

Protest movements: How effective are they?

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1. Executive Summary

Social Change Lab has undertaken six months of research looking into the outcomes of protests and protest movements, focusing primarily on Western democracies, such as those in North America and Western Europe. In this report, we synthesise our research, which we conducted using various research methods. These methods include literature reviews, public opinion polling, expert interviews, policymaker interviews and a cost-effectiveness analysis. This report only examines the impacts and outcomes of protest movements. Specifically, we mostly focus on the outcomes of large protest movements with at least 1,000 participants in active involvement. This is because we want to understand the impact that protests <u>can</u> have, rather than the impact that most protests will have. Due to this, our research looks at unusually influential protest movements, rather than the median protest movement. We think this is a reasonable approach, as we generally believe protest movements are a hits-based strategy for doing good. In short, we think that most protest movements have little success in achieving their aims, or otherwise positive outcomes. However, it's plausible that a small percentage of protest movements will achieve outcomes large enough to warrant funding a portfolio of social movement organisations. In future work, we plan on researching and estimating the likelihood for a given social movement organisation to achieve large impacts.

We believe this report could be useful for grantmakers and advocates who want to pursue the most effective ways to bring about change for a given issue, particularly those working on climate change and animal welfare. We specifically highlight these two causes, as we believe they are currently well-suited to grassroots social movement efforts.² A subsequent report will examine the factors that make some protest movements more successful than others.

The report is structured so we only present the key evidence from our various research methods for the main outcomes of interest, such as public opinion, policy change, or public discourse. Full reports for each research method are also linked throughout for readers to gain additional insight.

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¹ By "actively involved", we mean people are attending in-person demonstrations, donating, going to meetings or otherwise participating in the movement.

² It's not clear that climate change and animal welfare are the *most* suited to grassroots social movement efforts, but the current existence of similar activities in these fields indicates that external conditions are already somewhat favourable.

1.1 Summary Tables

Below, we scored answers to our various research questions on a 1-5 scale, to indicate our current estimates. We also provide our confidence level on a 1-5 scale (which can also be interpreted as 0-100% confidence intervals). Additionally, we indicate which research methodologies have updated us towards a particular direction, and how much weight we put on that particular methodology given the research question. A single star (*) indicates low weight on that methodology, two stars (**) indicates moderate weight and three stars (***) indicates high weight on that methodology. We based our relative weights on the research methods based on empirical robustness, breadth of information covered (e.g. number of protest movements studied), relevance of that research method to the research question, and other limitations that might have been present. The evidence related to each outcome, and how we arrived at these values, are explained further in the respective sections below.

To what extent can protest movements have significant impacts on <u>public opinion</u> ?					
1 Protests have negligible, or even net negative, impacts on public opinion	2	3 Protests lead to a small (2-5%) net positive change in public opinion	4	5 Protests lead to a large (10%+) net positive change in public opinion	
Evidence pointing towards negligible impact: • Public Opinion Polling*			Evidence pointing towLiterature ReviewExpert interviewsPolicymaker interviewsCase study of Ext	s** rviews**	
Our uncertainty in th	nis value:				
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)	

Table 1: A table that highlights our current estimates, and uncertainty, for the impact of large protest movements on **public opinion**.

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To what extent can protest movements have significant impacts on policy?				
1 Protests have negligible, or even net negative, impacts on policy	2	3 Protests lead to a small net positive change in policy	4	5 Protests lead to a large net positive change in policy
Evidence pointing towards negligible or negative impact: N/A			Evidence pointing towards positive impa Policymaker interviews** Expert interviews** Literature Review**†	
Our uncertainty in th	nis value:			
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)

Table 2: A table that highlights our current estimates, and uncertainty, for the impact of large protest movements on **policy**. Here, we define "net positive" as success in the direction of the aims of the protest movement, rather than what we think is subjectively good. †Whilst the majority of the literature reviewed found positive impacts on policy, there was relatively little literature, as well as some papers pointing towards negligible impact.

To what extent can protest movements have significant impacts on <u>public discourse</u> ?				
1 Protests have negligible, or even net negative, impacts on public discourse	2	3 Protests lead to a small net positive change in public discourse	4	5 Protests lead to a large net positive change in public discourse
Evidence pointing towards negligible impact: • Public Opinion Polling*			Evidence pointing towards positive impa Literature Review** Policymaker interviews** Case study of Extinction Rebellion* 	
Our uncertainty in th	nis value:			
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)

Table 3: A table that highlights our current estimates, and uncertainty, for the impact of large protest movements on **public discourse**. Here, we define public discourse as the salience and coverage of issues advocated for by the protest movement.

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To what extent is there a large variance in protest movement effectiveness?					
1 All protests are similarly effective	2	3 There is a moderate difference in protest effectiveness	4	5 There is a large (over 10x) difference in protest effectiveness	
Evidence pointing towards negligible differences: N/A			Evidence pointing tow differences: Policymaker inter Expert interviews Literature review Case study of Ext	rviews** :**	
Our uncertainty in th	Our uncertainty in this value:				
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)	

Table 4: A table that highlights our current estimates, and uncertainty, for the variance in effectiveness between protest movements.³ One could interpret this as the perceived difference between the protest movements we focus on in this report, and the "average" protest movement.

1.2 Other select findings

Below are some of our notable findings, across various research methods:

- Our <u>literature review</u> on protest outcomes found:
 - Voting behaviour across four protest movements was influenced by approximately 1-6 percentage points, observed via natural experiments.
 - Shifts in public opinion of 2-10% were observed, across both experimental and natural experiment settings.
 - Sustained interest in novel discourse put forward by Black Lives Matter a
 year after the majority of protests, and shown to be up to 10x larger than
 pre-protest activity.
- Our <u>bespoke public opinion polling</u> found that disruptive nonviolent climate protest in the UK did not cause any "backfire" effect i.e. there was no negative impact on public support for climate despite disruptive tactics. There's also weak evidence that it raised the number of people willing to take part in climate activism by 2.6 percentage points, equivalent to an additional 1.7 million people.
- Our <u>expert interviews</u> with academics and movement experts revealed that large protests can be seen as credible signals of public opinion, and public opinion plays an important role in policymaking.

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³ In short, just like <u>some charities differ greatly</u> in cost-effectiveness, we believe the same is true for protest movements. For example, it's very plausible that the most effective protest movements are 10-100x more effective relative to the worst protest movement.

- Our <u>policymaker interviews</u> revealed that while some policymakers believe most protest movements have little impact, they also highlighted a small number of protest movements who have achieved significant impacts on UK policy – primarily across animal welfare and climate change.
- Our <u>case study and cost-effectiveness estimate</u> found that Extinction Rebellion may have abated 0.1-71 (median 8) tonnes of CO2e per £ spent on advocacy. We think this is our most uncertain finding, so readers should interpret this result with caution.

1.3 How to read this report

In this report, we summarise the key findings from various research methods (e.g. our literature review), rather than replicating them in full. For example, in the public opinion section, we reference the most relevant papers from our literature review that we think provide the most valuable evidence, rather than all the papers that tackle the question of protest impacts on public opinion. For those who want to read more into a particular outcome or methodology, we encourage you to read the full reports that are linked. All sections are intended to be standalone pieces, so you can read them independently of other sections. However, this does lead to some points being repeated in several sections.

1.4 Who we are

<u>Social Change Lab</u> is a new <u>Effective Altruist</u>-aligned organisation that is conducting research into whether grassroots social movement organisations (SMOs) could be a cost-effective way to achieve positive social change. We're initially focusing on climate change and animal advocacy, as this is where we believe we can learn the most, due to existing active movements. We aim to understand whether protests and social movement activism should play a larger, or smaller, role in accelerating progress in these cause areas.

We're also interested in how social movements have the greatest chances in achieving their goals, and why some fail. We hope these findings can be applied to other important issues, such as building the effective altruism movement, reducing existential risks, and more.

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2. Introduction

2.1 Why we think this work is valuable

There are many pressing problems in the world, and it's unclear what is the most effective way to tackle these problems. There is some agreement that we need a <u>variety of approaches</u> to effectively bring about positive social change. However, it's not obvious how we should allocate resources (e.g. time, money and people) to the various approaches if we want to maximise social good. We seek to understand whether social movement organisations could be more effective than current well-funded avenues to change, and how much resources we should allocate towards grassroots strategies relative to other alternatives.

Despite the potentially huge benefits of our work, we believe that social movement research is neglected. We believe we are the first to conduct a (preliminary and uncertain) cost-effectiveness analysis of a social movement organisation, and the second to commission bespoke public opinion polling to understand the impact of protest on public opinion. We see this as an opportunity to add value by providing research that addresses some unanswered questions about the role of social movements in improving the world.

Why Protest?

We spent the first six months of our research focusing on two main questions, the outcomes of protest movements and the factors that make some protest movements more successful than others. We chose to initially focus on Social Movement Organisations (SMOs) that use protest as a main tactic, as we believed this to be an especially neglected area of research given that protests are an extremely commonly used tactic for achieving social change. We define a social movement organisation as a named formal organisation engaged in activities to advance a movement's cause (e.g. environmentalism or anti-racism).

SMOs such as Greta Thunberg's Fridays For Future, Extinction Rebellion and Black Lives Matter have been said to have large impacts on public opinion and public discourse around their respective issues. As seen below in Figure 1, polling by YouGov suggests that Extinction Rebellion may have played a key role in the increase in UK public concern for climate change, leading to a potential rise of 10% in just a matter of months.

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With COP-26 ongoing, the number of Britons saying the environment is a top national issue reaches record levels

Which of the following do you think are the most important issues facing the country at this time? Please tick up to three. %

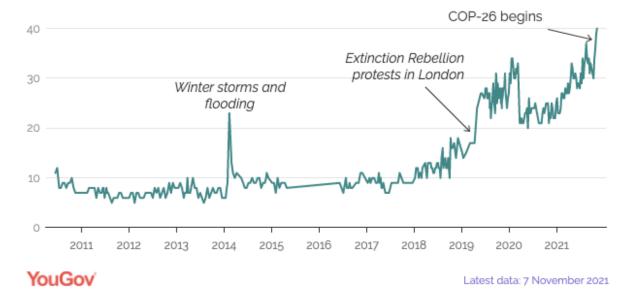


Figure 1: Public opinion polling on what percentage of UK citizens believe the environment is the most important issue facing the country. Source: YouGov

We think that if the claimed impacts of protests are accurate – that they can significantly alter public opinion and/or affect policymaker's beliefs – then there is a strong case that philanthropists and social change advocates should be considering this type of advocacy alongside other methods. We also think that there are several other mechanisms by which protest can influence social change. Specifically, protests can affect voting behaviour, corporate behaviour and policy. We outline a simplified theory of change diagram below in Figure 2 which illustrates some (but not all) of the pathways where protests can lead to significant social change.

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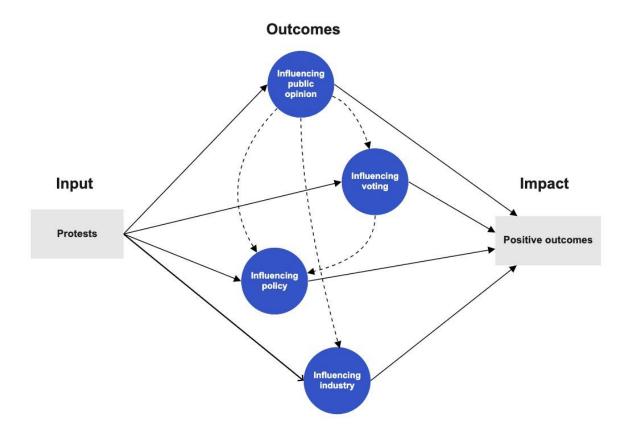


Figure 2: A simplified theory of change diagram for protests. Solid lines indicate direct effects, whereas dashed lines indicate indirect effects. A more detailed (but still non-exhaustive) version of this can be seen on page 7 of this report on protest by Animal Charity Evaluators.

