email you to notify you the total amount you have earned and payment details. We will process your participation and bonus payment through the HKUST Student Information System (SIS).

Feel free to contact us at jzproject@ust.hk if you have questions.

Appendix D Additional results: Figures and tables

D.1 Balance and research design

This section presents evidence on balancedness of observable characteristics and about basic elements of our research design.

Figure [D.1](#) presents the design and timeline of the experiment. Table [D.1](#) presents evidence on attrition across survey waves, starting from the initial sample recruited in June 2017. Table [D.2](#) compares characteristics of protesters in the 2017 treatment group (which in experimental terms would comprise “compliers” and “always-takers”) to experimental subjects who reported attendance in older protests. Tables [D.3](#) and [D.4](#) list and describe our 97 treatment cells. Table [D.5](#) presents evidence on balancedness of observable characteristics across the three treatment arms (pure control, placebo treatment and actual treatment). Table [D.6](#) presents balancedness across the four types of treatment cells (depending on cell-level treatment intensity).

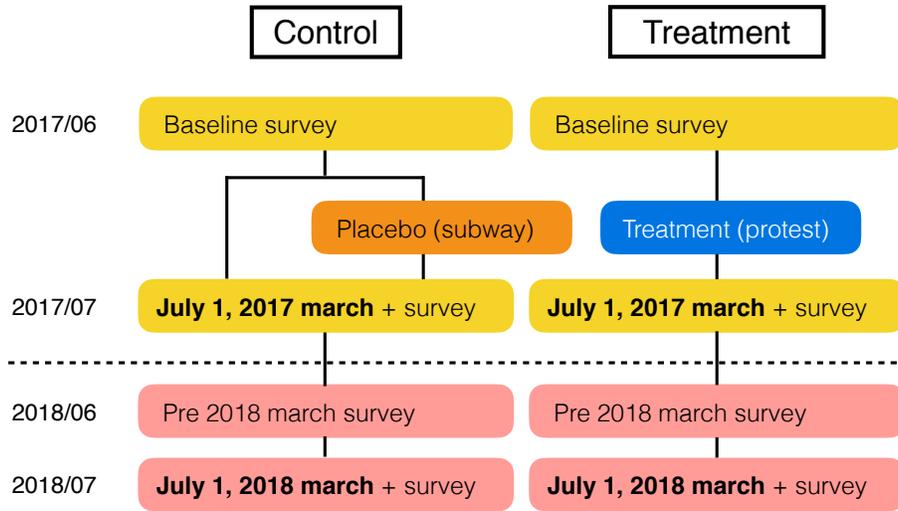


Figure D.1: Experimental design

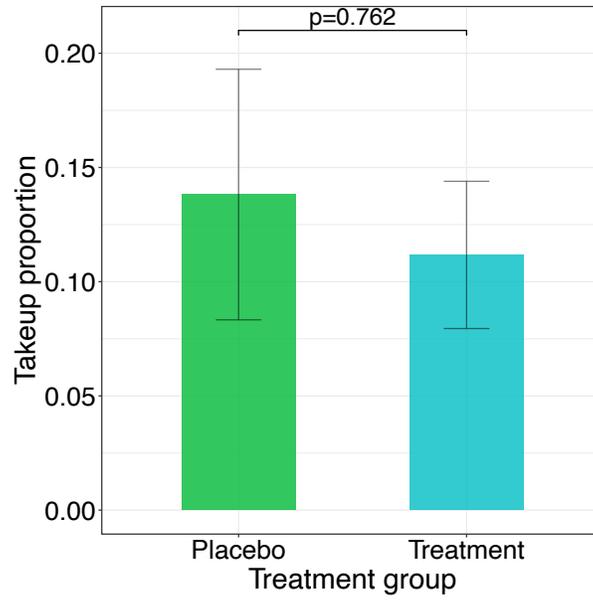


Figure D.2: Take-up proportions for treatment group and placebo treatment group, respectively. 95% confidence intervals shown. p -value calculated from a pairwise t -test of equality of means between placebo and treatment.

Table D.1: Attrition across survey parts

| Variables: | Completed Wave 1 | | Only wave 1 | All waves | p-value |
|----------------------------------------|------------------|----------|-------------|-----------|---------|
| | mean | std.dev. | mean | mean | |
| | (1) | (2) | (3) | (4) | (5) |
| Male | 0.512 | 0.500 | 0.482 | 0.521 | 0.283 |
| Birth year | 1997.26 | 1.40 | 1997.41 | 1997.22 | 0.065 |
| English language high school | NA | 0.399 | NA | NA | 0.290 |
| HH monthly income | 27399 | 16449 | 27231 | 27448 | 0.855 |
| Expected income at age 40 | 4.40 | 1.04 | 4.34 | 4.41 | 0.357 |
| # real estate owned | 0.771 | 0.950 | 0.777 | 0.769 | 0.905 |
| Planned to participate in 2017 protest | 0.151 | 0.358 | 0.138 | 0.154 | 0.520 |
| Participated in any previous protest | 0.369 | 0.482 | 0.401 | 0.359 | 0.234 |
| # of obs. | 1096 | | 247 | 849 | - |

Notes: Table presents mean individual characteristics for the entire sample recruited in 2017. It presents mean individual characteristics first for the sample that completed only Wave 1, then for the sample that completed all waves. It then tests for equality of means between the latter two groups. ‘English language high school’ is an indicator of whether the subject completed high school with English as the formal language of instruction (as opposed to Chinese). ‘HH monthly income’ is the self-reported total income earned by both parents (including sources of income such as dividends and rents). ‘Expected income at age 40’ is a survey response indicating self-reported expectations of relative income compared to classmates at HKUST at age 40. ‘# real estate owned’ is a measure of wealth: the number of real estate properties owned by a subject’s parents/household in Hong Kong at the time of the survey. ‘Planned to participate in 2017 protest’ is a subject’s self-reported plan (as of June 2017) to participate in the July 1, 2017 march prior to the treatment assignment.

Table D.2: Evidence on compliers: comparing treatment group protesters to past protesters

| Variables: | Overall | | Past | Treated | p-value |
|----------------------------------------|---------|----------|---------|---------|---------|
| | mean | std.dev. | mean | mean | |
| | (1) | (2) | (3) | (4) | (5) |
| Male | 0.552 | 0.497 | 0.554 | 0.537 | 0.831 |
| Birth year | 1997.03 | 1.44 | 1997.01 | 1997.22 | 0.377 |
| English language high school | NA | 0.382 | NA | 0.780 | 0.447 |
| HH monthly income | 28425 | 17133 | 28275 | 29463 | 0.679 |
| Expected income at age 40 | 4.38 | 1.00 | 4.36 | 4.51 | 0.370 |
| # real estate owned | 0.831 | 1.000 | 0.835 | 0.805 | 0.857 |
| Planned to participate in 2017 protest | 0.233 | 0.423 | 0.235 | 0.220 | 0.826 |
| Participated in any previous protest | 0.874 | 0.332 | 1.000 | 0.000 | 0.000 |
| # of obs. | 326 | | 285 | 41 | - |

Notes: Table studies the characteristics of protesters in the treatment group (taking them as suggestive of the “compliers” in the study, though they also include the “always takers”), comparing these subjects to other experimental subjects who reported attending past protests. The table first presents mean individual characteristics for experimental subjects who either reported previously attending a protest, or who were treatment group protesters in 2017, or both. The table then splits this group, presenting mean individual characteristics for two disjoint sets: (i) experimental subjects who participated in past protests but were *not* treatment group protesters; and (ii) experimental subjects who were treatment group protesters. It then tests for equality of means between groups. ‘English language high school’ is an indicator of whether the subject completed high school with English as the formal language of instruction (as opposed to Chinese). ‘HH monthly income’ is the self-reported total income earned by both parents (including sources of income such as dividends and rents). ‘Expected income at age 40’ is a survey response indicating self-reported expectations of relative income compared to classmates at HKUST at age 40. ‘# real estate owned’ is a measure of wealth: the number of real estate properties owned by a subject’s parents/household in Hong Kong at the time of the survey. ‘Planned to participate in 2017 protest’ is a subject’s self-reported plan (as of June 2017) to participate in the July 1, 2017 march prior to the treatment assignment.

Table D.3: Description of social network cells

| Major/program | Cohorts | Gender | Residence | Size | Protest treatment density (%) | Subway placebo density (%) |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|-----------|------|-------------------------------|----------------------------|
| 1 Accounting | 2014 | Female | All | 10 | 1 | 0 |
| 2 Accounting | 2014 | Male | All | 12 | 1 | 50 |
| 3 Accounting | 2015 | Female | All | 25 | 50 | 1 |
| 4 Accounting | 2015 | Male | All | 10 | 1 | 50 |
| 5 Biochemistry and Cell Biology, Biotechnology, Biological Science | 2013 | All | All | 5 | 1 | 50 |
| 6 Biochemistry and Cell Biology | 2014 | Female | All | 5 | 75 | 0 |
| 7 Biochemistry and Cell Biology | 2014 | Male | All | 5 | 1 | 50 |
| 8 Biochemistry and Cell Biology | 2015 | Female | All | 9 | 75 | 0 |
| 9 Biochemistry and Cell Biology | 2015 | Male | All | 3 | 75 | 0 |
| 10 Biological Science, Biotechnology | 2014 | All | All | 9 | 50 | 0 |
| 11 Biological Science, Biotechnology | 2015 | Female | All | 12 | 75 | 0 |
| 12 Biological Science, Biotechnology | 2015 | Male | All | 6 | 50 | 1 |
| 13 Chemistry | 2014 | Female | All | 9 | 50 | 0 |
| 14 Chemistry | 2014 | Male | All | 3 | 1 | 0 |
| 15 Chemistry | 2015 | Female | All | 9 | 50 | 0 |
| 16 Chemistry | 2015 | Male | All | 11 | 75 | 1 |
| 17 Aerospace Engineering, Civil Engineering, Civil and Environmental Engineering, Environmental Science, Environmental Management and Technology | 2013 | All | All | 6 | 75 | 0 |
| 18 Aerospace Engineering, Civil Engineering, Civil and Environmental Engineering, Biotechnology and General Business Management | 2014 | Female | All | 3 | 50 | 50 |
| 19 Aerospace Engineering, Civil Engineering, Civil and Environmental Engineering, Biotechnology and General Business Management | 2014 | Male | All | 15 | 0 | 75 |
| 20 Aerospace Engineering, Civil Engineering | 2015 | Female | All | 4 | 0 | 50 |
| 21 Aerospace Engineering, Civil Engineering | 2015 | Male | All | 20 | 50 | 0 |
| 22 Computer Science, Computer Engineering, Electronic Engineering | 2013 | Female | All | 3 | 50 | 50 |
| 23 Computer Science, Computer Engineering, Electronic Engineering | 2013 | Male | All | 5 | 1 | 0 |
| 24 Computer Science | 2014 | Female | All | 2 | 1 | 0 |
| 25 Computer Science | 2014 | Male | All | 10 | 1 | 50 |
| 26 Computer Science | 2015 | Female | All | 4 | 75 | 0 |