If further research uncovers evidence that suggests protest is not a particularly effective tool (or contingent on very specific criteria), this information value will still be useful in allocating resources going forward.

We seek to first look into the impact of protest movements, as a narrower research question, whilst slowly expanding our scope to social movements more generally.

2.2 Research Questions & Objectives

Primary research questions we have been investigating for this report:

- What are the outcomes of protest movements, and how large are they? Specifically, what are the impacts on:
 - a. Voting behaviour
 - b. Public Opinion
 - c. Policy

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- d. Corporate Behaviour
- e. Policymaker behaviour
- Are there crucial considerations that might hinder our ability to gather good evidence on our questions above?

Research questions that are tackled in our upcoming report on success factors:

- Which tactics, strategies and factors of protest movements (e.g. size, frequency, target, etc.) most affect chances of success?
- How important is movement agency relative to external societal conditions?
- What are the main bottlenecks faced by social movements, and to what extent are promising social movements funding constrained?
- Can we predict which movements will have large positive impacts? If so, how?

Other questions we are tackling or will tackle in the near future can be seen in our section on <u>future promising work</u>.

2.3 Audience

We think this work can be valuable to two audiences in particular:

- Philanthropists seeking to fund the most effective routes to positive
 change in their respective cause area where grassroots organisations could
 be a contender. For example, if we discover that grassroots animal advocacy
 movements are more cost-effective in reducing animal suffering relative to
 existing funded work, it makes sense we also fund these opportunities (all else
 being equal) if we seek to maximise our impact. Additionally, grantmakers could
 possibly use our success factors research to identify promising organisations to
 fund.
- Existing social movements who can employ and integrate best practices from social science literature to make their campaigns more effective. This includes Effective Altruist community-builders, who thus far seem to have made relatively little effort to learn from previous social movements and examine why and how they succeeded or failed.

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3. Methodology

As a preliminary step, we sought to understand the state of the academic literature pertaining to social movements. This was integral to measuring how promising research on social movements would be in terms of (i) how important social movements themselves are, and (ii) how useful any incremental knowledge contribution in this area would be. We thus conducted a comprehensive literature review to identify findings in this area of research, and analyse the robustness of these findings. If we had found here that there was a general and rigorously-derived consensus that social movements are ineffective at resulting in social and policy change, then any further research on social movements would not be meaningful. To the contrary, our literature review found that academic studies point to the effectiveness of nonviolent protests in inducing social change in some contexts. However, the evidence base we found was relatively small, 4 so we believe additional research will be useful to inform social movement strategies and funding allocations.

We decided to tackle subsequent research by approaching our research questions from many different angles and using several different methods. We believe this is a more robust way of tackling our research questions, as no single methodology provides an empirically foolproof approach, due to the difficulty in making causal inferences in empirical social science. Instead, we hope to evaluate the evidence base for social movement impacts using a variety of different methods, to understand where this broad evidence base converges or diverges. We explain the methodologies in-depth in Appendix A and in the full reports, but in summary, the research methods we used are shown in the table below. The limitations of our overall methodology are addressed in more detail in the Limitations section, with specific research-method focused limitations in our individual reports.

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⁴ For example, we only found 2-3 relevant and robust studies that examine the impacts of protest on corporate behaviour, whereas we found 7+ seemingly robust studies on the impact of protest on public opinion.

⁵ This approach is similar to using <u>many weak arguments</u> rather than one relatively strong argument.

Research method (with linked report)	Description	Which research question is the method addressing?	Strength	Weakness
Literature Review	Traditional literature review on a range of protest outcomes, such as public opinion, policy change, legislator behaviour, voting behaviour and corporate behaviour.	 Public opinion Policy Corporate behaviour Voting behaviour Public discourse 	Getting an overview of academic literature, understanding where the gaps and weaknesses of the evidence base are.	Experimental studies suffer from external validity, and vice versa for observational studies.
Expert interviews	Semi-structured interviews with protest academics and social movement experts to elicit expert views on our questions around SMO outcomes	1) Public opinion 2) Policy 3) Crucial considerations	Understanding expert consensus on the topic and eliciting answers to questions that are otherwise challenging to tackle empirically.	Experts may have bias (e.g. they all think protests are effective, which is why they conduct research into protest)
Public Opinion Polling	Nationally representative public opinion surveys before and after planned protests to see if there are statistically significant shifts in public opinion.	1) Public opinion	One current data point into the effectiveness of protest on public opinion	Based on one specific context, so generalisability is unclear
Policymaker interviews	Interviews with UK policymakers to understand the impact of grassroots movements on the impact of UK policy making, and to determine attribution of certain policy changes to movement organisations.	1) Policy 2) Public opinion 3) Public discourse	Attributing national level policy changes to the work of social movement organisations.	Small sample size of only three policymakers
Cost-effectiveness analyses & case study	Cost-effectiveness analyses of various social movement organisations.	1) Policy 2) Public opinion 3) Public discourse	Comparing the cost-effectiveness of SMOs to other interventions in a given cause. Can represent a 'best-case' figure for impact.	Highly uncertain, based on several subjective judgements, and overall much weaker than the methods above

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4. Public Opinion

Whether protest can have an impact on public opinion is an important question for figuring out the impact of protest more broadly, as the impact of protests on legislators and its ability to influence policy is likely to be at least partially mediated by the impact of protest on public opinion. In this section, we summarise the evidence for protest movements influencing public opinion.

Our overall assessment of the strength of evidence for protest movements impacting public opinion can be in the table below. **Based on the evidence below, it's likely that protest movements can, and often have, led to small yet significant shifts in public opinion for a given issue** (e.g. public concern about climate change increases by 5 percentage points). Additionally, we are somewhat confident (60-80%) in this, due to several natural experiments that support this claim. We think natural experiments that study voting behaviour are a good indicator of shifting public opinion as it highlights revealed preferences of the public, rather than stated preferences, which is a more reliable indicator of shifting public attitudes. However, we have some uncertainty due to the lack of long-term focused research, and importance of context.

To what extent can	2	3		5
Protests have negligible, or even net negative, impacts on public opinion	2	Protests lead to a small (2-5%) net positive change in public opinion	4	Protests lead to a large (10%+) net positive change in public opinion
Evidence pointing towards negligible impact: • Public Opinion Polling*			Evidence pointing towLiterature ReviewExpert interviewsPolicymaker interviewsCase study of Ext	/*** ;**
Our uncertainty in th	nis value:			
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)

Table 1: A table that highlights our current estimates, and uncertainty, for the impact of large protest movements on **public opinion**. A single star (*) indicates low weight on that methodology, two stars (**) indicates moderate weight and three stars (***) indicates high weight on that methodology.

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4.1 Literature Review

In our <u>literature review on protest outcomes</u>, we first look at a meta-analysis by <u>Burstein (2003)</u> examines the relationship between public opinion and policy change. He finds that in 75% cases of policy change, public opinion plays a statistically significant role. Furthermore, he identifies almost 50% of these as of substantial policy importance, indicating this is also true for policies with larger effects. Whilst this was done across a variety of policy areas, from social welfare to rights to business, this analysis was focused on US public opinion and policy from the 1950s to 2000s, so its generalisability is limited. In particular, the generalisability is probably the strongest for similar Western democracies, rather than countries with radically different cultural or political norms. Subsequent work by <u>Burstein (2010)</u>, <u>Burstein (2014)</u> and <u>Wlezien & Soroka (2016)</u> finds similar results, that public opinion plays a significant role in shaping policy.

As we believed this question to be fairly settled, we focused most of our efforts in understanding the possible connection between protest, protest movements and public opinion. We examined both experimental (i.e. lab-controlled or simulated) studies, as well as both that studied real movements using natural experiment techniques. We believe some of the most notable findings can be seen below.

By studying existing movements, several studies provide results that point towards protests having positive impacts on public opinion for a given issue. For example, natural experiments looking at voting behaviour provide useful examples. Teeselink & Melios (2021) study the impact of Black Lives Matter protests on electoral outcomes, in the aftermath of the George Floyd protests in 2020. They find that a one percentage point increase in the fraction of the population going out to protest increased the Democratic vote share in that county by 5.6 percentage points. Given that protest turnout was just under 0.5% of the national population, they estimate there was a 1.6 to 2.8 percentage boost of the Democratic vote share as a result of BLM protests. Most interestingly, they conduct additional analyses to understand whether this was due to an increased level of Democratic turnout, or a shift in attitudes by existing voters. They conclude that there was no significant increase in voter turnout, and this swing towards Democrats is best explained by a shift in people's attitude about racial disparities. Wasow (2020) also finds that 1960s nonviolent Civil Rights protests increased votes for Democrats, however, does not control for voter turnout. This result could have plausibly been down to shifting racial attitudes, which the authors assume, or increased voting from Democrats.

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A similar study by Madestam et al. (2013) looks at the impact of the Tea Party on electoral outcomes in 2013. They found that in areas with low rainfall (and therefore high Tea Party protest turnout, using an instrumental variable technique), votes for the Republican party were 1.04 percentage points higher than areas with high rainfall. In addition to strict voting outcomes, areas with low rainfall had a 6 percentage point greater likelihood to express support for the Tea Party. Similar to Teeselink & Melios (2019), the authors conclude that protests were instrumental in influencing political views, rather than simply revealing existing preferences or encouraging greater turn-out. Overall, we think these three natural experiments provide compelling evidence of shifting public opinion as a result of protest movements. Additionally, we believe that natural experiments that study voting behaviour are a reliable indicator of shifting public opinion as it highlights revealed preferences of the public, rather than stated preferences (e.g. via a public opinion poll).

In the only study that conducts nationally representative surveys immediately before, during and after a protest, Kenward and Brick (2019b, unpublished) used survey data to analyse the changes in public attitudes due to 10 days of Extinction Rebellion protests in London in April 2019. This study uses a longitudinal design, where the same panel of nationally representative participants are surveyed before, during and after the protests have occurred. Concern about climate change increased significantly after the protests took place, from approximately 12% of participants who noted "strongly agree" to approximately 18%, shown in Figure 3 below. This is interesting to note as Kenward and Brick (2019a) finds that although there was no increase in environmental concern after a single exposure to a protest event via a media article, a sustained protest campaign over 10 days did lead to a statistically significant increase in public concern around climate change.

However, this study also suffered from high levels of attrition, at 47%, which may be a cause for concern. It's not clear if this attrition was differential i.e. the participants that dropped out were the least likely to positively update their beliefs based on exposure to climate protest. In addition, it's not yet been submitted for review, so there may be other methodological flaws that will become apparent during the peer-review process. Due to these potential shortcomings, we hesitate to read too much into this one specific study, despite it being an otherwise very useful design.

There have been several other natural experiments that point in the direction of protest movements positively impact public opinion, such as <u>Carey et al. (2014)</u> and <u>Branton et al. (2015)</u> studying the impact of pro-immigration protests, but they only examine impacts limited to one specific sub-group of the population, namely Latinos, so we place less weight on these findings.