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Table D.3: Description of social network cells

| Major/program | Cohorts | Gender | Residence | Size | Protest treatment density (%) | Subway placebo density (%) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|-----------|------|-------------------------------|----------------------------|
| 27 Computer Science | 2015 | Male | All | 10 | 1 | 75 |
| 28 Computer Engineering | 2014 | All | All | 7 | 75 | 1 |
| 29 Computer Engineering, Electronic Engineering | 2015 | Female | All | 2 | 75 | 0 |
| 30 Computer Engineering, Electronic Engineering | 2015 | Male | All | 11 | 75 | 0 |
| 31 Electronic Engineering | 2014 | Female | All | 2 | 50 | 50 |
| 32 Electronic Engineering | 2014 | Male | All | 12 | 0 | 75 |
| 33 Environmental Science, Environmental Management and Technology | 2014 | Female | All | 5 | 75 | 1 |
| 34 Environmental Science, Environmental Management and Technology | 2014 | Male | All | 8 | 75 | 0 |
| 35 Environmental Science, Environmental Management and Technology | 2015 | Female | All | 9 | 1 | 50 |
| 36 Environmental Science, Environmental Management and Technology | 2015 | Male | All | 6 | 50 | 1 |
| 37 Accounting, Finance, Global Business, Economics and Finance | 2013 | Female | All | 5 | 75 | 0 |
| 38 Accounting, Finance, Global Business, Economics and Finance | 2013 | Male | All | 5 | 50 | 1 |
| 39 Finance, Economics and Finance | 2014 | Female | All | 4 | 50 | 50 |
| 40 Finance, Economics and Finance | 2014 | Male | All | 13 | 50 | 50 |
| 41 Finance, Economics and Finance | 2015 | Female | All | 9 | 1 | 50 |
| 42 Finance, Economics and Finance | 2015 | Male | All | 8 | 75 | 1 |
| 43 Accounting, Finance, Economics, Economics and Finance | 2016 | Female | All | 13 | 75 | 0 |
| 44 Accounting, Finance, Economics, Economics and Finance | 2016 | Male | All | 9 | 0 | 1 |
| 45 Global Business, Economics, General Business Management | 2014 | All | All | 8 | 75 | 0 |
| 46 Global Business, Economics, World Business, General Business Management | 2015 | Female | All | 14 | 50 | 0 |
| 47 Global Business, Economics, World Business, General Business Management | 2015 | Male | All | 8 | 75 | 0 |
| 48 Global Business, General Business Management, Information Systems, Mathematics and Economics, Mathematics, Management, Quantitative Finance, Logistics Management and Engineering and General Business Management | 2016 | Female | All | 5 | 75 | 1 |
| 49 Global Business, General Business Management, Information Systems, Mathematics and Economics, Mathematics, Management, Quantitative Finance, Logistics Management and Engineering and General Business Management | 2016 | Male | All | 6 | 75 | 0 |
| 50 Global China Studies | 2014 | All | All | 7 | 75 | 1 |
| 51 Global China Studies | 2015 | All | All | 5 | 0 | 0 |

Continued on next page

Table D.3: Description of social network cells

| Major/program | Cohorts | Gender | Residence | Size | Protest treatment density (%) | Subway placebo density (%) |
|---------------------------------------------------------------------------------------------------------------------------------------|---------|--------|-----------|------|-------------------------------|----------------------------|
| 52 Logistics Management and Engineering, Industrial Engineering and Engineering Management | 2014 | All | All | 6 | 0 | 75 |
| 53 Logistics Management and Engineering, Risk Management and Business Intelligence, Industrial Engineering and Engineering Management | 2015 | Female | All | 7 | 75 | 0 |
| 54 Logistics Management and Engineering, Risk Management and Business Intelligence, Industrial Engineering and Engineering Management | 2015 | Male | All | 3 | 1 | 50 |
| 55 Logistics Management and Engineering, Risk Management and Business Intelligence, Industrial Engineering and Engineering Management | 2016 | All | All | 6 | 50 | 1 |
| 56 Information Systems | 2014 | Female | All | 12 | 50 | 50 |
| 57 Information Systems | 2014 | Male | All | 4 | 1 | 75 |
| 58 Information Systems | 2015 | Female | All | 9 | 75 | 0 |
| 59 Information Systems | 2015 | Male | All | 5 | 50 | 50 |
| 60 Mathematics and Economics, Mathematics, Quantitative Finance | 2014 | Female | All | 2 | 0 | 1 |
| 61 Mathematics and Economics, Mathematics, Quantitative Finance | 2014 | Male | All | 10 | 1 | 1 |
| 62 Mathematics and Economics, Quantitative Finance | 2015 | All | All | 8 | 75 | 0 |
| 63 Marketing | 2013 | All | All | 4 | 0 | 1 |
| 64 Marketing | 2014 | Female | All | 19 | 75 | 1 |
| 65 Marketing | 2014 | Male | All | 5 | 0 | 1 |
| 66 Marketing | 2015 | Female | All | 18 | 50 | 0 |
| 67 Marketing | 2015 | Male | All | 6 | 50 | 0 |
| 68 Mathematics | 2015 | Female | All | 4 | 75 | 1 |
| 69 Mathematics | 2015 | Male | All | 11 | 0 | 1 |
| 70 Mechanical Engineering | 2014 | Female | All | 2 | 0 | 75 |
| 71 Mechanical Engineering | 2014 | Male | All | 9 | 50 | 50 |
| 72 Mechanical Engineering | 2015 | All | All | 15 | 75 | 0 |
| 73 Operations Management, Management, Information Systems | 2013 | All | All | 5 | 1 | 1 |
| 74 Operations Management, Management, Logistics Management and Engineering and General Business Management | 2014 | Female | All | 6 | 75 | 1 |
| 75 Operations Management, Management, Logistics Management and Engineering and General Business Management | 2014 | Male | All | 4 | 50 | 1 |
| 76 Operations Management, Management | 2015 | Female | All | 7 | 1 | 50 |
| 77 Operations Management, Management | 2015 | Male | All | 3 | 0 | 75 |
| 78 Risk Management and Business Intelligence | 2014 | All | All | 8 | 75 | 0 |

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Table D.3: Description of social network cells

| Major/program | Cohorts | Gender | Residence | Size | Protest treatment density (%) | Subway placebo density (%) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|-----------|------|-------------------------------|----------------------------|
| 79 Business and Management (undeclared) | 2015 | All | All | 4 | 75 | 0 |
| 80 Marketing, Business and Management (undeclared) | 2016 | Female | Off | 29 | 50 | 50 |
| 81 Marketing, Business and Management (undeclared) | 2016 | Female | On | 6 | 75 | 1 |
| 82 Marketing, Business and Management (undeclared) | 2016 | Male | Off | 25 | 50 | 0 |
| 83 Marketing, Business and Management (undeclared) | 2016 | Male | On | 7 | 75 | 0 |
| 84 Chemical Engineering, Chemical and Biomolecular Engineering, Engineering (undeclared), Individualized Interdisciplinary Major, Others | 2015 | Female | All | 6 | 50 | 1 |
| 85 Chemical Engineering, Chemical and Biomolecular Engineering, Engineering (undeclared), Individualized Interdisciplinary Major, Others | 2015 | Male | All | 8 | 50 | 0 |
| 86 Electronic Engineering, Computer Engineering, Computer Science and General Business Management, Civil Engineering and General Business Management, Chemical and Environmental Engineering, Engineering (undeclared) | 2016 | Female | All | 16 | 50 | 50 |
| 87 Electronic Engineering, Computer Engineering, Computer Science and General Business Management, Civil Engineering and General Business Management, Chemical and Environmental Engineering, Engineering (undeclared) | 2016 | Male | Off | 40 | 1 | 50 |
| 88 Electronic Engineering, Computer Engineering, Computer Science and General Business Management, Civil Engineering and General Business Management, Chemical and Environmental Engineering, Engineering (undeclared) | 2016 | Male | On | 10 | 1 | 1 |
| 89 Physics, Science (undeclared) | 2015 | All | All | 12 | 75 | 0 |
| 90 Chemistry, Physics, Environmental Science, Environmental Management and Technology, Science (undeclared) | 2016 | Female | Off | 30 | 75 | 0 |
| 91 Chemistry, Physics, Environmental Science, Environmental Management and Technology, Science (undeclared) | 2016 | Female | On | 9 | 50 | 50 |
| 92 Chemistry, Physics, Environmental Science, Environmental Management and Technology, Science (undeclared) | 2016 | Male | Off | 18 | 75 | 0 |
| 93 Chemistry, Physics, Environmental Science, Environmental Management and Technology, Science (undeclared) | 2016 | Male | On | 4 | 50 | 0 |

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Table D.3: Description of social network cells

| Major/program | Cohorts | Gender | Residence | Size | Protest treatment density (%) | Subway placebo density (%) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|-----------|------|-------------------------------|----------------------------|
| 94 Chemistry, Chemical Engineering, Chemical and Environmental Engineering, Mathematics and Economics, Mathematics, Quantitative Finance, Physics, Logistics Management and Engineering, Industrial Engineering and Engineering Management and General Business, Global China Studies, Engineering (undeclared), Science (undeclared), Business and Management (undeclared), Others | 2013 | Male | All | 7 | 75 | 0 |
| 95 Biotechnology, Chemical and Biomolecular Engineering, Chemical Engineering, Chemical and Environmental Engineering, Physics, Engineering (undeclared), Science (undeclared), Others | 2014 | Female | All | 4 | 1 | 50 |
| 96 Biotechnology, Chemical and Biomolecular Engineering, Chemical Engineering, Chemical and Environmental Engineering, Physics, Engineering (undeclared), Science (undeclared), Others | 2014 | Male | All | 3 | 75 | 0 |
| 97 Global China Studies, Individualized Interdisciplinary Major, Others | 2016 | All | All | 7 | 0 | 1 |

Table D.4: List of treatment cells

| | Name | Size | # treated | Empirical intensity | Target intensity | 2017 turnout | 2018 turnout |
|----|-------------|------|-----------|---------------------|------------------|--------------|--------------|
| 1 | ACCT-2014-F | 10 | 0 | 0.00 | 1.00 | 0 | 0 |
| 2 | ACCT-2014-M | 12 | 0 | 0.00 | 1.00 | 0 | 0 |
| 3 | ACCT-2015-F | 25 | 13 | 52.00 | 50.00 | 0 | 0 |
| 4 | ACCT-2015-M | 10 | 0 | 0.00 | 1.00 | 0 | 0 |
| 5 | BCB-2013 | 5 | 0 | 0.00 | 1.00 | 0 | 0 |
| 6 | BCB-2014-F | 5 | 4 | 80.00 | 75.00 | 0 | 0 |
| 7 | BCB-2014-M | 5 | 0 | 0.00 | 1.00 | 0 | 0 |
| 8 | BCB-2015-F | 9 | 5 | 55.56 | 75.00 | 0 | 0 |
| 9 | BCB-2015-M | 3 | 2 | 66.67 | 75.00 | 0 | 0 |
| 10 | BISC-2014 | 9 | 3 | 33.33 | 50.00 | 0 | 1 |
| 11 | BISC-2015-F | 12 | 8 | 66.67 | 75.00 | 1 | 2 |
| 12 | BISC-2015-M | 6 | 4 | 66.67 | 50.00 | 0 | 0 |
| 13 | CHEM-2014-F | 9 | 7 | 77.78 | 50.00 | 1 | 0 |
| 14 | CHEM-2014-M | 3 | 0 | 0.00 | 1.00 | 0 | 0 |
| 15 | CHEM-2015-F | 9 | 5 | 55.56 | 50.00 | 2 | 0 |
| 16 | CHEM-2015-M | 11 | 8 | 72.73 | 75.00 | 1 | 0 |
| 17 | CIVL-2013 | 6 | 3 | 50.00 | 75.00 | 0 | 0 |
| 18 | CIVL-2014-F | 3 | 2 | 66.67 | 50.00 | 0 | 0 |
| 19 | CIVL-2014-M | 15 | 0 | 0.00 | 0.00 | 0 | 1 |
| 20 | CIVL-2015-F | 4 | 0 | 0.00 | 0.00 | 1 | 0 |
| 21 | CIVL-2015-M | 20 | 11 | 55.00 | 50.00 | 1 | 0 |
| 22 | COMP-2013-F | 3 | 1 | 33.33 | 50.00 | 0 | 0 |
| 23 | COMP-2013-M | 5 | 1 | 20.00 | 1.00 | 0 | 0 |
| 24 | COMP-2014-F | 2 | 0 | 0.00 | 1.00 | 0 | 0 |
| 25 | COMP-2014-M | 10 | 0 | 0.00 | 1.00 | 0 | 0 |
| 26 | COMP-2015-F | 4 | 4 | 100.00 | 75.00 | 0 | 0 |
| 27 | COMP-2015-M | 10 | 1 | 10.00 | 1.00 | 0 | 1 |
| 28 | CPEG-2014 | 7 | 6 | 85.71 | 75.00 | 1 | 1 |
| 29 | CPEG-2015-F | 2 | 1 | 50.00 | 75.00 | 0 | 0 |
| 30 | CPEG-2015-M | 11 | 7 | 63.64 | 75.00 | 2 | 2 |

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Table D.4 – continued from previous page.

| | Name | Size | # treated | Empirical intensity | Target intensity | 2017 turnout | 2018 turnout |
|----|-------------|------|-----------|---------------------|------------------|--------------|--------------|
| 31 | ELEC-2014-F | 2 | 0 | 0.00 | 50.00 | 0 | 0 |
| 32 | ELEC-2014-M | 12 | 0 | 0.00 | 0.00 | 0 | 0 |
| 33 | ENVS-2014-F | 5 | 5 | 100.00 | 75.00 | 0 | 1 |
| 34 | ENVS-2014-M | 8 | 5 | 62.50 | 75.00 | 1 | 1 |
| 35 | ENVS-2015-F | 9 | 1 | 11.11 | 1.00 | 0 | 0 |
| 36 | ENVS-2015-M | 6 | 3 | 50.00 | 50.00 | 0 | 0 |
| 37 | FINA-2013-F | 5 | 2 | 40.00 | 75.00 | 2 | 2 |
| 38 | FINA-2013-M | 5 | 1 | 20.00 | 50.00 | 0 | 0 |
| 39 | FINA-2014-F | 4 | 2 | 50.00 | 50.00 | 0 | 0 |
| 40 | FINA-2014-M | 13 | 7 | 53.85 | 50.00 | 1 | 0 |
| 41 | FINA-2015-F | 9 | 1 | 11.11 | 1.00 | 0 | 1 |
| 42 | FINA-2015-M | 8 | 6 | 75.00 | 75.00 | 1 | 1 |
| 43 | FINA-2016-F | 13 | 9 | 69.23 | 75.00 | 0 | 1 |
| 44 | FINA-2016-M | 9 | 0 | 0.00 | 0.00 | 0 | 1 |
| 45 | GBUS-2014 | 8 | 6 | 75.00 | 75.00 | 1 | 0 |
| 46 | GBUS-2015-F | 14 | 7 | 50.00 | 50.00 | 0 | 0 |
| 47 | GBUS-2015-M | 8 | 5 | 62.50 | 75.00 | 2 | 2 |
| 48 | GBUS-2016-F | 5 | 2 | 40.00 | 75.00 | 0 | 0 |
| 49 | GBUS-2016-M | 6 | 5 | 83.33 | 75.00 | 1 | 1 |
| 50 | GCS-2014 | 7 | 5 | 71.43 | 75.00 | 0 | 0 |
| 51 | GCS-2015 | 5 | 0 | 0.00 | 0.00 | 0 | 0 |
| 52 | IELM-2014 | 6 | 0 | 0.00 | 0.00 | 0 | 0 |
| 53 | IELM-2015-F | 7 | 4 | 57.14 | 75.00 | 0 | 0 |
| 54 | IELM-2015-M | 3 | 0 | 0.00 | 1.00 | 0 | 1 |
| 55 | IELM-2016 | 6 | 3 | 50.00 | 50.00 | 1 | 0 |
| 56 | IS-2014-F | 12 | 6 | 50.00 | 50.00 | 1 | 0 |
| 57 | IS-2014-M | 4 | 1 | 25.00 | 1.00 | 0 | 0 |
| 58 | IS-2015-F | 9 | 7 | 77.78 | 75.00 | 1 | 0 |
| 59 | IS-2015-M | 5 | 2 | 40.00 | 50.00 | 1 | 0 |
| 60 | MAEC-2014-F | 2 | 0 | 0.00 | 0.00 | 0 | 0 |
| 61 | MAEC-2014-M | 10 | 1 | 10.00 | 1.00 | 0 | 0 |

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Table D.4 – continued from previous page.

| | Name | Size | # treated | Empirical intensity | Target intensity | 2017 turnout | 2018 turnout |
|----|-----------------|------|-----------|---------------------|------------------|--------------|--------------|
| 62 | MAEC-2015 | 8 | 5 | 62.50 | 75.00 | 0 | 0 |
| 63 | MARK-2013 | 4 | 0 | 0.00 | 0.00 | 0 | 0 |
| 64 | MARK-2014-F | 19 | 14 | 73.68 | 75.00 | 2 | 1 |
| 65 | MARK-2014-M | 5 | 0 | 0.00 | 0.00 | 0 | 0 |
| 66 | MARK-2015-F | 18 | 10 | 55.56 | 50.00 | 1 | 0 |
| 67 | MARK-2015-M | 6 | 3 | 50.00 | 50.00 | 1 | 0 |
| 68 | MATH-2015-F | 4 | 3 | 75.00 | 75.00 | 1 | 1 |
| 69 | MATH-2015-M | 11 | 0 | 0.00 | 0.00 | 1 | 2 |
| 70 | MECH-2014-F | 2 | 0 | 0.00 | 0.00 | 0 | 0 |
| 71 | MECH-2014-M | 9 | 5 | 55.56 | 50.00 | 0 | 0 |
| 72 | MECH-2015 | 15 | 11 | 73.33 | 75.00 | 1 | 0 |
| 73 | OM-2013 | 5 | 0 | 0.00 | 1.00 | 0 | 0 |
| 74 | OM-2014-F | 6 | 3 | 50.00 | 75.00 | 0 | 0 |
| 75 | OM-2014-M | 4 | 2 | 50.00 | 50.00 | 0 | 0 |
| 76 | OM-2015-F | 7 | 0 | 0.00 | 1.00 | 0 | 1 |
| 77 | OM-2015-M | 3 | 0 | 0.00 | 0.00 | 0 | 0 |
| 78 | RMBI-2014 | 8 | 6 | 75.00 | 75.00 | 1 | 1 |
| 79 | SBM-2015 | 4 | 3 | 75.00 | 75.00 | 0 | 0 |
| 80 | SBM-2016-F-Off | 29 | 12 | 41.38 | 50.00 | 2 | 0 |
| 81 | SBM-2016-F-On | 6 | 4 | 66.67 | 75.00 | 0 | 0 |
| 82 | SBM-2016-M-Off | 25 | 12 | 48.00 | 50.00 | 1 | 1 |
| 83 | SBM-2016-M-On | 7 | 5 | 71.43 | 75.00 | 1 | 2 |
| 84 | SENG-2015-F | 6 | 4 | 66.67 | 50.00 | 1 | 1 |
| 85 | SENG-2015-M | 8 | 6 | 75.00 | 50.00 | 0 | 0 |
| 86 | SENG-2016-F | 16 | 6 | 37.50 | 50.00 | 0 | 0 |
| 87 | SENG-2016-M-Off | 40 | 1 | 2.50 | 1.00 | 3 | 1 |
| 88 | SENG-2016-M-On | 10 | 1 | 10.00 | 1.00 | 0 | 0 |
| 89 | SSCI-2015 | 12 | 8 | 66.67 | 75.00 | 0 | 1 |
| 90 | SSCI-2016-F-Off | 30 | 23 | 76.67 | 75.00 | 1 | 2 |
| 91 | SSCI-2016-F-On | 9 | 4 | 44.44 | 50.00 | 2 | 2 |
| 92 | SSCI-2016-M-Off | 18 | 12 | 66.67 | 75.00 | 3 | 1 |

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Table D.4 – continued from previous page.

| | Name | Size | # treated | Empirical intensity | Target intensity | 2017 turnout | 2018 turnout |
|----|----------------|------|-----------|---------------------|------------------|--------------|--------------|
| 93 | SSCI-2016-M-On | 4 | 3 | 75.00 | 50.00 | 1 | 1 |
| 94 | Others-2013-M | 7 | 6 | 85.71 | 75.00 | 0 | 0 |
| 95 | Others-2014-F | 4 | 0 | 0.00 | 1.00 | 0 | 0 |
| 96 | Others-2014-M | 3 | 3 | 100.00 | 75.00 | 1 | 0 |
| 97 | Others-2016 | 7 | 0 | 0.00 | 0.00 | 0 | 0 |

Notes: Table lists all treatment cells, including cell size, number in the cell who received the main treatment, the empirical treatment intensity (# treated/size), the target treatment intensity (1, 50, or 75), turnout in 2017, and turnout in 2018. All columns include only participants who completed all waves of the study.