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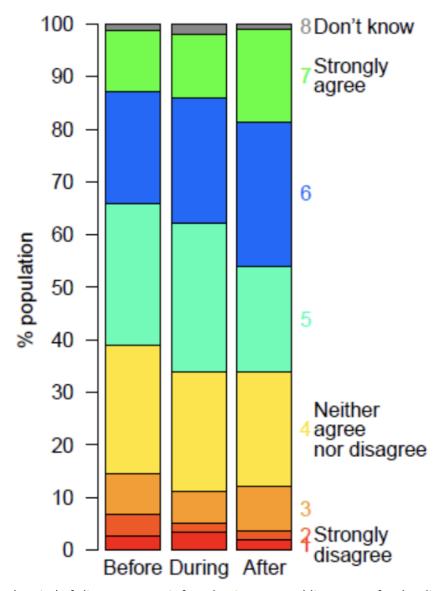


Figure 3: A sustained period of climate protest is found to increase public concern for the climate crisis (Kenward and Brick, 2019b). The question shows results from an average of three items, with the overall construct being 'Concern about the climate crisis'.

Additionally, there have been several experimental studies that examine the impact of protest on public opinion by exposing participants to (real and fictional) media stories about protest. One such example is Bugden (2020), which finds that respondents are more likely to support a protestor's cause after being exposed to a news article about the protest (Figure 4 below). Specifically, support for the protest went from 3.28 in the

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control condition to 3.82 for peaceful protest, on a Likert scale from 1 to 5.6 Despite this finding, other experimental evidence finds more mixed or negative outcomes on public opinion due to protest. For example, Kenward & Brick (2019b, unpublished) find that concern for climate change does not change when participants are exposed to news articles about Extinction Rebellion from the BBC, Daily Mail and Extinction Rebellion news sources. Despite this, they have some changes in other variables, such as people's belief that civil disobedience is necessary to force government action on climate change. In another experimental study, Feinberg et al. (2019) finds that "extreme" protest actions can be counterproductive, finding that extreme protests against Donald Trump led to an increased number of people reporting they support Donald Trump.

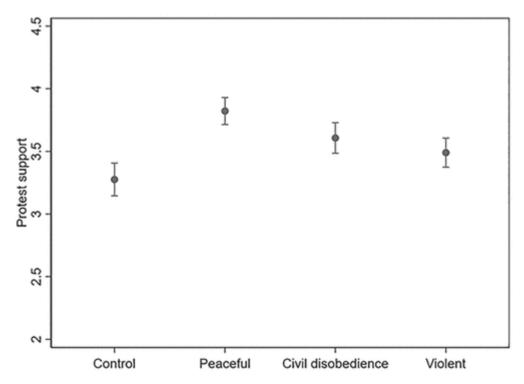


Figure 4: The results of Bugden (2020) - respondents who were shown a news report about a peaceful protest and civil disobedience were more likely to support the protest.

As discussed at greater length in our full literature review, we place much more weight on natural experiments studying protest movements that actually occurred, relative to experimental studies. This is because we think there are several large concerns with external validity, such that experimental conditions don't accurately portray reality. Due to factors such as repeated exposures to media sources, exposures from a variety of information outlets and conversations with other people, it's quite likely experimental studies will underestimate or otherwise misrepresent the impact of protest on public opinion.

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⁶ Support for the protest was a composite variable of four factors, highlighted in the <u>Supplementary material.</u>

Overall, largely due to the numerous natural experiments that find protest movements positively (i.e. in the direction of the movement's aims) influencing public opinion, we believe there is moderately strong evidence that protest can influence public opinion.

4.2 Expert interviews

In our <u>conversations</u> with <u>six academics</u> who study the impacts of social movements and protest, we asked a range of questions to understand the impact of public opinion on policy, and the impact of protest on public opinion. Across our conversations, the overall consensus was that **the number of people protesting is likely to increase the impact of protests** on account of the fact that legislators would be more likely to take the protests seriously as a signal of public opinion. There was also consensus that **public opinion is quite likely to have an impact on legislation**, so a causal pathway that involves protests impacting public opinion, and public opinion impacting legislators seems like a plausible way that protests could impact legislation.

Illustrative Quotes:

- "If you look at the drivers of policy-change, there is a large consensus that general public opinion is very important in impacting legislation"
- "Although politicians invest so much effort in discovering public opinion, often they don't have good models, so they might use protest and the numbers at a protest to get a sense of public opinion."
- "The number of people at a protest is probably the most important factor in its success, but this is somewhat obvious to protestors."
- "The personal ideology of legislators is an important factor in policy making. This and public opinion are the two main drivers of policy making"
- "Politicians are becoming much more dependent on public opinion because most of the public are floating voters."

4.3 Policymaker interviews

In general, the three <u>civil servants we interviewed</u> thought that protests sometimes played a role as a significant public opinion signal to policymakers but that other factors often played a larger role. For example, policymakers were more likely to form views on public opinion from reading the news, so protest was a weaker indicator of public sentiment. However, protests often lead to news coverage of an issue, which in turn might signal something about public priorities to the policymaker.

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Additionally, large and diverse protests with lots of media coverage are much more likely to be taken as reliable public opinion signals relative to protests with few people in attendance. This is consistent with our <u>other research</u> on interviews with experts and literature review on success factors, which adds some weight to this finding.

However, the Civil Servants we spoke to also mentioned that it's plausible there are cases where protests can be counterproductive, such as protests that are disruptive enough to lose public support for an issue. Despite this claim, we have yet to see little empirical evidence for this hypothesis, even after conducting <u>public opinion polling</u> before and after disruptive climate protests.

Illustrative quotes:

- "Grassroots movements tend to play a small role in informing public opinion overall as civil servants are generally well-read on the news and current affairs, which provide more compelling public opinion signals."
- "Larger and more frequent protests provide much more compelling public opinion signals relative to small protests."
- "Live exports protests were quite successful in raising the salience of live export as an animal welfare issue, keeping it high on the political agenda and ultimately played a role in it ultimately being banned in the UK"
- "Some groups seemed a priori counter-productive e.g. Insulate Britain. Making a large amount of the public hate you doesn't seem good (although not conclusively bad)."
- "Disruptive protests will mean people are more annoyed but it's unclear how this overall affects policy making (e.g. trade-off between increased salience and higher frustration at specific organisation/protest)"

4.4 Case Study of Extinction Rebellion

In our <u>case study of Extinction Rebellion</u>, we explored how much we can attribute an approximate 10% increase in public concern for climate change to Extinction Rebellion (XR) and other protest movements. As per the YouGov graph below, it's quite likely that XR played a large role in shaping public opinion around climate change in the UK. However, the graph also misses some important points, such as 2018-2019 also being the time when David Attenborough produced several prominent documentaries about climate change and the release of a <u>special IPCC Report</u> in October 2018, six months prior to most prominent XR protests in April 2019.

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Overall, we think that there is reasonable evidence to believe that Extinction Rebellion, Fridays For Future, School Strikes for Climate and other grassroots climate groups played a significant role in increasing public concern for climate change, from 2018 onwards. We think it's plausible they sped up an eventual increase in concern for climate change by several years, but are quite unsure about a specific figure.

With COP-26 ongoing, the number of Britons saying the environment is a top national issue reaches record levels

Which of the following do you think are the most important issues facing the country at this time? Please tick up to three. %

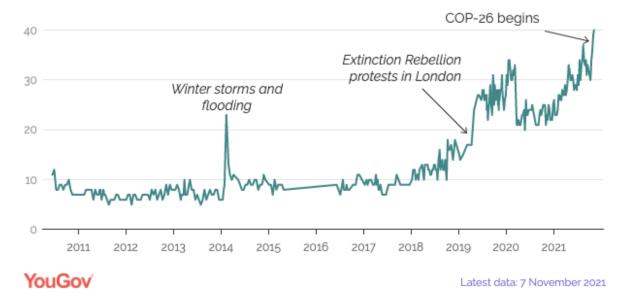


Figure 5: The percentage of UK citizens who think climate change is one of the most important issues facing the country. Source: <u>YouGov</u>

Our thinking for the attribution of changing public opinion was informed by a <u>document</u> <u>by Founders Pledge</u>, on how to evaluate policy-focused organisations. Namely, they list several factors when doing so:

- 1) **How crowded was the field when it started?** Were there numerous organisations that could have led to the increase in public opinion without the existence of protest movements?
- 2) **Role of each actor** the need to understand the various roles played by different organisations.
- 3) **Consistency of timelines** Does the timeline for XR match the timelines for changes in UK public opinion?

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4) **Catalytic nature of the organisation's work** - Conceiving and leading a campaign is much less replaceable than joining a campaign. Leading a campaign probably means that the organisation had a greater counterfactual impact.

How crowded was the field?

Arguments in favour of the field being crowded already (and protest movements not being responsible for the increase in public support for climate change):

• It was a very opportune moment and context for the growth of climate activism. One factor being that in October 2018, the Intergovernmental Panel on Climate Change (IPCC) issued a dire statement: "a failure to limit the increase in global average temperature to 1.5°C above pre-industrial levels, it said, was likely to result in fires, floods and famines", and that we had 12 years left to act. Another factor would be the meteoric rise to fame that Greta Thunberg faced, boosting the profile of climate change, especially across young people and on social media.

Arguments against the field being crowded and protest movements being replaceable:

- XR had its first public actions in October and November 2018, which drew 1,000 and 5,000 people respectively. This indicates that XR was already growing in size around the release of the IPCC report.
- Whilst Fridays for Future and the student strikes also faced significant increases in size and popularity in this period, we think it's not relevant to distinguish them from XR for this specific question as ultimately we care whether protest movements in general can influence public opinion, rather than if it was a specific organisation that caused this.
- Greta Thunberg kicked off Friday For Future (FFF) and School Strikes for Climate (SS4C) with her first strike in August 2018. This led to the first mass coordinated school climate strike in January 2019 which mobilised 45,000 protestors in Switzerland and Germany alone.
- This later led to two large global climate strikes in March 2019 and May 2019, which mobilised <u>1.4 million people</u> across 2,200 events and hundreds of thousands across <u>1,600 events</u> respectively.

The role of each actor

Arguments in favour of XR and protest movements having a small role relative to other actors:

• The UK has been designated to be the host of COP26, an international climate conference, <u>since September 2019</u>. This makes it more likely that the UK would announce more ambitious climate policies closer to COP26 (in November 2021) or otherwise initiate more climate-related campaigns.

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 David Attenborough is an extremely influential UK public figure and there's reason to believe that his more climate-focused documentaries, released <u>predominately in 2019</u> and beyond, played a role in influencing public opinion on climate change.

Arguments in favour of XR having a large role relative to other actors:

- One of XR's key demands, unique to XR alone, was for the UK to declare a climate emergency. This indeed <u>did happen</u>, with most attributing this to XR's activities, indicating that XR did play a significant role.
- YouGov, a polling organisation, indicated that they think the <u>large increase in public concern for climate change</u> was partly due to Extinction Rebellion (with no mention of other factors such as a David Attenborough documentary). <u>Analysis by CarbonBrief</u> shows a similar result in attributing some of the increasing public concern to XR.

Consistency of timelines

Arguments against consistency in timelines for protest movements to shift public opinion:

- In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a <u>special report on 1.5°C</u>, which received large amounts of publicity and generated a lot of attention on climate change.
- David Attenborough released more climate-focused documentaries, in 2019 and beyond, which likely played a role in influencing public opinion on climate change.

Arguments in favour of consistency of protest movements and public opinion timelines:

- XR had its first public actions in October and November 2018, which drew 1,000 and 5,000 people respectively, indicating rapid growth around the release of the IPCC report.
- The main spike in public opinion, according to the YouGov polling, appears to be in April 2019, which is exactly when XR hosted the "April Rebellion", which received large amounts of international and national media coverage.
- Similarly, FFF and the European climate movement also experienced huge growth in 2019, in the way of two large global climate strikes in March 2019 and May 2019, which mobilised <u>1.4 million people</u> across 2,200 events and hundreds of thousands across <u>1,600 events</u> respectively.
- On the other hand, the largest spike in public opinion happened six months after the IPCC report was released, suggesting that XR played a larger role than the IPCC report.

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Catalytic nature of XR's work

Arguments against XR's work being catalytic:

 One could argue that the popularity and success of XR crowded out other climate organisations from emerging and being even more effective. I however believe this is tenuous as I highly doubt other organisations would have been as popular and able to mass mobilise as XR did.

Arguments for XR's work being catalytic:

- One argument for XR's work being catalytic is that there was no mass popular climate movement in the UK or globally (Fridays for Future was only youth-focused) before they started. As of October 19th 2021, there are 1194 XR local groups globally in 84 countries, indicating a huge growth over the past three years. Similarly, XR had the largest number of local groups of any climate organisation within the UK, with hundreds of local groups. This has likely catalysed climate actions on all levels of society, across the globe.
- In addition, the work of XR catalysed the birth of other organisations that used similar tactics or were inspired by the success of XR. Notable examples are:
 - The <u>CEE Bill Alliance</u>, a parliamentary bill advocating for a more rapid transition to net-zero within the UK, which has the support of 118 MPs.
 - The <u>Climate Emergency Fund</u>, a grant-making foundation that was created specifically due to the success of XR and continues to fund climate movement organisations today.
 - Similar campaigning organisations: <u>Animal Rebellion</u>, <u>Insulate Britain</u>,
 <u>Wildcard</u>, and so on.

In summary, we think that the timelines indeed corroborate that XR was growing rapidly before other events (e.g. IPCC report), and that the climate movement reached sizes large enough to meaningfully affect public opinion, which was in the millions of people. Additionally, the largest increases in public concern seem to be exactly during April 2019, when XR received large-scale attention due to their "April Rebellion" campaign. Due to this, we believe that protest movements did play a key role in positively shaping public opinion around climate change from 2018 onwards.

4.5 Public Opinion Polling

Social Change Lab commissioned <u>YouGov</u> to conduct three <u>nationally representative</u> <u>surveys</u> of approximately 2,000 people each in the United Kingdom, focusing on their views on climate change, their willingness to engage in environmental activism, and their opinion of the climate activist group <u>Just Stop Oil</u>. The surveys were conducted before any significant protest activity occurred (on March 29th), during the Just Stop Oil

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and Extinction Rebellion protests (on the 9th of April), and after most (but not all) of the protest activity had occurred (on the 19th of April). **Despite disruptive protests, there was no loss of support for climate policies**, providing some evidence against the notion that disruptive protests tend to cause a negative public reaction. However, we found no statistically significant changes in any metric, besides likelihood to take part in environmental activism.

Our findings suggest that the protests had a marginally statistically significant effect (p = 0.09) on respondents' self-perceived likelihood of participating in environmental activism. Our data suggests that the number of people saying that they were willing to take part in some form of climate activism increased from 8.7% to 11.3% of the UK population, equivalent to approximately 1.7 million additional people.

These results indicate that high-profile disruptive action did not change minds about environmental issues, but did inspire some already concerned people to want to join in. We think this may be due to existing high levels of climate concern in the UK, such that advocating for issues with existing high salience or broadly trying to increase climate concern is now less effective than previous years, due to diminishing marginal returns. For example, similar polling by Kenward & Brick about Extinction Rebellion in the UK in 2019 did find a statistically significant increase in concern for climate change after a sustained protest campaign, using vaguely similar tactics. One might infer that it's now more promising to either focus on building salience for more neglected issues, or on focusing on climate advocacy in countries with much lower baseline support for climate change.

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5. Policy

As highlighted by our theory of change diagram (Figure 2) in the Introduction, protest movements could plausibly influence policy by a variety of mechanisms, such as influencing public opinion, influencing policymakers directly and amplifying existing public priorities. These effects are also likely to be mediated via media coverage and outlets which cover the activities of a social movement organisation. In this section, we outline the strength of possible impact of protest movements on policy change, across the following pathways:

- 1) **Agenda-setting** whereby protest influences the media, which can in turn influence policymakers and policy.
- 2) **Influencing legislators** where protest influences the salience, position and willingness to act of legislators.
- 3) **Amplifying public priorities (the Amplification Model)** The Amplification Model suggests that protests amplify public priorities, which can lead to increased legislative action independent of changes in public opinion.

Our overall assessment of the strength of evidence for protest movements impacting policy can be seen in Table 2 below. **Based on the evidence we examined, it's likely that protest movements can, and sometimes have, led to small shifts in policy, in the direction of the aims of the protest movement**. However, we are only moderately confident (40-60%) in this, due to the weak evidence base, mixed results in academic studies, and lack of research into recent protest movements (e.g. past 5-10 years).

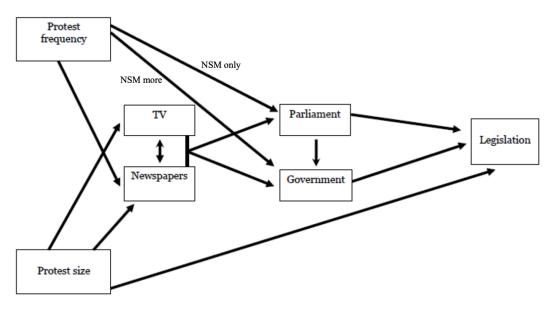
1	protest movement	3	4	5
Protests have negligible, or even net negative, impacts on policy	2	Protests lead to a small net positive change in policy	4	Protests lead to a large net positive change in policy
Evidence pointing towards negligible or negative impact: N/A			Evidence pointing towards positive impa Policymaker interviews** Expert interviews** Literature Review**†	
Our uncertainty in th	nis value:			
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)

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Table 2: A table that highlights our current estimates, and uncertainty, for the impact of large protest movements on policy. Here, we define "net positive" as success in the direction of the aims of the protest movement, rather than what we think is subjectively good. †Whilst the majority of the literature reviewed found positive impacts on policy, there was relatively little literature, as well as some papers pointing towards negligible impact. A single star (*) indicates low weight on that methodology, two stars (**) indicates moderate weight and three stars (***) indicates high weight on that methodology.

5.1 Literature Review

To illustrate the agenda-setting pathway for protest influencing policy through the media, our <u>literature review</u> looks at <u>Walgrave and Vliegenthart (2012)</u>. Here they study both the direct and indirect effects of protest events on policy in Belgium, for 25 issues that occurred from 1993-2000. Using a large data-set of 3,839 demonstrations, 1,198 pieces of legislation and 180,265 news items, they find statistically significant and causal relationships where protest size and protest frequency influence legislation. As seen below in Figure 6, the indirect impacts of protest events can be mediated via both TV and newspaper coverage. This is in addition to the direct impacts of protest on Parliament and legislation. We think this is a useful and illustrative paper, as it both focuses on the agenda-setting, or indirect effects, of protest on policy, as well as examining it across a broad range of issues. The range of issues, as well as the large number of protest events studied makes us more confident that these results can generalise to similar contexts, such as Western democracies. The only caveat is that data collection occurred between 1993-2000, even though we had reasonably significant social, political and economic changes since then.



Notes: p < .05; all arrows indicate significant effects.

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Figure 6: A causal diagram of the impact of protest on political agendas, by <u>Walgrave & Vliegenthart</u> (2012). NSM refers to "New Social Movement" which Walgrave defines <u>here</u> as issues that are more global in scope, such as environment, defence, and development.

Whilst a context more dissimilar today, <u>Wasow (2020)</u> finds the agenda-setting impact of protest to be true for Civil Rights protest in the 1960s in the US, by examining 274,950 frontpage headlines between 1960 and 1972 across major US newspapers. Wasow finds statistically significant relationships between nonviolent protest, news coverage of Civil Rights, and discussion in Congress related to Civil Rights. Additionally, he finds that protests and public opinion seem to be leading media coverage and Congressional activity, rather than the opposite. More literature that supports the agenda-setting model of protest can be seen in <u>Hutter and Vliegenthart (2016)</u>, who find that political parties often respond to protests that are covered in the media.

Besides agenda-setting, another possible pathway for protest impacting policy is direct influence on policymakers and legislators. As a member of the public, they might be influenced by the protest movement given the evidence above in Section 4 on Public Opinion. However, they might also behave quite differently to a member of the public, which is reasonable given their additional responsibilities. In this case, it's important to understand how policymakers and elected representatives specifically respond to protest movements.

One such experiment is by <u>Wouters and Walgrave (2017)</u>, who performed an experiment in which they showed news articles about fictional protests to 269 elected representatives in Belgium. After exposure, representatives were asked about how salient they perceived the issue in the news story to be, their position on the issue, and their intended actions on the issue. Their experiment showed that there was an effect of being shown the vignette - **legislators who saw the news article about protest** were more likely to say the issue was high salience, more likely to take a position closer to that of the protesters, and more likely to say they intended to take action on the issue. The results of this can be seen in Figure 7 below, where it is also highlighted how when different factors of the protest were highlighted (e.g. the numbers or unity of protestors), the results differed. It's important to note that the subject of the protest in this case was asylum-seekers, so it may not generalise perfectly to other issues. This experiment is impressive however as it surveys 65% of contacted politicians, which we think might provide good insight into the behaviours of similar elected officials in Western Europe.

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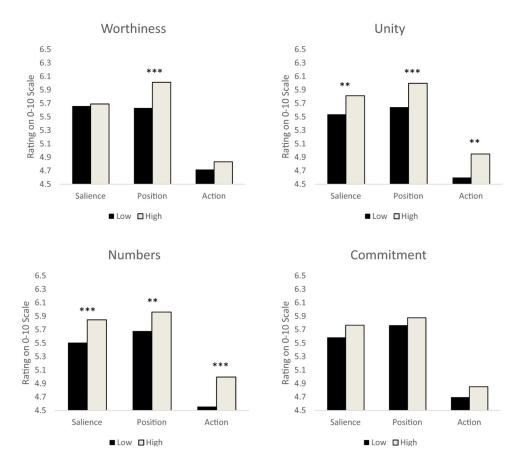


Figure 7: Predicted Values of Salience, Position, and Intended Action Effects by Protest Feature. Source: <u>Wouters & Walgrave (2017)</u>

*p < .05; **p < .01; ***p < .001 (two-tailed tests).

A third pathway for protests to influence policy is via the Amplification model, proposed by Agnone (2007). The Amplification model outlines a theory where protest can influence legislative action independently of public opinion, due to amplifying existing public priorities and raising the salience of an issue. Looking at environmental laws in the US, Agnone finds that the correlation between the number of environmental protests and the number of laws passed relating to the environment is highly significant even when controlling for public opinion, media attention, a lagged dependent variable, and the extent to which other environmental advocacy is taking place. Agnone also finds an interaction effect between the number of protests and public opinion - public opinion is more likely to be correlated with the number of laws passed if there are also protests taking place, suggesting that protests may amplify public opinion to affect legislator behaviour.

However, <u>Bernardi (2020)</u> argues against the Amplification model, and also finds that protest generally has little impact on policy, in their dataset of policy outcomes from 1974-2011 across the UK, Spain, Germany and the United States. Their findings suggest

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that protest does not play an important role in affecting policy makers' attention in legislative agendas. However, they also conclude that protest can matter sometimes, if the protestors' signal is strong (i.e. large numbers) and the issue is supported by existing public priorities.