Table D.5: Summary statistics and balance check: main treatment vs. placebo vs. pure control

| Variables: | Overall | | Control | | | Treatment | p-values | | | |
|----------------------------------------|---------|----------|---------|---------|---------|-----------|----------|--------|--------|-------|
| | mean | std.dev. | Pure | Placebo | Both | | (Pu=Pl) | (Pu=T) | (Pl=T) | (B=T) |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Male | 0.521 | 0.500 | 0.591 | 0.572 | 0.585 | 0.436 | 0.702 | 0.000 | 0.005 | 0.000 |
| Birth year | 1997.22 | 1.43 | 1997.25 | 1997.09 | 1997.20 | 1997.25 | 0.238 | 0.986 | 0.247 | 0.586 |
| English language high school | NA | 0.405 | NA | NA | NA | NA | 0.862 | 0.955 | 0.895 | 0.985 |
| HH monthly income | 27448 | 16397 | 27228 | 26987 | 27152 | 27837 | 0.880 | 0.625 | 0.594 | 0.547 |
| Expected income at age 40 | 4.41 | 1.03 | 4.39 | 4.42 | 4.40 | 4.43 | 0.740 | 0.573 | 0.901 | 0.627 |
| # real estate owned | 0.769 | 0.944 | 0.776 | 0.783 | 0.778 | 0.757 | 0.939 | 0.800 | 0.777 | 0.754 |
| Planned to participate in 2017 protest | 0.154 | 0.361 | 0.152 | 0.211 | 0.170 | 0.134 | 0.110 | 0.497 | 0.028 | 0.144 |
| Participated in any previous protest | 0.359 | 0.480 | 0.336 | 0.388 | 0.353 | 0.368 | 0.270 | 0.386 | 0.664 | 0.649 |
| # of obs. | 849 | | 330 | 152 | 482 | 367 | - | - | - | - |

Notes: Table presents mean individual characteristics for the entire experimental sample, then presents means for the pure control group, the placebo treatment group, the union of pure control and placebo treatment groups ('control'), and the treatment group, respectively. It then tests for pairwise equality of means between groups. 'English language high school' is an indicator of whether the subject completed high school with English as the formal language of instruction (as opposed to Chinese). 'HH monthly income' is the self-reported total income earned by both parents (including sources of income such as dividends and rents). 'Expected income at age 40' is a survey response indicating self-reported expectations of relative income compared to classmates at HKUST at age 40. '# real estate owned' is a measure of wealth: the number of real estate properties owned by a subject's parents/household in Hong Kong at the time of the survey. 'Planned to participate in 2017 protest' is a subject's self-reported plan (as of June 2017) to participate in the July 1, 2017 march prior to the treatment assignment. 'Participated in any previous protest' is a self-reported indicator for having participated in a protest prior to 2017.

Table D.6: Cell-level summary statistics and balance check

| Variables: | Overall | | 0-intensity | 1-intensity | 50-intensity | 75-intensity | p-value |
|----------------------------------------|---------|----------|-------------|-------------|--------------|--------------|-------------|
| | mean | std.dev. | mean | mean | mean | mean | (0=1=50=75) |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Male | 0.521 | 0.500 | 0.753 | 0.734 | 0.414 | 0.435 | 0.000 |
| Birth year | 1997.22 | 1.43 | 1996.80 | 1997.16 | 1997.38 | 1997.24 | 0.000 |
| English language high school | NA | 0.405 | NA | NA | NA | NA | 0.040 |
| HH monthly income | 27448 | 16397 | 28294 | 26837 | 26754 | 28205 | 0.595 |
| Expected income at age 40 | 4.413 | 1.034 | 4.400 | 4.509 | 4.418 | 4.359 | 0.029 |
| # real estate owned | 0.769 | 0.944 | 0.718 | 0.815 | 0.740 | 0.784 | 0.436 |
| Planned to participate in 2017 protest | 0.154 | 0.361 | 0.200 | 0.168 | 0.165 | 0.124 | 0.452 |
| # of obs | 97 | | 13 | 20 | 28 | 36 | - |

Notes: Table presents mean individual characteristics at the cell level for the entire experimental sample, then presents mean cell characteristics across categories of cell treatment intensity: 0% treated, 1 individual treated, 50% treated, and 75% treated, respectively. It then tests for equality of means across all groups. 'English language high school' is an indicator of whether the subject completed high school with English as the formal language of instruction (as opposed to Chinese). 'HH monthly income' is the self-reported total income earned by both parents (including sources of income such as dividends and rents). 'Expected income at age 40' is a survey response indicating self-reported expectations of relative income compared to classmates at HKUST at age 40. '# real estate owned' is a measure of wealth: the number of real estate properties owned by a subject's parents/household in Hong Kong at the time of the survey. 'Planned to participate in 2017 protest' is a subject's self-reported plan (as of June 2017) to participate in the July 1, 2017 march prior to the treatment assignment. 'Participated in any previous protest' is a self-reported indicator for having participated in a protest prior to 2017.

D.2 Robustness of treatment effects and auxiliary results

This section presents supplementary regression tables, figures, and robustness checks relating to the treatment effect estimation.

Figure [D.3](#) presents the heterogeneous treatment effects by target cell treatment intensity, plotting turnout rates by individual treatment status (treatment versus pooled control) and cell treatment intensity (1% treated, 50% treated, or 75% treated), for 2017 (left-hand graph) and 2018 (right-hand graph).

Table [D.7](#) replicates Table [1](#), but controlling for unbalanced characteristics interacted with treatment indicators. Table [D.8](#) replicates Table [2](#) but controlling for unbalanced characteristics interacted with treatment indicators.

Table [D.9](#) reports regression evidence using all individual survey questions as outcomes (instead of the summary indices of the previous tables), and using all pairwise comparisons across the three treatment arms.

Table [D.10](#) estimates the “naturally occurring” persistence rate, as resulting from a simple regression of (self-reported) participation in year t on participation in year $t - 1$. One might also wish to benchmark the persistence rate we find against rates of persistence observed in other settings (sporting events, concerts, etc.). In this work, our aim is to test for a meaningful effect of past protest behavior on future behavior (i.e., testing the effect of past participation against 0) and to test for meaningful roles of belief changes, preference changes, and changed social interactions (i.e., comparing these mechanisms’ effects to 0). Comparing the magnitudes within this setting to analogous magnitudes in other settings is left for future work.

Table [D.11](#) replicates Table [1](#), but observations in the regression are weighted to match the sample of individuals who completed at least one wave of the study on observables. Table [D.12](#) replicates Table [2](#) but observations in the regression are weighted to match the sample of individuals who completed at least one wave of the study on observables.

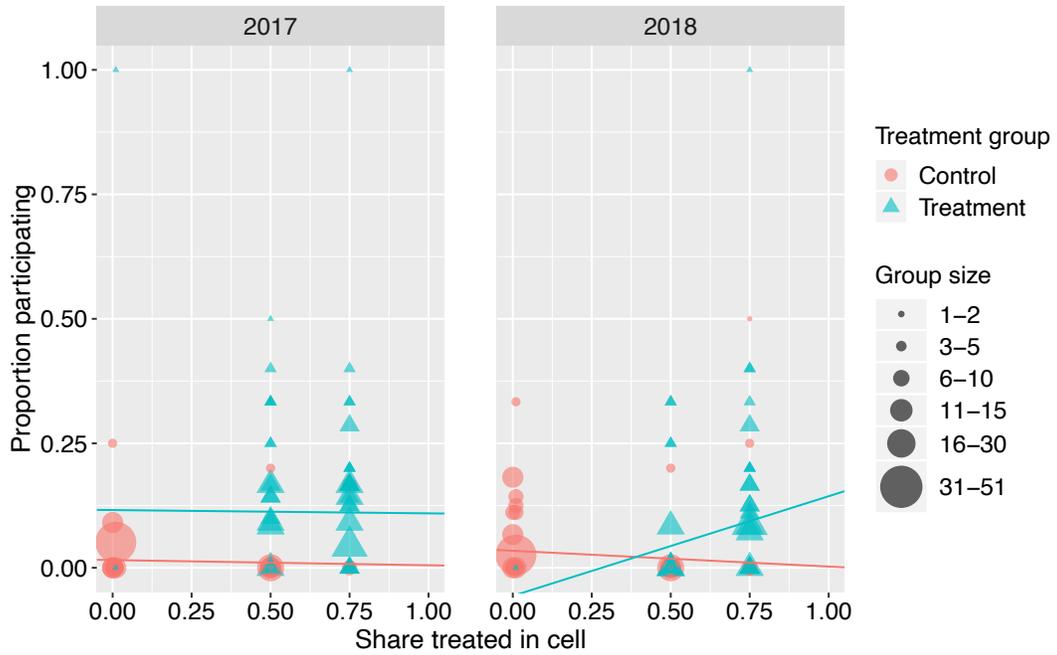


Figure D.3: Heterogeneous treatment effects by target cell treatment intensity. p -values calculated from a test that the coefficient on the interaction between individual treatment and cell treatment intensity (graphically, the slope of the line) equals zero: 0.951 (2017, treatment); 0.524 (2017, control); 0.022 (2018, treatment); 0.170 (2018, control).

Table D.7: Treatment effects (controlling for unbalanced characteristics)

| | Participation | | | | Plans to participate | |
|-----------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|----------------------|-------------------|
| | 2017 | 2017 | 2018 | 2018 | 2018 | 2018 |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A: <i>No control – replication of Table 1</i> | | | | | | |
| Treatment | 0.133 (0.124) | 0.114 (0.122) | -0.033 (0.018) | -0.047 (0.030) | -0.104 (0.051) | -0.117 (0.062) |
| <i>p</i> -value (permutation test) | 0.038 | 0.059 | 0.298 | 0.058 | 0.091 | 0.017 |
| Treatment × 50% intensity | -0.028 (0.126) | -0.020 (0.124) | 0.062 (0.022) | 0.068 (0.025) | 0.067 (0.061) | 0.073 (0.064) |
| <i>p</i> -value (permutation test) | 0.345 | 0.362 | 0.042 | 0.061 | 1.000 | 0.905 |
| Treatment × 75% intensity | -0.028 (0.127) | -0.021 (0.125) | 0.117 (0.036) | 0.122 (0.038) | 0.110 (0.062) | 0.112 (0.065) |
| <i>p</i> -value (permutation test) | 0.356 | 0.363 | 0.005 | 0.005 | 0.046 | 0.024 |
| Panel B: <i>In addition control for birth year</i> | | | | | | |
| Treatment | . | . | . | . | . | . |
| Treatment × 50% intensity | -0.029 (0.127) | -0.020 (0.124) | 0.059 (0.025) | 0.066 (0.026) | 0.059 (0.066) | 0.068 (0.068) |
| Treatment × 75% intensity | -0.028 (0.127) | -0.021 (0.125) | 0.116 (0.038) | 0.122 (0.039) | 0.107 (0.069) | 0.113 (0.072) |
| Panel C: <i>In addition control for English-language High School</i> | | | | | | |
| Treatment | 0.162 (0.140) | 0.139 (0.138) | -0.072 (0.034) | -0.094 (0.040) | -0.135 (0.068) | -0.159 (0.079) |
| Treatment × 50% intensity | -0.046 (0.146) | -0.037 (0.142) | 0.058 (0.035) | 0.066 (0.037) | 0.100 (0.077) | 0.109 (0.079) |
| Treatment × 75% intensity | -0.034 (0.147) | -0.027 (0.144) | 0.120 (0.047) | 0.127 (0.049) | 0.150 (0.079) | 0.157 (0.083) |
| Panel D: <i>In addition control for expected income at age 40</i> | | | | | | |
| Treatment | 0.091 (0.138) | 0.073 (0.134) | -0.147 (0.054) | -0.159 (0.059) | -0.095 (0.083) | -0.107 (0.089) |
| Treatment × 50% intensity | -0.030 (0.127) | -0.022 (0.124) | 0.058 (0.022) | 0.063 (0.025) | 0.068 (0.061) | 0.074 (0.065) |
| Treatment × 75% intensity | -0.029 (0.128) | -0.022 (0.126) | 0.115 (0.036) | 0.119 (0.038) | 0.110 (0.062) | 0.112 (0.065) |