5.2 Policymaker interviews

Whilst the three UK Civil Servants that we interviewed generally thought the effects of protest movements on policy were often indirect and mediated via channels such as public opinion, they also believed XR and anti-live export protests had significant impacts on UK policymaking. Specifically, one civil servant thought that XR may have sped up the declaration of net-zero by 2050 by several months, and that grassroots pressure likely caused other climate policies to be passed quicker. Another civil servant thought that the anti-live export protests played a significant role in the UK ultimately banning live exports. However, a common sentiment was that direct impacts on policy are rare, and often pressure is applied indirectly via other mediums such as local politicians or public opinion, explored further below.

Illustrative quotes:

- "During the height of XR in early-2019, civil servants in BEIS were working much harder (e.g. staying later) than normal, to get out certain climate policies such as the net-zero declaration. It's plausible that this was due to additional external pressure from social movements such as XR or Fridays for Future."
- "I think that Extinction Rebellion had a meaningful influence on the UK government's climate policy but it was part of a wider recognition that the public cared deeply about climate change and it might have also caused alienation."
- "These protest groups were successful ultimately, in that live exports did get banned."
- "[Protests] probably wouldn't change [policymaker] attitudes much largely because civil servants already have firm views or would only change their views on the basis of more standard empirical evidence."
- "There aren't many clear examples I can think of, as policymakers will generally not attribute policy changes or proposals due to changes in public opinion."

5.3 Expert interviews

The most common view amongst the <u>6 academics that we interviewed</u> was that **there** are some forms of protests that politicians often feel as though they can't ignore. This was especially true of large protests that involved people other than the 'usual suspects'. For instance, one academic reported that a climate protest led by

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schoolchildren that quickly gains thousands of participants seems more likely to catch the attention of politicians than an 'ordinary' protests that involved fairly typical environmental protesters.

There were other factors that were liable to affect the extent that protests are able to influence politicians, such as whether the personal costs to the politician were high, whether the protest is gaining widespread media attention or catching the attention of the politician's constituents, whether the politician perceived the protests as a valid signal of public opinion, whether the protests were well-attended, etc.

Illustrative Quotes:

- "Politicians are often impressed by protests that don't just involve the 'usual suspects'.

 If a protest involves people who do not usually attend protests (e.g. school kids),

 politicians take it as a more credible signal of broader public opinion."
- "One of the most important aspects to consider when thinking about the impact of protest is that its impact is very indirect the effect of protest on legislators is almost always mediated by other factors, often either the media or public opinion"
- "Change happens because of legislators even if a protest can change public opinion, change will not happen unless legislators are convinced that public opinion has changed. The signals of public opinion that politicians rely on are not necessarily signals that actually show what public opinion is for instance, they are more likely to take a conversation with one of their constituents or with ordinary people more generally as a credible sign of public opinion than they are to rely on actual opinion polls."

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6. Public Discourse and Media

It is well-established that the most influential protest movements often receive significant coverage from mainstream media. From Greta Thunberg's *School Strike for Climate* to the Black Lives Matter protests in the aftermath of the murder of George Floyd in 2020, the most influential protest movements are able to dominate discussion on social media (as well as the headlines in mainstream media). The impact of protest movements on public discourse is important - the increased salience of certain issues can result in people changing their voting behaviour, increasing pressure on politicians to change their positions, or the degree of polarisation around an issue.

Our overall assessment of the strength of evidence for protest movements impacting public discourse and the media can be in Table 3 below. **Based on the evidence, it's likely that protest movements can, and often have, led to moderate to large increases in the salience of the issues they are highlighting.** We are fairly certain (60 - 80% confidence) in making this claim, given the varied evidence in favour of the claim that protest movements can have significant effects on public discourse: the literature we reviewed (which generally points towards protest increasing the salience of various issues), the fact that the policymakers we spoke to seemed somewhat confident that Extinction Rebellion and Black Lives Matter had been responsible for an increase of the salience of their respective issues, the evidence from our case study of Extinction Rebellion, and so on. On the other hand, the fact that the amount of discourse surrounding *Just Stop Oil* was lower than we anticipated leaves some room for uncertainty around how much of an impact protests have on public discourse, especially during times of heightened media attention on other issues, such as the Russian invasion of Ukraine.

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To what extent can protest movements have significant impacts on <u>public discourse</u> ?				
1 Protests have negligible, or even net negative, impacts on public discourse	2	3 Protests lead to a small net positive change in public discourse	4	5 Protests lead to a large net positive change in public discourse
Evidence pointing towards negligible impact: • Public Opinion Polling*			Evidence pointing towards positive impa • Literature Review** • Policymaker interviews** • Case study of Extinction Rebellion*	
Our uncertainty in th	nis value:			
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)

Table 3: A table that highlights our current estimates, and uncertainty, for the impact of large protest movements on **public discourse and media coverage**. Here, we define public discourse as the salience and coverage of issues advocated for by the protest movement. A single star (*) indicates low weight on that methodology, two stars (**) indicates moderate weight and three stars (***) indicates high weight on that methodology.

6.1 Literature Review

In our <u>literature review</u> of the various potential outcomes of protest, one of the most interesting papers on the impact of protest on public discourse is <u>Wasow (2020)</u>, which examines the relationship between nonviolent protest activity and front page headlines and Congressional Speech during the 1960s Civil Rights movement (Figure 8 below). By examining 274,950 frontpage headlines between 1960 and 1972 across major US newspapers, he estimates the 'agenda seeding' power of protest. **Not only does he find that moments of heightened protest activity are correlated with increases in civil rights related headlines, but that nonviolent protests are highly predictive of front-page headlines and Congressional speech in following days. He uses bivariate Granger causality tests to identify a causal relationship between nonviolent protest and increased media coverage of civil rights. He also finds that elite opinions drive media coverage, consistent with previous models of elite influence.**

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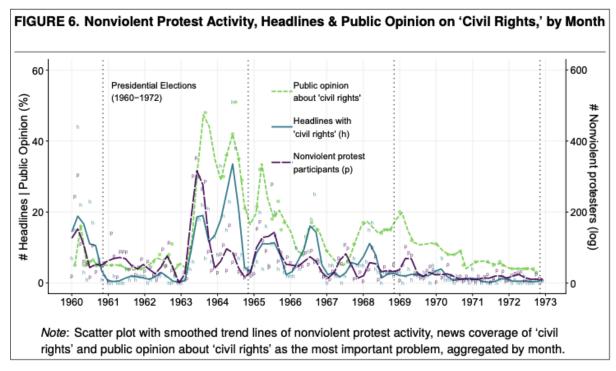


Figure 8: The impact of Civil Rights Movement nonviolent protest activity on both headlines and public opinion. Source: <u>Wasow (2020)</u>

A key question is whether protests can have sustained effects on public discourse, rather than moments of heightened attention on an issue. Dunivin et al. (2022) finds that Black Lives Matter (BLM) protests from 2014 onwards generated attention to BLM and related concepts even after the protests had ceased. By analysing information across Google Search volumes, news items, Wikipedia page visits, and other sources, the authors find that BLM increased discourse in a way to "engender lasting changes" around then novel ideas pushed by the movement, such as systemic racism.

Specifically, the authors find that daily visits to the Wikipedia pages for "systemic racism" is 5.5 times greater six months after the George Floyd protests, relative to the previous year. They also find this to be true for visits to "Black Lives Matter", which is 10x greater, and "prison abolition", which is 1.6x greater. The graphs below in Figure 9 also highlight the impact on news media and Google Search volume. However, the authors note that this study does not draw a causal link between street protest and changes in public discourse, as it is an observational study that evaluates the changes in trends over time. Whilst the amplification of antiracist discourse might lead to political change further down the line, this isn't guaranteed, and neither is the impact that BLM specifically had on changes in public attention.

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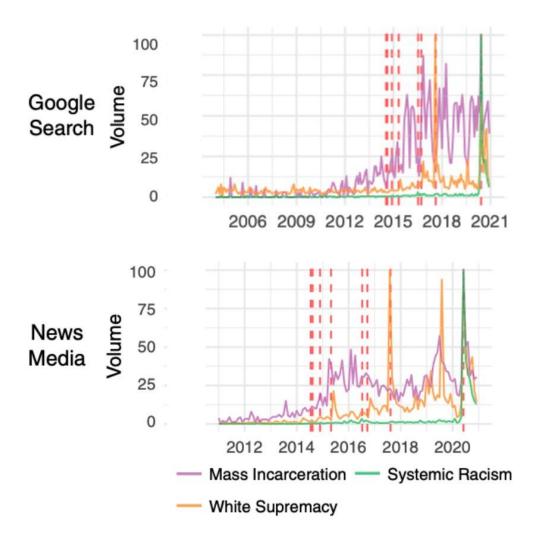


Figure 9: Trends in the use of selected antiracist terms that were specifically used by Black Lives Matter. Google Search volume is normalised from 0-100, rather than being absolute values. News media volume is given by national news articles mentioning each item. Red dashed lines correspond to major BLM protest events.

Other studies also examine the causal pathway from protest to possible outcomes. Vliegenthart et al. (2016) examine the impact of protests in six Western European countries, and find that the impact of protest on legislator behaviour is mediated by the media, rather than being a direct impact. They actually identify a 'dual-mediating' role of media, wherein the impact is often through the media covering a protest, and the initial coverage of the protest leading to more coverage of the issue being highlighted, which finally leads to legislative change. Similarly, Smith et al. (2001) find that the likelihood of a protest achieving its aims is conditional on the media coverage that they receive, finding (slightly counterintuitively) that media stories that rely on sources from inside the protest movement are less likely to benefit the protesters, whereas news stories that relied on neutral or authority sources showed the opposite effect.

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6.2 Policymaker interviews

In general, the three civil servants we interviewed largely believed that protests had moderately large impacts on public discourse and the salience of certain issues. The report that details these interviews can be found here. Eight claims were made about the impact of protest on public discourse. Of those eight, one was a claim that protests could make a small positive difference to public discourse (positive, in this instance, refers to increasing the salience of the issue that the protesters are trying to highlight, rather than being a normative claim about the issue that the protesters are highlighting). Five of the eight claims indicated that protests could make a moderate positive difference, and a further two of the claims were that protests could make a large positive difference.

Specific examples that were mentioned where they believe that protests had a significant impact on issue salience were badger culling, racism, live exports and climate change. It was also reported that protests helped to shift the <u>Overton Window</u> (the range of policies acceptable to the general public) of some issues, meaning that issues are framed in different ways due to the protest. One example given was Extinction Rebellion shifting the Overton Window on climate, by introducing new narratives such as "<u>climate emergency</u>" and <u>net-zero by 2025</u> into public discourse.

Illustrative quotes:

"Live exports protests were quite successful in raising the salience of live export as an animal welfare issue, keeping it high on the political agenda and ultimately played a role in it ultimately being banned in the UK"

"Racial inclusion generally seems higher up the agenda in the Civil Service and other institutions due to the protests in 2020."

"It seems more likely that protests would have impact through upstream effects such as influencing public opinion, shifting the Overton window and minds of decision makers, which would then filter into policy."

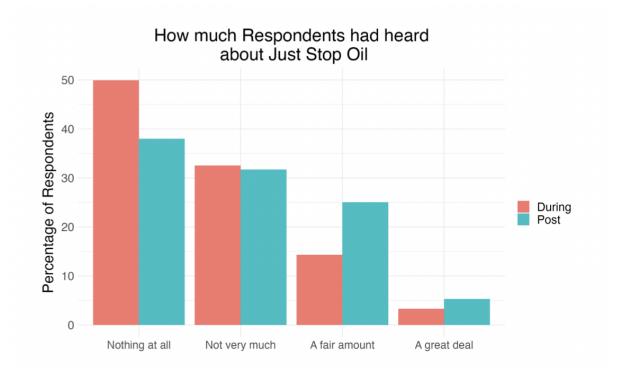
6.3 Public Opinion Polling

Overall, our polling found that Just Stop Oil's protests significantly increased the number of people who knew about Just Stop Oil (from approximately 0% to 60% in a few months), and that they received high levels of media coverage. Despite this, there were little to no significant impacts on public opinion, indicating either the public discourse impacts weren't particularly large after all, or that public discourse has little influence on public opinion.