Panel E: In addition control for predicted protest propensity

| | | | | | | |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Treatment | 0.101 (0.135) | 0.092 (0.132) | -0.046 (0.033) | -0.054 (0.038) | -0.116 (0.063) | -0.123 (0.068) |
| Treatment × 50% intensity | -0.026 (0.127) | -0.021 (0.124) | 0.063 (0.022) | 0.068 (0.025) | 0.068 (0.061) | 0.073 (0.065) |
| Treatment × 75% intensity | -0.024 (0.129) | -0.020 (0.126) | 0.118 (0.037) | 0.122 (0.038) | 0.111 (0.063) | 0.112 (0.065) |
| DV mean (control grp.) | 0.012 | 0.012 | 0.025 | 0.025 | 0.100 | 0.100 |
| DV std. dev. (control grp.) | 0.111 | 0.111 | 0.156 | 0.156 | 0.299 | 0.299 |
| DV mean (all) | 0.055 | 0.055 | 0.045 | 0.045 | 0.091 | 0.091 |
| DV std. dev. (all) | 0.229 | 0.229 | 0.207 | 0.207 | 0.287 | 0.287 |
| Gender controls | No | Yes | No | Yes | No | Yes |
| Observations | 849 | 849 | 849 | 849 | 849 | 849 |

Notes: Panel A replicates Table 1. As an alternative approach to statistical inference, we also conduct two-sided permutation tests (i.e., “randomization inference”) for all specifications shown in the paper, based on 1,000 repetitions and maintaining the same proportion of participants across treatment arms. Each subsequent panel in addition controls for one unbalanced characteristics and its interaction with the treatment indicator. The coefficient on Treatment in Panel B cannot be estimated due to collinearity.

Table D.8: Mechanisms (controlling for unbalanced characteristics)

| | New friendships | | Political preferences | | Political beliefs | | Beliefs about others | |
|-----------------------------------------------------------------------------|-------------------|-------------------|-----------------------|-------------------|-------------------|-------------------|----------------------|--|
| | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
| Panel A: <i>No control – replication of Table 3</i> | | | | | | | | |
| Treatment | −0.036 (0.019) | −0.316 (0.545) | 0.155 (0.440) | −0.455 (0.472) | −0.148 (0.177) | −0.424 (0.394) | −0.382 (0.106) | |
| <i>p</i> -value (permutation test) | 0.041 | 0.923 | 1.000 | 0.234 | 0.786 | 0.185 | 0.736 | |
| Treatment × 50% intensity | 0.073 (0.031) | 0.414 (0.551) | −0.062 (0.460) | 0.362 (0.489) | 0.115 (0.215) | 0.497 (0.406) | 0.521 (0.144) | |
| <i>p</i> -value (permutation test) | 0.012 | 0.809 | 1.000 | 0.511 | 0.798 | 0.189 | 0.680 | |
| Treatment × 75% intensity | 0.058 (0.038) | 0.544 (0.556) | −0.069 (0.456) | 0.491 (0.483) | 0.141 (0.229) | 0.489 (0.411) | 0.305 (0.149) | |
| <i>p</i> -value (permutation test) | 0.012 | 0.808 | 1.000 | 0.266 | 0.833 | 0.193 | 0.748 | |
| Panel B: <i>In addition control for birth year</i> | | | | | | | | |
| Treatment | . | . | . | . | . | . | . | |
| Treatment × 50% intensity | 0.066 (0.036) | 0.420 (0.551) | −0.052 (0.465) | 0.371 (0.484) | 0.112 (0.214) | 0.506 (0.408) | 0.544 (0.135) | |
| Treatment × 75% intensity | 0.056 (0.045) | 0.545 (0.556) | −0.066 (0.460) | 0.494 (0.477) | 0.140 (0.228) | 0.491 (0.415) | 0.311 (0.140) | |
| Panel C: <i>In addition control for English-language High School</i> | | | | | | | | |
| Treatment | −0.050 (0.042) | −0.307 (0.623) | 0.129 (0.551) | −0.251 (0.479) | −0.191 (0.147) | −0.433 (0.434) | −0.345 (0.145) | |
| Treatment × 50% intensity | 0.085 (0.036) | 0.698 (0.613) | 0.104 (0.540) | 0.173 (0.469) | 0.023 (0.189) | 0.439 (0.422) | 0.541 (0.161) | |
| Treatment × 75% intensity | 0.065 (0.049) | 0.800 (0.622) | 0.041 (0.548) | 0.337 (0.464) | 0.080 (0.184) | 0.489 (0.427) | 0.317 (0.176) | |
| Panel D: <i>In addition control for expected income at age 40</i> | | | | | | | | |
| Treatment | −0.144 (0.063) | −0.143 (0.593) | 0.153 (0.476) | −0.883 (0.537) | −0.594 (0.321) | −0.438 (0.456) | −0.040 (0.234) | |
| Treatment × 50% intensity | 0.070 (0.031) | 0.420 (0.555) | −0.063 (0.461) | 0.347 (0.488) | 0.099 (0.213) | 0.496 (0.406) | 0.533 (0.146) | |
| Treatment × 75% intensity | 0.056 (0.038) | 0.547 (0.561) | −0.069 (0.457) | 0.483 (0.482) | 0.132 (0.228) | 0.489 (0.411) | 0.311 (0.150) | |

Panel E: In addition control for predicted protest propensity

| | | | | | | | |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Treatment | -0.053 (0.042) | -0.516 (0.546) | 0.182 (0.467) | -0.463 (0.486) | -0.252 (0.235) | -0.537 (0.427) | -0.341 (0.175) |
| Treatment × 50% intensity | 0.075 (0.031) | 0.430 (0.550) | -0.065 (0.462) | 0.363 (0.489) | 0.123 (0.214) | 0.505 (0.408) | 0.518 (0.148) |
| Treatment × 75% intensity | 0.060 (0.039) | 0.570 (0.554) | -0.072 (0.459) | 0.492 (0.482) | 0.154 (0.233) | 0.504 (0.413) | 0.300 (0.153) |
| DV mean (control grp.) | 0.064 | -0.062 | -0.052 | -0.012 | 0.005 | -0.045 | 0.005 |
| DV std. dev. (control grp.) | 0.245 | 0.994 | 1.039 | 1.024 | 1.033 | 1.016 | 1.050 |
| DV mean (all) | 0.078 | -0.011 | -0.015 | 0.002 | 0.001 | -0.015 | 0.005 |
| DV std. dev. (all) | 0.268 | 0.993 | 1.007 | 1.000 | 1.018 | 0.998 | 1.008 |
| Observations | 849 | 849 | 849 | 849 | 849 | 849 | 849 |

Notes: Panel A replicates Table 2. As an alternative approach to statistical inference, we also conduct two-sided permutation tests (i.e., “randomization inference”) for all specifications shown in the paper, based on 1,000 repetitions and maintaining the same proportion of participants across treatment arms. Each subsequent panel in addition controls for one unbalanced characteristics and its interaction with the treatment indicator. The coefficient on Treatment in Panel B cannot be estimated due to collinearity. The individual survey questions combined to construct the indices are provided in Appendix C.1.

Table D.9: Group effects on individual outcomes

| | (1) (T-Pu) | (2) (T-Pu, FE) | (3) (T-PI) | (4) (T-PI, FE) | (5) (PI-Pu) | (6) (PI-Pu, FE) |
|---------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| <i>Panel A.1: Likelihood of integration by 2025, post-July 2017</i> | | | | | | |
| Group 1 | 0.058 (0.043) | 0.059 (0.043) | 0.051 (0.055) | 0.050 (0.055) | 0.007 (0.057) | 0.007 (0.058) |
| DV mean | 2.184 | 2.184 | 2.184 | 2.184 | 2.184 | 2.184 |
| DV std.dev. | 0.572 | 0.572 | 0.572 | 0.572 | 0.572 | 0.572 |
| p-value | 0.179 | 0.168 | 0.355 | 0.362 | 0.904 | 0.910 |
| Adj. p-value | 0.471 | - | 0.702 | - | 0.906 | - |
| <i>Panel A.2: Likelihood of integration by 2025, pre-July 2018</i> | | | | | | |
| Group 1 | 0.031 (0.046) | 0.031 (0.046) | 0.026 (0.057) | 0.021 (0.056) | 0.005 (0.060) | 0.007 (0.060) |
| DV mean | 2.193 | 2.193 | 2.193 | 2.193 | 2.193 | 2.193 |
| DV std.dev. | 0.601 | 0.601 | 0.601 | 0.601 | 0.601 | 0.601 |
| p-value | 0.500 | 0.497 | 0.651 | 0.704 | 0.928 | 0.912 |
| Adj. p-value | 0.816 | - | 0.652 | - | 0.930 | - |
| <i>Panel B.1: Confidence in answer to likelihood of integration by 2025, post-July 2017</i> | | | | | | |
| Group 1 | -0.011 (0.135) | -0.022 (0.135) | -0.097 (0.175) | -0.098 (0.176) | 0.087 (0.179) | 0.089 (0.179) |
| DV mean | 6.253 | 6.253 | 6.253 | 6.253 | 6.253 | 6.253 |
| DV std.dev. | 1.801 | 1.801 | 1.801 | 1.801 | 1.801 | 1.801 |
| p-value | 0.936 | 0.873 | 0.579 | 0.578 | 0.629 | 0.621 |
| Adj. p-value | 0.943 | - | 0.586 | - | 0.973 | - |
| <i>Panel B.2: Confidence in answer to likelihood of integration by 2025, pre-July 2018</i> | | | | | | |
| Group 1 | -0.044 (0.125) | -0.039 (0.126) | 0.132 (0.169) | 0.134 (0.169) | -0.176 (0.174) | -0.165 (0.174) |
| DV mean | 6.895 | 6.895 | 6.895 | 6.895 | 6.895 | 6.895 |
| DV std.dev. | 1.716 | 1.716 | 1.716 | 1.716 | 1.716 | 1.716 |
| p-value | 0.728 | 0.756 | 0.434 | 0.430 | 0.313 | 0.342 |
| Adj. p-value | 0.909 | - | 0.712 | - | 0.686 | - |
| <i>Panel C.1: Likelihood of integration by 2050, post-July 2017</i> | | | | | | |
| Group 1 | 0.066 (0.057) | 0.066 (0.058) | 0.054 (0.074) | 0.051 (0.074) | 0.011 (0.076) | 0.011 (0.076) |
| DV mean | 1.894 | 1.894 | 1.894 | 1.894 | 1.894 | 1.894 |
| DV std.dev. | 0.764 | 0.764 | 0.764 | 0.764 | 0.764 | 0.764 |
| p-value | 0.254 | 0.253 | 0.463 | 0.486 | 0.881 | 0.884 |
| Adj. p-value | 0.436 | - | 0.708 | - | 0.986 | - |
| <i>Panel C.2: Likelihood of integration by 2050, pre-July 2018</i> | | | | | | |
| Group 1 | -0.047 (0.057) | -0.048 (0.057) | -0.083 (0.072) | -0.087 (0.072) | 0.036 (0.076) | 0.035 (0.076) |
| DV mean | 1.832 | 1.832 | 1.832 | 1.832 | 1.832 | 1.832 |
| DV std.dev. | 0.755 | 0.755 | 0.755 | 0.755 | 0.755 | 0.755 |