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Social Change Lab commissioned <u>YouGov</u> to conduct three <u>nationally representative</u> <u>surveys</u> of approximately 2,000 people each in the United Kingdom, focusing on their views on climate change, their willingness to engage in environmental activism, and their opinion of the climate activist group <u>Just Stop Oil</u>. The surveys were conducted before any significant protest activity occurred (on March 29th), during the Just Stop Oil and Extinction Rebellion protests (on the 9th of April), and after most (but not all) of the protest activity had occurred (on the 19th of April). While these surveys were intended primarily to provide insight into the impact of the protests on public opinion (specifically, on the views people had related to climate change), it also provides some insight into the impact that protest movements can have on public discourse.

Prior to the protests, there was virtually no knowledge of *Just Stop Oil* as a protest movement. By the time we conducted our second survey (during the protests, on the 9th of April), 50.1% reported that they were aware of *Just Stop Oil*, and this increased to 62% in the final survey that took place after the majority of protest activity had taken place, on the 19th of April, as can be seen in Figure 10 below. That being said, we should not take this as definitive evidence that this number of people actually *had* heard of *Just Stop Oil*, given that people may incorrectly claim that they are aware of things that they aren't actually aware of. In future research, we intend to ask people whether they are aware of a fictional protest movement to get a better idea of exactly how many people are genuinely aware of the protest movement of interest.



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Figure 10: The number of people who had reported to have heard of Just Stop Oil, during and after their organised climate protests in April 2021. Source: Ozden & Glover (2022)

That being said, there is some reason to believe that the *Just Stop Oil* protests did not have a particularly large impact on public discourse. Specifically, it seems likely that *if* it were the case that the protests had had a significant and meaningful impact on public discourse, we would have seen a significant increase in the number of people saying either that they were supportive of the aims of *Just Stop Oil* (for instance, we may have seen more people reporting that they supported the government no longer granting licences for oil and gas production), or that we would have seen more people saying they were opposed to the goals of *Just Stop Oil* (for instance, we could have seen more people saying that it is not appropriate for the UK to reduce its use of oil and/or gas). The fact that we saw no significant change in any of these metrics should lead us to the conclusion that the protests probably did not have a significant impact on public discourse, even if most people reported that they were aware that the protests took place.

It is also worth mentioning that we do have some evidence that *Just Stop Oil* attracted significant media attention. Figure 11 below shows the number of articles and shares on Twitter that the protests (and media related to the protests) received. At the peak of the protests, they were receiving 2,400 articles per day. They also had one day on Twitter (after the protests had occurred, in May) when there were nearly 8000 Twitter shares of their content or content related to the protests, as can be seen in the figure below (taken from signal.ai).

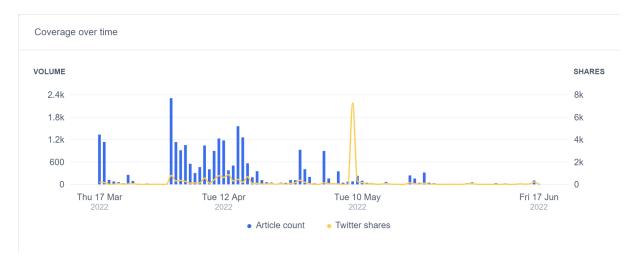


Figure 11: The number of news articles and twitter shares of content related to Just Stop Oil protests between March and June 2022, taken from <u>signal.ai</u>.

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6.4 Case study of Extinction Rebellion

Our <u>case study of Extinction Rebellion</u> (XR) indicates that it is likely that XR increased the salience of climate change in the UK. As can be seen in the YouGov visualisation below, the salience of climate change increased significantly in the aftermath of protests by XR (among other protest groups).

With COP-26 ongoing, the number of Britons saying the environment is a top national issue reaches record levels

Which of the following do you think are the most important issues facing the country at this time? Please tick up to three. %

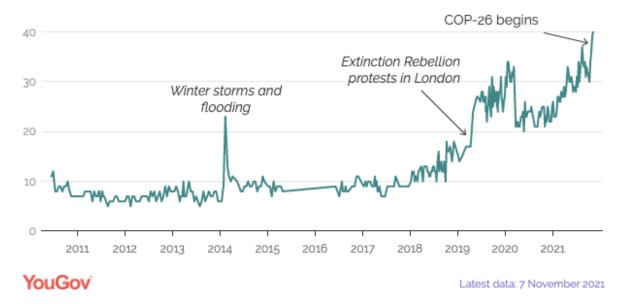


Figure 12: Public opinion polling on what percentage of UK citizens believe the environment is the most important issue facing the country. Source: <u>YouGov</u>

There are several reasons to believe that XR played a significant part in increasing the salience of climate change:

- Analysis by Carbon Brief indicates that coverage of climate change on the news agenda reached a record high from the 15th to the 25th of April, which was a week when Extinction Rebellion were carrying out mass protests in the United Kingdom. On the other hand, this may not be only attributable to XR, given that Greta Thunberg's School Strikes for the Climate occurred at the same time, as did a BBC documentary by David Attenborough.
- There was extremely widespread media coverage of the protests (although we should be clear that much of the media coverage was critical of XR), indicating that they were able to capture the attention of the press and likely also the public.

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- One of XR's key demands, unique to XR alone, was for the UK to declare a climate emergency. This indeed <u>did happen</u>, with most attributing this to XR's protest. In the aftermath of the protests, 2,043 jurisdictions have declared climate emergency globally, covering over <u>1 billion citizens across 37 countries</u>.
- Subsequently, the term 'climate emergency' became significantly more popular among politicians and in the media. In May 2019, *The Guardian* announced that it was replacing 'climate change' with 'climate emergency' in its coverage.

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7. Variance in effectiveness of protest movements

In this section, we outline the evidence on whether protest movements do differ significantly in effectiveness.

Our overall assessment for this question, seen in Table 4 below, **is that there are large differences between the effectiveness of the most impactful protest movements, and a randomly selected (or median) protest movement**. We think this difference is large enough such that if we were able to accurately model the cost-effectiveness of these protest movements, it would be different by a factor of at least 10. We're somewhat confident in this answer, with confidence intervals of 60-80%. Our main uncertainties come from the fact that very little cost-effectiveness analyses have been carried out which study protest movements, but we believe we can infer our findings from specific cases, expert consensus and publication bias.

To what extent is there a large variance in protest movement effectiveness?					
1 All protests are similarly effective	2	3 There is a moderate difference in protest effectiveness	4	5 There is a large (over 10x) difference in protest effectiveness	
Evidence pointing towards negligible differences: • N/A			Evidence pointing towards large differences: Policymaker interviews** Expert interviews** Literature review** Case study of Extinction Rebellion*		
Our uncertainty in this value:					
1 We are highly uncertain (under 20% confidence)	2 We are fairly uncertain (20-40% confidence)	3 We are somewhat certain (40-60% confidence)	4 We are quite certain (60-80% confidence)	5 We are highly certain (80-100% confidence)	

Table 4: A table that highlights our current estimates, and uncertainty, for the variance in effectiveness between protest movements.⁷ One could interpret this as the perceived

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⁷ In short, just like <u>some charities differ greatly</u> in cost-effectiveness, we believe the same is true for protest movements. For example, it's very plausible that the most effective protest movements are 10-100x more cost-effective (given their goal) relative to the worst protest movement.

difference between the protest movements we focus on in this report, and the average protest movement.

7.1 Literature Review

In our <u>literature review</u>, we find that studied protest movements have reasonably different impacts on voting behaviour. For example:

- <u>Teeselink & Melios (2021)</u> find that Black Lives Matter likely led to a 1.6 to 2.8 percentage boost of the Democratic vote share as a result of BLM protests;
- <u>Madestam et al. (2013)</u> concludes that Republican vote share is 1.04 percentage points higher with Tea Party protests;
- Wasow (2020) finds that a 1.6 percentage point higher Democratic vote share given nonviolent protests and a 2.2 - 5.4 percentage point decrease in Democratic vote share for violent protests

We already see here there are differences of approximately 3x between studied protest movements, and that some protests (e.g. violent ones during the Civil Rights Movement) might have even significantly hindered their cause. The fact that some protest movements can have negative outcomes at all provide reasonably strong evidence that there are significant (e.g. over 10x) differences in effectiveness for various protest movements.

Similar to the case of voter behaviour, we also find a range of impacts when looking at public opinion:

- <u>Bugden (2020)</u> finds that people are more likely to support a protestor's cause after being exposed to a news article about the protest. Specifically, support for the protest went from 3.28 in the control condition to 3.82 for peaceful protest, on a Likert scale from 1 to 5.8
- <u>Kenward and Brick (2019b, unpublished)</u> finds that concern about climate change increased significantly after Extinction Rebellion protests took place, from approximately 12% of participants who noted "strongly agree" to approximately 18%.
- Wasow (2020) indicates an increase in approximately 40 percentage points for the number of Americans who thought Civil Rights was the most important facing the country (from Figure 6 in his paper, although this wasn't causally attributed).

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⁸ Support for the protest was a composite variable of four factors, highlighted in the <u>Supplementary material.</u>

• <u>Feinberg et al. (2019)</u> finds that "extreme" protest actions can be counterproductive, finding that extreme protests against Donald Trump led to an increased number of people reporting they support Donald Trump.

Again, we find that protest movements have positive consequences that are approximately 6-7x greater, in the case of the Civil Rights movement relative to Extinction Rebellion. Additionally, some (experimental) evidence from <u>Feinberg et al.</u> (2019) also shows that protest can lead to counterproductive outcomes, which again indicates high variance in effectiveness.

In addition, as noted in the Limitations section of our literature review, we believe that publication bias will lead to published studies examining the impact of particularly influential protest movements. Due to this, it's quite likely that studies which found little to no impact will struggle to reach publication, and hence skew our results such that protest movements that achieved very little are included. This factor means that the true variance in protest movements is likely to be much larger than suggested by the papers we review.

7.2 Expert interviews

In our <u>interviews with experts</u>, several academics we spoke to highlighted the potential large variance in protest movements. Specifically, one academic highlighted the fact that as a proportion of all protests that occur, most of these are small protests. Several other academics noted that small protests tend to be less effective than large protests, which leads to the conclusion that most protests that occur are not particularly effective. In addition, several academics pointed out that there were some examples of protest movements that had counterproductive outcomes, such as violent protests that had led to a loss in public support for an issue.

Illustrative quotes:

- "It's worth noting that it's very unclear what effect small protests are likely to have some studies looking at small protests against austerity in Greece, Spain, and
 Portugal seem to find that they had pretty much zero effect. Very small protests seem
 really different to large protests, and the evidence they are effective is much less
 strong."
- "Sometimes protests are completely counterproductive for instance, one protest against the privatisation of a factory led to the factory being shut down and all the workers losing their jobs. Although the factory was not privatised, privatisation would perhaps have led to only half of the workers losing their jobs."

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• "We can say with a reasonable amount of confidence that violence is probably less effective than nonviolence, and violence against the police is a terrible idea."