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Table D.9 – continued from previous page.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | (T-Pu) | (T-Pu, FE) | (T-PI) | (T-PI, FE) | (PI-Pu) | (PI-Pu, FE) |
| p-value | 0.409 | 0.401 | 0.247 | 0.225 | 0.633 | 0.640 |
| Adj. p-value | 0.848 | - | 0.624 | - | 0.844 | - |
| <i>Panel D.1: Confidence in answer to likelihood of integration by 2050, post-July 2017</i> | | | | | | |
| Group 1 | -0.204 (0.161) | -0.224 (0.161) | -0.248 (0.210) | -0.255 (0.211) | 0.043 (0.209) | 0.044 (0.209) |
| DV mean | 6.271 | 6.271 | 6.271 | 6.271 | 6.271 | 6.271 |
| DV std.dev. | 2.140 | 2.140 | 2.140 | 2.140 | 2.140 | 2.140 |
| p-value | 0.204 | 0.165 | 0.240 | 0.227 | 0.836 | 0.834 |
| Adj. p-value | 0.431 | - | 0.595 | - | 0.995 | - |
| <i>Panel D.2: Confidence in answer to likelihood of integration by 2050, pre-July 2018</i> | | | | | | |
| Group 1 | -0.027 (0.150) | -0.034 (0.151) | 0.207 (0.190) | 0.209 (0.190) | -0.234 (0.203) | -0.233 (0.203) |
| DV mean | 6.865 | 6.865 | 6.865 | 6.865 | 6.865 | 6.865 |
| DV std.dev. | 2.002 | 2.002 | 2.002 | 2.002 | 2.002 | 2.002 |
| p-value | 0.857 | 0.823 | 0.276 | 0.273 | 0.249 | 0.252 |
| Adj. p-value | 0.869 | - | 0.585 | - | 0.615 | - |
| <i>Panel E.1: Index of political beliefs (z-score), post-July 2017</i> | | | | | | |
| Group 1 | 0.047 (0.074) | 0.041 (0.074) | 0.001 (0.098) | -0.003 (0.098) | 0.046 (0.101) | 0.046 (0.101) |
| DV mean | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| DV std.dev. | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| p-value | 0.526 | 0.576 | 0.993 | 0.973 | 0.648 | 0.647 |
| <i>Panel E.2: Index of political beliefs (z-score), pre-July 2018</i> | | | | | | |
| Group 1 | -0.034 (0.078) | -0.035 (0.078) | 0.043 (0.096) | 0.037 (0.096) | -0.076 (0.101) | -0.073 (0.101) |
| DV mean | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| DV std.dev. | 1.018 | 1.018 | 1.018 | 1.018 | 1.018 | 1.018 |
| p-value | 0.665 | 0.655 | 0.659 | 0.700 | 0.452 | 0.473 |
| <i>Panel F.1: Perceived importance of democracy, post-July 2017</i> | | | | | | |
| Group 1 | 0.092 (0.157) | 0.106 (0.158) | 0.059 (0.201) | 0.068 (0.201) | 0.033 (0.215) | 0.045 (0.215) |
| DV mean | 6.512 | 6.512 | 6.512 | 6.512 | 6.512 | 6.512 |
| DV std.dev. | 2.109 | 2.109 | 2.109 | 2.109 | 2.109 | 2.109 |
| p-value | 0.559 | 0.500 | 0.771 | 0.735 | 0.877 | 0.833 |
| Adj. p-value | 0.794 | - | 0.798 | - | 0.988 | - |
| <i>Panel F.2: Perceived importance of democracy, pre-July 2018</i> | | | | | | |
| Group 1 | 0.314 (0.159) | 0.323 (0.160) | 0.097 (0.202) | 0.107 (0.202) | 0.217 (0.217) | 0.233 (0.216) |
| DV mean | 6.787 | 6.787 | 6.787 | 6.787 | 6.787 | 6.787 |
| DV std.dev. | 2.131 | 2.131 | 2.131 | 2.131 | 2.131 | 2.131 |

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Table D.9 – continued from previous page.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---------------------------------------------------------------------------------------|---------|------------|---------|------------|---------|-------------|
| | (T-Pu) | (T-Pu, FE) | (T-PI) | (T-PI, FE) | (PI-Pu) | (PI-Pu, FE) |
| p-value | 0.048 | 0.044 | 0.629 | 0.596 | 0.318 | 0.283 |
| Adj. p-value | 0.194 | - | 0.863 | - | 0.530 | - |
| <i>Panel G.1: Political attitudes (pro-democracy vs. pro-Beijing), post-July 2017</i> | | | | | | |
| Group 1 | 0.110 | 0.110 | 0.308 | 0.308 | -0.197 | -0.206 |
| | (0.152) | (0.153) | (0.195) | (0.195) | (0.197) | (0.197) |
| DV mean | 3.703 | 3.703 | 3.703 | 3.703 | 3.703 | 3.703 |
| DV std.dev. | 2.013 | 2.013 | 2.013 | 2.013 | 2.013 | 2.013 |
| p-value | 0.470 | 0.474 | 0.114 | 0.115 | 0.318 | 0.297 |
| Adj. p-value | 0.832 | - | 0.348 | - | 0.754 | - |
| <i>Panel G.2: Political attitudes (pro-democracy vs. pro-Beijing), pre-July 2018</i> | | | | | | |
| Group 1 | -0.067 | -0.064 | 0.288 | 0.286 | -0.356 | -0.357 |
| | (0.152) | (0.153) | (0.194) | (0.195) | (0.198) | (0.199) |
| DV mean | 3.789 | 3.789 | 3.789 | 3.789 | 3.789 | 3.789 |
| DV std.dev. | 2.016 | 2.016 | 2.016 | 2.016 | 2.016 | 2.016 |
| p-value | 0.659 | 0.675 | 0.138 | 0.143 | 0.074 | 0.073 |
| Adj. p-value | 0.881 | - | 0.419 | - | 0.230 | - |
| <i>Panel H.1: Legitimacy of CCP rule in Hong Kong, post-July 2017</i> | | | | | | |
| Group 1 | 0.263 | 0.240 | 0.096 | 0.094 | 0.168 | 0.149 |
| | (0.186) | (0.186) | (0.231) | (0.231) | (0.241) | (0.240) |
| DV mean | 4.910 | 4.910 | 4.910 | 4.910 | 4.910 | 4.910 |
| DV std.dev. | 2.435 | 2.435 | 2.435 | 2.435 | 2.435 | 2.435 |
| p-value | 0.157 | 0.198 | 0.679 | 0.686 | 0.487 | 0.534 |
| Adj. p-value | 0.453 | - | 0.963 | - | 0.849 | - |
| <i>Panel H.2: Legitimacy of CCP rule in Hong Kong, pre-July 2018</i> | | | | | | |
| Group 1 | -0.042 | -0.061 | 0.303 | 0.303 | -0.345 | -0.377 |
| | (0.183) | (0.184) | (0.226) | (0.226) | (0.253) | (0.250) |
| DV mean | 4.962 | 4.962 | 4.962 | 4.962 | 4.962 | 4.962 |
| DV std.dev. | 2.441 | 2.441 | 2.441 | 2.441 | 2.441 | 2.441 |
| p-value | 0.817 | 0.739 | 0.181 | 0.181 | 0.173 | 0.133 |
| Adj. p-value | 0.812 | - | 0.444 | - | 0.403 | - |
| <i>Panel I.1: HK should be independent, post-July 2017</i> | | | | | | |
| Group 1 | -0.051 | -0.048 | -0.083 | -0.068 | 0.032 | 0.033 |
| | (0.203) | (0.203) | (0.254) | (0.254) | (0.268) | (0.268) |
| DV mean | 4.353 | 4.353 | 4.353 | 4.353 | 4.353 | 4.353 |
| DV std.dev. | 2.675 | 2.675 | 2.675 | 2.675 | 2.675 | 2.675 |
| p-value | 0.802 | 0.813 | 0.746 | 0.790 | 0.906 | 0.903 |
| Adj. p-value | 0.803 | - | 0.928 | - | 0.902 | - |
| <i>Panel I.2: HK should be independent, pre-July 2018</i> | | | | | | |
| Group 1 | 0.117 | 0.144 | -0.049 | -0.022 | 0.166 | 0.193 |
| | (0.215) | (0.215) | (0.271) | (0.269) | (0.284) | (0.283) |

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Table D.9 – continued from previous page.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--------------------------------------------------------------------------------------|---------|------------|---------|------------|---------|-------------|
| | (T-Pu) | (T-Pu, FE) | (T-PI) | (T-PI, FE) | (PI-Pu) | (PI-Pu, FE) |
| DV mean | 4.565 | 4.565 | 4.565 | 4.565 | 4.565 | 4.565 |
| DV std.dev. | 2.842 | 2.842 | 2.842 | 2.842 | 2.842 | 2.842 |
| p-value | 0.585 | 0.504 | 0.856 | 0.935 | 0.559 | 0.496 |
| Adj. p-value | 0.927 | - | 0.857 | - | 0.575 | - |
| <hr/> | | | | | | |
| <i>Panel J.1: Index of political preferences (z-score), post-July 2017</i> | | | | | | |
| Group 1 | 0.110 | 0.111 | 0.137 | 0.144 | -0.027 | -0.031 |
| | (0.075) | (0.075) | (0.096) | (0.095) | (0.098) | (0.098) |
| DV mean | -0.011 | -0.011 | -0.011 | -0.011 | -0.011 | -0.011 |
| DV std.dev. | 0.993 | 0.993 | 0.993 | 0.993 | 0.993 | 0.993 |
| p-value | 0.143 | 0.143 | 0.151 | 0.133 | 0.780 | 0.748 |
| <hr/> | | | | | | |
| <i>Panel J.2: Index of political preferences (z-score), pre-July 2018</i> | | | | | | |
| Group 1 | 0.047 | 0.054 | 0.168 | 0.175 | -0.121 | -0.117 |
| | (0.076) | (0.076) | (0.095) | (0.095) | (0.102) | (0.102) |
| DV mean | -0.015 | -0.015 | -0.015 | -0.015 | -0.015 | -0.015 |
| DV std.dev. | 1.007 | 1.007 | 1.007 | 1.007 | 1.007 | 1.007 |
| p-value | 0.537 | 0.473 | 0.079 | 0.066 | 0.236 | 0.251 |
| <hr/> | | | | | | |
| <i>Panel K.1: Others afraid of expressing pro-independence views, post-July 2017</i> | | | | | | |
| Group 1 | 0.047 | 0.036 | -0.050 | -0.044 | 0.097 | 0.079 |
| | (0.165) | (0.165) | (0.206) | (0.206) | (0.211) | (0.210) |
| DV mean | 4.441 | 4.441 | 4.441 | 4.441 | 4.441 | 4.441 |
| DV std.dev. | 2.153 | 2.153 | 2.153 | 2.153 | 2.153 | 2.153 |
| p-value | 0.777 | 0.827 | 0.807 | 0.830 | 0.646 | 0.707 |
| Adj. p-value | 0.950 | - | 0.809 | - | 0.950 | - |
| <hr/> | | | | | | |
| <i>Panel K.2: Others afraid of expressing pro-independence views, pre-July 2018</i> | | | | | | |
| Group 1 | -0.243 | -0.219 | -0.087 | -0.076 | -0.156 | -0.150 |
| | (0.177) | (0.178) | (0.224) | (0.224) | (0.218) | (0.219) |
| DV mean | 4.925 | 4.925 | 4.925 | 4.925 | 4.925 | 4.925 |
| DV std.dev. | 2.302 | 2.302 | 2.302 | 2.302 | 2.302 | 2.302 |
| p-value | 0.171 | 0.218 | 0.699 | 0.734 | 0.475 | 0.492 |
| Adj. p-value | 0.480 | - | 0.966 | - | 0.851 | - |
| <hr/> | | | | | | |
| <i>Panel L.1: Second-order beliefs about importance of democracy, post-July 2017</i> | | | | | | |
| Group 1 | 0.060 | 0.065 | 0.129 | 0.123 | -0.069 | -0.066 |
| | (0.121) | (0.122) | (0.154) | (0.154) | (0.160) | (0.161) |
| DV mean | 6.380 | 6.380 | 6.380 | 6.380 | 6.380 | 6.380 |
| DV std.dev. | 1.607 | 1.607 | 1.607 | 1.607 | 1.607 | 1.607 |
| p-value | 0.621 | 0.596 | 0.403 | 0.425 | 0.669 | 0.681 |
| Adj. p-value | 0.952 | - | 0.866 | - | 0.887 | - |
| <hr/> | | | | | | |
| <i>Panel L.2: Second-order beliefs about importance of democracy, pre-July 2018</i> | | | | | | |
| Group 1 | 0.031 | 0.030 | -0.055 | -0.056 | 0.086 | 0.090 |
| | (0.123) | (0.124) | (0.152) | (0.153) | (0.156) | (0.156) |