7.3 Policymaker interviews

In <u>our conversations with three UK Civil Servants</u>, they revealed that certain examples, such as Extinction Rebellion or Black Lives Matter, stood out as protest movements that had a reasonably large impact. They noted that besides a select few examples, most protests or protest movements they had observed generally achieved little impact, at least on UK policy making.

Illustrative quotes:

- "Although most protests are probably low-impact, some especially high profile protests (such as Extinction Rebellion or Black Lives Matter) seem like they may have had an impact."
- "Larger and more frequent protests provide much more compelling public opinion signals relative to small protests."
- "Live exports protests were quite successful in raising the salience of live export as an animal welfare issue, keeping it high on the political agenda and ultimately played a role in it ultimately being banned in the UK"

7.4 Case study of Extinction Rebellion

In our <u>case study of Extinction Rebellion</u> (XR), we find preliminary and uncertain results that XR averted 0.3-71 (median 8) tonnes of GHGs per pound spent on advocacy. This number seems surprisingly large, potentially as this cost-effectiveness analysis was only conducted for the first year of XR's activities, which seemed to be the most cost-effective to date. Whilst we haven't conducted cost-effectiveness analyses for other protest movements, we think it's unlikely that other protest movements would meet this bar. A couple of reasons that make us believe this are:

• XR was unusually cost-effective - XR gained large traction and quickly spread globally, reaching over 1180 groups in over 80 countries. In addition, they achieved significant policy wins on a local level in the UK, as well as a national-level climate emergency declaration. Besides the Fridays For Future movement focused on school strikes for climate and Black Lives Matter, it's hard to think of any other recent social movements that achieved such global scale. Due to this, and other reasons included in our case study, we think that these three examples are more likely to be outliers than the exception.

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• The most effective climate charities are similar in cost-effectiveness - Founders Pledge has conducted a cost-effectiveness analysis for Clean Air Task Force (CATF) and finds that they have been extremely effective in reducing carbon emissions. They find that CATF likely averted 0.31-3.88 tonnes of CO2e per £ spent on advocacy, which is slightly lower than what we find for XR. As this is one of the most effective climate charities that Founders Pledge found, we think it's quite unlikely there are many more, if any, protest movements that significantly surpass the bar for cost-effectiveness of CATF.

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8. Other outcomes

We also examined the impact of protest movements on voting behaviour and corporate behaviour, however, we found relatively less evidence on these two outcomes. Due to this, we're less confident in our results for these outcomes. All of the evidence to support our findings in these two cases come from our literature review, with little to no evidence being from our expert interviews, policymaker interviews, polling, or other research methods we employed. Despite this, we still believe our literature review uncovered some interesting findings, as well as avenues for further work.

8.1 Voting Behaviour

Generally, most of the compelling evidence we found for the claim that protests can impact voting behaviour was found in the literature review. The relevant papers indicated that protests generally change the number of people voting for a certain party by a few (between 1 and 5) percentage points. One paper also indicated that nonviolent protest is associated with more people voting for the party allied to the protesters, whereas violent protests can result in more people voting for the party *opposed* to the protesters (this was the case during the Civil Rights movement). Because the evidence collated only amounts to a few papers in the literature review that mostly examined the impact of protest on voting behaviour in the United States, we are hesitant to draw any strong conclusions about the direct impact of protest on voting behaviour. In addition, all of the evidence came from one research methodology, our literature review, so it is potentially less robust than our other findings. That being said, the evidence we do have indicates that protests can have a small but meaningful impact on the behaviour of voters.

8.1.1 Literature Review

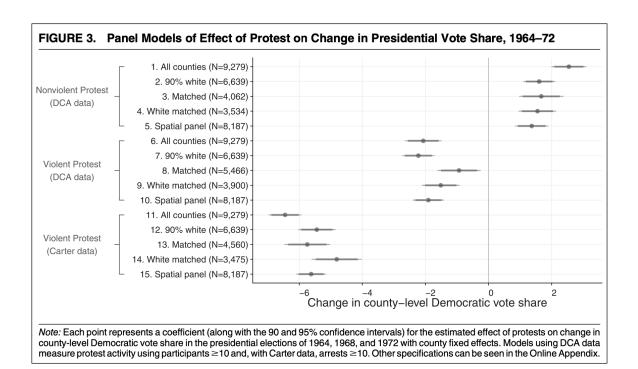
In our <u>literature Review</u>, we found that protests can have significant impacts on voting behaviour:

Teeselink & Melios (2021) use Instrumental Variables (using rainfall as an exogenous variable), finding that a one percentage point increase in the fraction of the population going out to protest increased the Democratic vote share in that county by 5.6 percentage points. Given that protest turnout was just under 0.5% of the national population, they estimate there was a 1.6 to 2.8 percentage boost of the Democratic vote share as a result of BLM protests. The authors also find that protests didn't lead to a significant rise in turnout, rather it's more likely that protests lead to a progressive shift amongst undecided voters.

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Similarly, Madestam et al. (2013) used Instrumental Variables (again, using rainfall as an exogenous variable) and found that protests by the Tea Party increased Republican vote share by 1.04 percentage points. The effect here is that the Republican vote share is 1.04 percentage points higher in counties that had protests with no rain compared to counties that had protests with rain, suggesting that greater turnout at Tea Party protests did lead to an increased Republican vote share. The mechanism suggested for this is that greater attendance at the initial launch protest led to a stronger movement overall, with a higher number of organisers in areas that had low rainfall, as well as greater donations towards the Tea Party. Additional measures that changed in areas of low rainfall were greater likelihood of expressing support for the Tea Party, by 6 percentage points, as well as higher appearances of media coverage. The authors conclude that in this case, protests were instrumental in influencing political views, as opposed to only revealing existing political preferences.

Wasow (2020) examines protests during the Civil Rights movement, and finds that a 90% white county that was exposed to a non-violent protest had a 1.6 percentage point higher Democratic vote share relative to a 'control' county that was not exposed to a non-violent protest. Conversely, a 90% white county that was exposed to a violent protest had a 2.2 - 5.4 percentage point decrease in Democratic vote share. The figure below shows the impact of various types of protests on Democratic vote share in the Presidential Elections in 1964, 1968, and 1972.



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Figure 13: The findings from Wasow (2020) on the effect of violent/non-violent protest on voting behaviour during the Civil Rights Movement.

That being said, there is significantly less research on the impact of protests on voting behaviour outside of the United States. One study we did include in the literature review was Bremer et al. (2019), which examined the impact of protests on voting behaviour in 30 European countries. Specifically, they wanted to test whether there was any relationship between protest and performance in elections after the Great Recession of 2008. They found that whilst no such relationship existed for all 30 countries, in Western Europe did find a statistically significant interaction between protest, levels of economic hardship in a country and the loss of votes for the incumbent party. The authors found that protest might have played an amplification effect, highlighting the level of "economic misery" in a country, leading to a statistically significant reduction in votes for the incumbent party. It seems that for a given level of economic hardship a country faces, if the number of protests increase, the incumbent political party will lose more votes, as shown in the figure below.

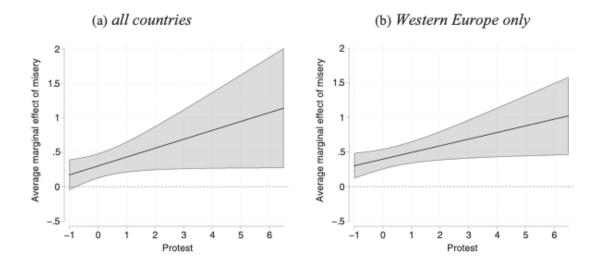


Figure 14: The findings from <u>Bremer et al. (2019)</u> on the effects of protest. "Economic Misery" is formed from an index of the change of unemployment, change in GDP and change in national debt.

8.2 Corporate Behaviour

Overall, we think the evidence on the <u>impacts of protest movements on corporate</u> <u>behaviour</u> is relatively limited. Given that many protests are targeted at companies, there seems to be a lack of research addressing these issues. As noted by one academic we interviewed, this is partly due to most protest-related research happening within the

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realm of political science, where legislative outcomes are studied rather than impacts on corporations. Despite this, there is somewhat good evidence (60-80% confidence) that protest movements can influence corporate behaviour, with many examples of this happening in the climate and tobacco divestment movements. However, direct impacts of divestment campaigns seem limited, with most of the impact being through indirect outcomes such as stigmatisation and movement building. Divesting from publicly listed companies seems especially unlikely to have a direct effect, given that investors are likely to buy undervalued shares and push the price back up. In addition, most of the research is focused on divestment campaigns, with very little on other corporate campaigns, such as corporate welfare campaigns that are common within the animal advocacy movement.

Gulliver, Fielding & Louis (2021) analyse the impact of the Stop Adani campaign in Australia, a civil resistance campaign targeted at stopping the construction of a coal mine, alongside the Australian divestment movement. Although the campaign ultimately failed in influencing the national government to stop the coal mine project, they later conducted partially successful targeting of business to withdraw their support for the Adani mine. This tactic, referred to as secondary targeting, constitutes social movements targeting the pillars of the support of the primary target, in this case the Adani corporation. For example, the Stop Adani campaign targeted banks lending money to the project, engineering firms supporting the construction, insurers doing the underwriting, and so on. The results of this secondary targeting can be seen in Table 5 below. Whilst this secondary targeting was reasonably successful, by pressuring 63 (out of 145 targeted) companies to commit to not working with the Adani corporation, ultimately the Adani corporation was able to find the necessary partners for each stage of their project. This method of secondary targeting is a strategy that was also used by the Stop Huntingdon Animal Cruelty campaign, which will covered in a subsequent report.

COMPANY SECTOR	NUMBER OF COMPANIES		NUMBER OF CIVIL	
COMPANY SECTOR	TARGETED	WON (%)	RESISTANCE ACTIONS	
Finance	60 (41%)	46 (77%)	62	
Construction and engineering	48 (33%)	12 (25%)	96	
Insurance	34 (23%)	4 (12%)		
Coal haulage	3 (2%)	1 (33%)	4	
Total	145	63 (43%)	160	

Table 5: Success rate for secondary targeting of supporting industry for the Adani Corporation, by the Stop Adani campaign in Australia. Source: <u>Gulliver, Fielding & Louis</u> (2021)

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In the same monograph by <u>Gulliver</u>, <u>Fielding & Louis</u> (2021), they study the impact of the Australian Divestment movement, from 2015 to 2019, on garnering commitments by companies to divest their investments from fossil fuels. Interestingly, despite that the Divestment movement only targeted 36 specific organisations, they garnered over 235 divestment commitments. In addition, the majority of these divestment announcements were made by superannuation funds, which is the equivalent to pension funds, which control significant amounts of money. The authors note that the number of divestment commitments drastically outpacing the number of specific activist campaigns suggests there are other factors influencing institutions to divest, again indicating it's challenging to draw a cause-and-effect relationship between protest and desired outcomes. Analysis from both case studies in this monograph leads the authors to conclude that civil resistance campaigns have higher rates of success against corporate targets, relative to government or government entities.

Additional literature on divestment campaigns by the climate movement yield further insights into the impact of protest movements on corporate behaviour. Bergman (2018) reviews the academic and grey literature to provide some analysis on the potential impacts of the climate divestment movement on policy, public discourse and financing of fossil fields. The author concludes that the direct impacts of the divestment movement on fossil fuel financing seems to be small, there are significant impacts on public discourse. Specifically, the authors note increased attention towards the legitimacy, reputation and viability of the fossil fuel industry might lead to long-term material damage to fossil fuel corporations. Additionally, this cultural impact has seemingly led to investors raising concerns with fossil fuel investments, and some funds underweighting fossil fuels to account for their relatively short-time horizon.