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Table D.9 – continued from previous page.

| | (1) (T-Pu) | (2) (T-Pu, FE) | (3) (T-PI) | (4) (T-PI, FE) | (5) (PI-Pu) | (6) (PI-Pu, FE) |
|--------------------------------------------------------------------------------------------------|-------------------|-------------------|------------------|-------------------|-------------------|--------------------|
| DV mean | 6.420 | 6.420 | 6.420 | 6.420 | 6.420 | 6.420 |
| DV std.dev. | 1.601 | 1.601 | 1.601 | 1.601 | 1.601 | 1.601 |
| p-value | 0.799 | 0.811 | 0.718 | 0.714 | 0.580 | 0.563 |
| Adj. p-value | 0.957 | - | 0.914 | - | 0.552 | - |
| <i>Panel M.1: Second-order beliefs about legitimacy of CCP rule in Hong Kong, post-July 2017</i> | | | | | | |
| Group 1 | 0.131 (0.143) | 0.111 (0.143) | 0.132 (0.190) | 0.119 (0.189) | -0.001 (0.180) | -0.014 (0.180) |
| DV mean | 5.166 | 5.166 | 5.166 | 5.166 | 5.166 | 5.166 |
| DV std.dev. | 1.895 | 1.895 | 1.895 | 1.895 | 1.895 | 1.895 |
| p-value | 0.359 | 0.439 | 0.488 | 0.531 | 0.996 | 0.936 |
| Adj. p-value | 0.827 | - | 0.863 | - | 0.998 | - |
| <i>Panel M.2: Second-order beliefs about legitimacy of CCP rule in Hong Kong, pre-July 2018</i> | | | | | | |
| Group 1 | -0.089 (0.138) | -0.097 (0.139) | 0.046 (0.170) | 0.047 (0.170) | -0.135 (0.190) | -0.142 (0.190) |
| DV mean | 5.348 | 5.348 | 5.348 | 5.348 | 5.348 | 5.348 |
| DV std.dev. | 1.837 | 1.837 | 1.837 | 1.837 | 1.837 | 1.837 |
| p-value | 0.521 | 0.485 | 0.787 | 0.783 | 0.479 | 0.455 |
| Adj. p-value | 0.884 | - | 0.797 | - | 0.723 | - |
| <i>Panel N.1: Second-order beliefs about whether HK should be independent, post-July 2017</i> | | | | | | |
| Group 1 | -0.029 (0.140) | -0.022 (0.141) | 0.083 (0.178) | 0.091 (0.178) | -0.111 (0.182) | -0.114 (0.183) |
| DV mean | 4.609 | 4.609 | 4.609 | 4.609 | 4.609 | 4.609 |
| DV std.dev. | 1.848 | 1.848 | 1.848 | 1.848 | 1.848 | 1.848 |
| p-value | 0.838 | 0.877 | 0.642 | 0.608 | 0.542 | 0.533 |
| Adj. p-value | 0.839 | - | 0.876 | - | 0.945 | - |
| <i>Panel N.2: Second-order beliefs about whether HK should be independent, pre-July 2018</i> | | | | | | |
| Group 1 | -0.016 (0.154) | -0.000 (0.154) | 0.220 (0.191) | 0.230 (0.190) | -0.236 (0.194) | -0.234 (0.195) |
| DV mean | 4.594 | 4.594 | 4.594 | 4.594 | 4.594 | 4.594 |
| DV std.dev. | 1.999 | 1.999 | 1.999 | 1.999 | 1.999 | 1.999 |
| p-value | 0.918 | 0.999 | 0.249 | 0.227 | 0.225 | 0.230 |
| Adj. p-value | 0.924 | - | 0.666 | - | 0.595 | - |
| <i>Panel O.1: Index of second-order beliefs (z-score), post-July 2017</i> | | | | | | |
| Group 1 | 0.053 (0.075) | 0.050 (0.075) | 0.104 (0.096) | 0.100 (0.096) | -0.051 (0.100) | -0.055 (0.100) |
| DV mean | -0.015 | -0.015 | -0.015 | -0.015 | -0.015 | -0.015 |
| DV std.dev. | 0.998 | 0.998 | 0.998 | 0.998 | 0.998 | 0.998 |
| p-value | 0.477 | 0.505 | 0.280 | 0.298 | 0.609 | 0.580 |
| <i>Panel O.2: Index of second-order beliefs (z-score), pre-July 2018</i> | | | | | | |
| Group 1 | -0.026 | -0.025 | 0.057 | 0.060 | -0.083 | -0.084 |

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Table D.9 – continued from previous page.

| | (1) (T-Pu) | (2) (T-Pu, FE) | (3) (T-Pl) | (4) (T-Pl, FE) | (5) (Pl-Pu) | (6) (Pl-Pu, FE) |
|--------------------|---------------|-------------------|---------------|-------------------|----------------|--------------------|
| DV mean | 0.077 | 0.077 | 0.093 | 0.093 | 0.103 | 0.103 |
| DV std.dev. | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| p-value | 1.009 | 1.009 | 1.009 | 1.009 | 1.009 | 1.009 |
| Treatment cell FEs | 0.738 | 0.746 | 0.541 | 0.522 | 0.424 | 0.419 |
| Observations | No | Yes | No | Yes | No | Yes |
| | 849 | 849 | 849 | 849 | 849 | 849 |

Notes: Table reports estimated coefficients from regressions of each outcome on an indicator for the first condition in the column heading (the main treatment in Columns 1-4 and the placebo in Columns 5-6), in which the sample is limited to the two conditions listed in the column heading (treatment and pure control in Columns 1-2, treatment and placebo in Columns 3-4, and placebo and pure control in Columns 5-6). Columns 2, 4, and 6 include controls for a full set of treatment cell fixed effects. We present p-values adjusted for multiple hypothesis testing following [Enikolopov, Makarin and Petrova \(2019\)](#) at the level of each of the three broad categories within each period (post-17 and pre-18) and at the level of each of the three broad categories (political beliefs, political preferences, and political beliefs about other Hong Kong citizens).

Table D.10: Naturally occurring persistence rate

| | Participation in July 1st march in year ... | | | | | | | |
|-------------------------------|---------------------------------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
| | 2015 | 2016 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Participation in $t-1$ | 0.366 [0.030] | 0.356 [0.031] | 0.238 [0.056] | 0.255 [0.060] | 0.275 [0.121] | 0.272 [0.119] | 0.376 [0.115] | 0.426 [0.123] |
| Male | | 0.004 [0.008] | | -0.006 [0.009] | | 0.010 [0.010] | | -0.002 [0.007] |
| Birth year | | -0.007 [0.003] | | 0.001 [0.002] | | -0.000 [0.003] | | -0.007 [0.003] |
| Not religious | | -0.006 [0.011] | | -0.007 [0.011] | | -0.001 [0.012] | | -0.008 [0.010] |
| HK-oriented childhood env. | | -0.001 [0.004] | | 0.008 [0.003] | | 0.005 [0.004] | | -0.003 [0.004] |
| HH economic and social status | | 0.005 [0.004] | | -0.000 [0.004] | | 0.001 [0.005] | | 0.009 [0.004] |
| Own projected economic status | | -0.004 [0.004] | | -0.003 [0.004] | | -0.004 [0.004] | | -0.002 [0.003] |
| Observations | 3052 | 2801 | 1273 | 1172 | 781 | 699 | 1063 | 971 |
| Adjusted R^2 | 0.204 | 0.202 | 0.110 | 0.117 | 0.087 | 0.091 | 0.127 | 0.175 |
| Mean of Dep. Var. | 0.0554 | 0.0564 | 0.0236 | 0.0256 | 0.0154 | 0.0157 | 0.0188 | 0.0175 |
| SD of Dep. Var. | 0.229 | 0.231 | 0.152 | 0.158 | 0.123 | 0.125 | 0.136 | 0.131 |

Notes: Table D.10 shows the results of regressing participation in the July 1st march in year t on participation in the July 1st march in year $t-1$ (and on a set of demographic characteristics for year t), separately by year. Participation in the July 1st march in year t is elicited from subjects either directly after the march in year t (asked as a question about “current” protest participation), or in future survey waves in years $t+1, t+2, \dots$ (asked as a question about past protest participation). For the years 2016, 2017, and 2018, the samples only include subjects who were *not* in the treatment groups of either of the experiments affecting the protest participation we conducted in 2016 (provision of information on fellow students’ planned participation, see Cantoni et al., 2019) and 2017 (the experiment from the current paper). Hong Kong-oriented childhood environment, the household’s economic and social status, and subjects’ own projected economic status are z-score indices, i.e. they are weighted by the inverse covariance of the standardized variables (see Anderson, 2008).

Table D.11: Treatment effects: protest participation and plans (reweighted sample)

| | Participation | | | | Plans to participate | |
|-----------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|----------------------|-------------------|
| | 2017 | 2017 | 2018 | 2018 | 2018 | 2018 |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A: Average treatment effect | | | | | | |
| Treatment | 0.105 (0.018) | 0.093 (0.023) | 0.049 (0.016) | 0.042 (0.019) | -0.021 (0.023) | -0.029 (0.027) |
| Panel B: Heterogeneity by cell treatment intensity | | | | | | |
| Treatment | 0.136 (0.127) | 0.117 (0.124) | -0.034 (0.018) | -0.048 (0.029) | -0.103 (0.050) | -0.118 (0.061) |
| Treatment × 50% intensity | -0.032 (0.129) | -0.024 (0.126) | 0.062 (0.022) | 0.068 (0.025) | 0.066 (0.060) | 0.073 (0.064) |
| Treatment × 75% intensity | -0.032 (0.130) | -0.026 (0.127) | 0.117 (0.035) | 0.122 (0.037) | 0.109 (0.061) | 0.112 (0.064) |
| DV mean (control grp.) | 0.013 | 0.013 | 0.025 | 0.025 | 0.099 | 0.099 |
| DV std. dev. (control grp.) | 0.112 | 0.112 | 0.155 | 0.155 | 0.298 | 0.298 |
| DV mean (all) | 0.055 | 0.055 | 0.045 | 0.045 | 0.090 | 0.090 |
| DV std. dev. (all) | 0.228 | 0.228 | 0.206 | 0.206 | 0.286 | 0.286 |
| Treatment × gender | No | Yes | No | Yes | No | Yes |
| Observations | 849 | 849 | 849 | 849 | 849 | 849 |

Notes: Panel A presents estimated coefficients from regressions of protest turnout (or planned turnout) on the individual treatment indicator. Panel B presents estimated coefficients from regressions of protest turnout (or planned turnout) on the individual treatment indicator interacted with *majorimescohort* cell treatment intensity bin indicators (and lower-order terms). Results are shown for 2017 protest turnout (columns 1–2), 2018 protest turnout (columns 3–4), and 2018 planned protest turnout (columns 5–6). Columns 1, 3, and 5 include *majorimescohort* cell fixed effects; in addition, columns 2, 4, and 6 include the interaction between individual treatment status and a gender indicator. Standard errors (reported in parentheses) are clustered at the *majorimescohort* cell level. Observations re-weighted to match the sample of individuals who completed at least one wave of the study on observables.

Table D.12: Mechanisms: political beliefs, preferences, beliefs about others, and new friendships
(reweighted sample)

| | New friendships | | Political preferences | | Political beliefs | | Beliefs about others | |
|-----------------------------------------------------------|-------------------|-------------------|-----------------------|-------------------|-------------------|-------------------|----------------------|--|
| | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
| Panel A: Average treatment effect | | | | | | | | |
| Treatment | 0.026 (0.020) | 0.136 (0.068) | 0.096 (0.089) | -0.055 (0.081) | -0.022 (0.089) | 0.045 (0.073) | 0.017 (0.071) | |
| Panel B: Heterogeneity by cell treatment intensity | | | | | | | | |
| Treatment | -0.037 (0.019) | -0.316 (0.543) | 0.158 (0.443) | -0.468 (0.464) | -0.151 (0.175) | -0.411 (0.387) | -0.381 (0.106) | |
| Treatment × 50% intensity | 0.075 (0.031) | 0.417 (0.549) | -0.065 (0.463) | 0.373 (0.481) | 0.125 (0.214) | 0.480 (0.399) | 0.517 (0.143) | |
| Treatment × 75% intensity | 0.058 (0.038) | 0.545 (0.554) | -0.065 (0.459) | 0.505 (0.475) | 0.149 (0.227) | 0.482 (0.404) | 0.310 (0.148) | |
| DV mean (control grp.) | 0.064 | -0.062 | -0.052 | -0.012 | 0.005 | -0.045 | 0.005 | |
| DV std. dev. (control grp.) | 0.244 | 0.992 | 1.039 | 1.023 | 1.033 | 1.016 | 1.051 | |
| DV mean (all) | 0.078 | -0.011 | -0.015 | 0.002 | 0.001 | -0.015 | 0.005 | |
| DV std. dev. (all) | 0.267 | 0.991 | 1.006 | 1.000 | 1.017 | 0.997 | 1.008 | |
| Observations | 849 | 849 | 849 | 849 | 849 | 849 | 849 | |

Notes: Panel A presents estimated coefficients from regressions of new friendships, indices of preferences, political beliefs, and beliefs about others on the individual treatment indicator. Panel B presents estimated coefficients from regressions of new friendships, indices of preferences, political beliefs, and beliefs about others on the individual treatment indicator interacted with major × cohort cell treatment intensity bin indicators (and lower-order terms). Results are shown for new friendships reported in July 2018 (column 1); for July 2017 preferences, beliefs, and beliefs about others (columns 2, 4, and 6); and for June 2018 preferences, beliefs, and beliefs about others (columns 3, 5, and 7). All regressions include major × cohort cell fixed effects. Standard errors (reported in parentheses) are clustered at the major × cohort cell level. Observations re-weighted to match the sample of individuals who completed at least one wave of the study on observables. The individual survey questions combined to construct the indices are provided in Appendix [C.1](#).

Appendix E July 1st, 2017 crowd size estimates

We describe the procedure and results of estimating the crowd size of July 1st, 2017, march based on the information collected by the study participants.

There are many estimates on the number of participants in the demonstration, with wide discrepancies between them. The estimation provided by the Hong Kong University Public Opinion Programme (HKUPOP) was based on the counting of the demonstrators at a fixed point throughout the entire demonstration. Their conclusion is that the total number of demonstrators is somewhere between 26 and 32 thousands. Our crowd-sourcing effort seeks to make an estimation based on another method, in order to provide a plausible range of the number of participants, which can be used to examine which of the earlier estimates were reasonable.

Data available The effective data available consists of 56 responses from the study respondents, including two headcounts taken separately for each respondent. These two headcounts were the number of people that one can touch when stretching out his or her both arms. For each respondent, these two counts were taken at different places at different times, with both the location and time recorded. The drawbacks to the dataset were the small sample size, the very limited information contained in the reported headcount, the dispersal of time and location at which the counts were reported, and the quite common ambiguity of the location (for example, only reporting the main avenue on which the counts were recorded, rather than the specific intersection).

Methodology We assume that the crowd participating in the demonstration had occupied a substantial part of the pre-determined demonstration route. This method is plausible because the 2017 demonstration was one that the endpoint of the march was reached after all demonstrators had left the starting point; therefore, at some point, all demonstrators were on the route, occupying some segments of it. We pin down these segments of the demonstration route by keeping only the counts recorded within the time frame of 15:00 and 18:00, when the main demonstration march took place, and locate both ends of the route where counts were given in this time-frame. This leaves us with 92 counts at different places in this three-hour window.

Furthermore, we assume that within each segment of the demonstration route, the density of the crowd is relatively stable. Therefore, we take the average of the counts from all available responses for every segment of the route and use it to calculate the average density on every segment of the route. For the sake of simplicity and accuracy, we only consider the larger and longer roads on which the demonstration proceeded, because the smaller roads were too short to affect the estimation significantly and lacked responses. Therefore, we estimate the average density of the crowd on the Victoria Park, Causeway Road, Hennessy Road, Queensway, and Yee Wo Street. Also in calculating the density, we assume that the arms-length of respondents are 1.70 meters, which roughly corresponds to the average height of Hong Kong teenagers.

Finally, with the average density available, and data on the lengths and widths of these five aforementioned segments of the demonstration route available, we make the estimation by multiplying each segment's area and the density of demonstrators on it, and then summing them together.

Results Appendix Table [E.1](#) includes all the crowd densities that have been estimated from the survey responses within the time-frame of 15:00 to 18:00. The density listed is the number of people within the one squared-meter circle around our respondent. Note that our respondent himself or herself is also included, so that the density is calculated by:

$$density = (N + 1) \div (1.7^2 \times \pi)$$

where N denotes the number of people within arms reach by each respondent.

Table E.1: Estimated crowd densities

| Hennessy | Queensway | Victoria Park | Causeway | Great George | Yee Wo |
|----------|-----------|---------------|----------|--------------|--------|
| 0.957 | 0.705 | 0.964 | 1.010 | 1.120 | 0.936 |

Appendix Table [E.2](#) shows the measurements of all the road or street segments on the demonstration route; note that not all of them will be used. This is compiled based on official data and the map of the demonstration route provided.

Table E.2: Route area information

| Chinese Name | English Name | Width | Length | Area |
|--------------|----------------------------|--------|-----------|------------|
| 維多利亞公園中央草坪 | Victoria Park Central Lawn | 158 | 80 | 12,640 |
| 維多利亞公園路徑 | Victoria Park Route | 4.100 | 265.895 | 1,090.169 |
| 高士威道 | Causeway Road | 9.600 | 475.929 | 4,568.915 |
| 禮頓道 | Leighton Road | 8.700 | 20.896 | 181.798 |
| 伊榮街 | Irving Street | 11.400 | 158.428 | 1,806.082 |
| 邊寧頓街 | Pennington Street | 11.800 | 61.446 | 725.060 |
| 怡和街 | Yee Wo Street | 7.600 | 167.028 | 1,269.415 |
| 軒尼詩道 | Hennessy Road | 10 | 1,837.731 | 18,377.310 |
| 金鐘道 | Queensway | 10 | 179.657 | 1,796.570 |
| 樂禮街 | Rodney Street | 5.700 | 149.370 | 851.409 |
| 夏道 | Harcourt Road | 10.600 | 300.426 | 3,184.519 |
| 夏道行人道 | Harcourt Road Pavement | 12.400 | 255.763 | 3,171.465 |
| 添美道行人路 | Tim Mei Avenue Pavement | 3 | 137.940 | 413.819 |

Finally, we determine what proportion of the Victoria Park Lawn was occupied. It is obvious that not the entire park was filled by demonstrators when the leading elements had reached far down the route, but many of the responses on Victoria Park still came in very late in our time-frame. Therefore, we provide five final estimates, each assuming a different proportion of the Victoria Park being occupied, ranging from only occupying the Victoria Park Road to occupying the entire park. These final estimates shown in Appendix Table [E.3](#).

Table E.3: Estimation of number of participants

| Full Lawn | 75% lawn | 50% lawn | 25% lawn | Park route only |
|-----------|-----------|-----------|-----------|-----------------|
| 37,069.76 | 34,024.34 | 30,978.92 | 27,933.49 | 25,938.71 |

These estimates give a range slightly higher than that given by HKUPOP, and certainly much higher than the numbers provided by the Hong Kong Police. We think that our estimation could slightly overestimate the crowd size, for the following reasons. First, it is most likely that our respondents were always at the densest parts among the demonstrators, because they randomly followed the crowd. So most likely, their estimation of the crowd density is higher than the actual density over the entire road. Second, our method is based on the assumption that in this three hour interval, the entire length of the segments of the route taken into consideration was occupied. However, these over-estimations should be partially offset by the exclusion of many smaller road segments from our analysis. Yet these smaller segments were indeed not

too significant in causing the downward bias, given their short lengths and small widths. Finally, given the reports on this demonstration, the proportion of the Victoria Park lawn occupied should probably be quite low. Therefore, we think the range given from "Park route only" to "50%" could be more accurate. If this restriction is considered, then this estimation is very close to that of the HKUPOP.