Grady-Benson and Sarathy (2016) catalogue a list of student campaigns to divest from fossil fuels in the United States, noting that high profile institutions such as Stanford University and the New School have committed to fossil fuel divestment. They conduct very brief case studies into the fossil fuel divestment campaigns at Prescott College, Pitzer College, and Unity College. It was noted that in the Prescott College decision, the Board of Trustees was convinced due to a 'carbon bubble' argument rather than a moral argument, indicating that highlighting the financial damage that failing to divest could cause was a key factor in the success of the campaign. On the other hand, the decision of Pitzer College to divest was based on the moral imperative rather than a cost-benefit analysis. Table 6 below shows the successful student campaigns that the authors identify.

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Table 1. College and university divestment successes.^a

College	Endowment size (estimated)	Motivations for FFD (according to press releases)
1. Hampshire College	\$31,795,000	 Alignment with values of social and environmental responsibility Previously established Environmental,
		Social and Governance (ESG) policy
2. Unity College	\$13,500,000	Alignment with values
		 Power of educational institutions to take a stand against FFCs
		 Expect minimal harm to endowment
3. Sterling College	\$1,000,000	 Alignment with values
		 Long-term endowment stability
4. College of the Atlantic	\$30,000,000	 Student leadership and empowerment
5. Green Mountain College	\$3,400,000	 Alignment with values
6. San Francisco State University	\$51,200,000	Alignment with sustainability clause
7. Foothill-De Anza	\$33,000,000	 Alignment with values
Community College		 Expect minimal harm to endowment
District		 Long-term endowment stability
8. Naropa University	Unknown	 Alignment with values
		 Expect minimal harm to endowment
		• History of socially responsible investment
9. Peralta Community College	Unknown	Alignment with values
District		 Providing for future students
10. Prescott College	\$460,000	Alignment with values
		 Long-term endowment stability
11. Pitzer College	\$125,000,000	Alignment with values
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• Expect minimal harm to endowment
		Part of holistic climate action plan

^aThe information in this table is derived from press releases and divestment announcements from the respective colleges based on victories as of April 2014 (Grady-Benson 2014).

Table 6: A list of successful student fossil fuel divestment campaigns, as included in Grady-Benson and Sarathy (2016).

That being said, many universities outright rejected calls for fossil fuel divestment (or ignored them), often citing the costs, the lack of impact that divestment would have, and the risks associated with fossil fuel divestment. Predictors of whether a college is likely to divest include the institutional values of the university and the size of the endowment (with colleges with smaller endowments being more likely to divest).

<u>Carpendale (2022)</u> of *Animal Ask* analyses the literature on Efficient Market Hypothesis and its plausible implications for the impact of divestment in the context of animal suffering. In theory, divesting from publicly traded stocks will make little difference to the fortunes of a company, as other traders will exploit the divestment by buying stock in the undervalued companies. This potential problem with divestment is also expressed in <u>Hunt et al. (2016)</u>. Capendale concludes that the evidence generally suggests that divestment results in short-term decreases in stock price, but that there is

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little evidence of any direct long-term impact, which is consistent with Efficient Market Hypothesis. That being said, that does not rule out *indirect* impacts, in which the act of divestment acts as a stigmatisation process.

In fact, Carpendale claims that there is moderate evidence that divestment can be successful in stigmatising companies, although this may be less effective than other methods of reducing animal suffering (partially because people may overestimate the importance of the direct effect and underestimate the importance of the indirect effect). These other methods may include campaigning for legislative change, or personal changes in animal product consumption. A potential theory of change, including both indirect and divestment impacts are highlighted below in Figure 15. Carpendale concludes that the evidence for divestment as a potential activist strategy is weak relative to other strategies, although we should not conclude that it is necessarily *ineffective* (the evidence is mostly weak on account of the low number of attempts to isolate the causal impact of divestment). He also notes that with regards to animal consumption specifically, divestment on environmental grounds may lead to any reduction in the consumption of large animals being replaced by the consumption of smaller animals, which may result in more animal suffering.

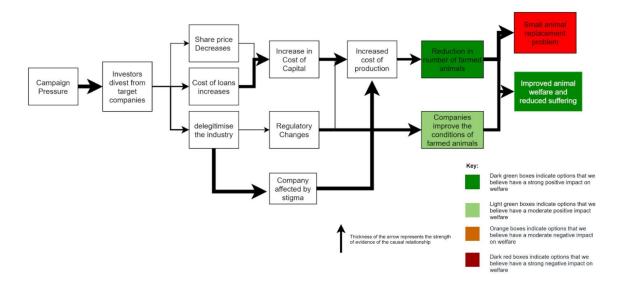


Figure 15: Mapping the direct and indirect impacts of divestment campaigns, in the context of animal advocacy. Source: <u>Carpendale (2022)</u>

Braungardt, van Den Bergh and Dunlop (2019) also review the arguments for and against institutional divestment campaigns. They find that whilst it's unlikely to have a direct impact on reducing greenhouse gas emissions, divestment can contribute towards increasing support for climate policies in the medium to long term. Additionally, they indicate that the divestment movement might have added political

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and social pressure that led to recent successful climate policy, such as the Paris Climate Agreement. Similar conclusions are reached by Anser, Caldecott & Tilbury (2013), who find little direct impacts on share prices but more significant impacts on the reputation of fossil fuel companies, due to stigmatisation. They also note that divestment campaigns have often succeeded in passing legislation that might increase costs, such as a carbon or tobacco tax.

Additionally, McDonnell et al. (2015) use longitudinal data to analyse the extent to which activism against harmful corporate practices results in corporations adopting 'social management devices', strategies developed by corporations to assist a firm in managing its social strategy and showing a commitment to socially responsible values. The results suggest that the total number of activist challenges faced by corporations is significantly linked to the likelihood that corporations will disseminate a (Corporate Social Responsibility) CSR report and institute a CSR Board Committee.

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9. Future work that could be promising

Research questions that are tackled in our upcoming report on success factors:

- Which tactics, strategies and factors of protest movements (e.g. size, frequency, target, etc.) most affect chances of success?
- How important is movement agency relative to external societal conditions?
- What are the main bottlenecks faced by protest movements, and to what extent are promising protest movements funding constrained?

Given additional funding, we seek to address key questions that might influence what we recommend to funders, decision-makers or movement leaders, such as:

- What are some common reasons social movements or social movement organisations fail?
- How likely is it for social movement organisations to achieve large positive impacts, and can we find a 'base rate' for success?
- To what extent do social movements cause a negative backfire effect (e.g. loss of public support) and is this avoidable or necessary?
- Which factors most determine the success of social movements (rather than just protest movements)?
- Which causes are the most suitable for a grassroots social movement, and which criteria should we use to determine this?
- To what degree can we predict which SMOs will be successful?

Whilst it's still early days, we're also interested in investigating whether grassroots movements can play an effective role in other issues, such as nuclear war, or other existential risks. That being said, we recognise the need to be extremely cautious when researching the potential impact of protests on existential risks, as we are acutely aware of the dangers that information hazards can pose.

We also hope to test out other novel research methods, such as:

- Building a database of recent social movements (in Western Europe & North America) that have failed, and trying to understand the reasons for this.
- Aggregating comparative case studies to extract, where possible, factors that have caused some movements to succeed.
- Additional public opinion polling around disruptive and non-disruptive protests in the UK, for other issues such as animal advocacy.
- Commissioning experimental research to test our observational findings (e.g. how do people react when faced with media articles about protest).

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10. Limitations

Besides the specific limitations of the individual research methodologies that we address in the respective reports, we believe there are broader limitations of our research:

- 1) Causal inference is challenging With most of our research, it is extremely hard to draw watertight causal inferences between the protest or activities of the protest movement and the effects we observe. As there are always external events occurring that could confound the impacts of the protest (such as the release of an IPCC report during climate protests), it's hard to ever definitively say that a protest movement was attributable to the change observed.
- 2) Attribution is rare As the civil servants we interviewed pointed out, ministers or policymakers are unlikely ever to attribute a change in policy due to the influence of an SMO. This is due to a moral hazard that may occur, where they inadvertently encourage more protests if they are seen to be having a positive effect. Due to this, policy or legislation is rarely attributed to the impact of SMOs, even though this might be true. This then requires subjective judgements about an SMO's exact role in a certain change, which adds additional uncertainty.
- 3) Long-term effects are hard to evaluate It's plausible to think that most of the impact of a social movement will be its long-term impacts on society. For example, the abolition of slavery has likely altered the trajectory of society, in clear socially beneficial ways. Despite this, the long-term impacts of protests are often not studied, due to the difficulty in teasing out causal inferences over long time periods.
- 4) It's unclear how much we can generalise Most research related to protest has taken place in the US and Western Europe. In addition, they tend to focus primarily on civil rights and environmentalism. Due to this, it's hard to accurately estimate how well these findings will generalise to protests in other contexts, be it a different issue, country, political context or time period.
- 5) **Only the most influential movements are studied** Most of the literature on the impact of protests is likely to study protests that are perceived to have been particularly effective or otherwise noteworthy, meaning that the average effect size found in the literature is likely to be larger than the genuine effect of the median protest.

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11. Conclusion

Overall, we find that our studied protest movements have significant measurable impacts across a variety of important outcomes, such as public opinion, voting behaviour and policy. Whilst it's currently unclear how easy it is to create protest movements that reliably achieve these outcomes, we believe it's plausible that a small percentage of protest movements will achieve outcomes large enough to warrant funding a portfolio of social movement organisations. Our subsequent report will focus on protest success factors, which will identify the key strategies and tactics that have resulted in some of the protest movements mentioned here achieving large-scale impacts.

Contact us

To discuss any of this work, feel free to contact James at james@socialchangelab.org.
Otherwise, you can see more of our work on our website. To hear about our latest research, such as our upcoming work on success factors of protest movements, you can sign up to our newsletter.

Acknowledgements

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Appendix A - Methodology

A.1 Literature Review Methodology

The social science literature on protests and Social Movement Organisations (SMOs) is large. There is a substantial amount of theoretical literature and empirical literature, spanning political science, sociology, and other disciplines. We concentrated on newer, empirical research related to the following:

- The impact of protest on voting behaviour.
- The impact of protest on public opinion.
- The impact of protest on public discourse and media.
- The impact of protest on legislator behaviour and policy.
- The impact of protest on corporate behaviour.

It is worth noting that our Literature Review was not intended to be representative or exhaustive. Instead, we focused on research with the following traits:

- Modern, empirical research that used experimental or quasi-experimental methods and had clear causal identification strategies.
- We were less likely to include articles that were related to theoretical developments. Our focus was on empirical literature that was specifically looking at the impact of protest.
- Focused on countries similar to the contexts we are interested in, which is largely Western democracies (e.g. the UK, the US and countries in Western Europe). Therefore we excluded all research studying the overthrowing of autocratic regimes in the Global South (e.g. Stephan & Chenoweth, 2008).
- Relatively recent protest movements, to provide more generalisability to the current social, political and economic contexts. Whilst we did include several papers on the Civil Rights Movements (1950s United States), most papers we included were focused on movements from the 1990s onwards.⁹
- Research from both highly relevant journals (such as *Mobilization* and *Social Forces*) and top political science and sociology journals (such as *APSR* and *ASR*), as well as using tools like Elicit to find relevant research in other journals.

We also had the opportunity to interview six academics who have studied protest and SMOs extensively (with the <u>findings analysed below</u>), and we asked for their views on the most important and influential research that may not have been on our radar yet.

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⁹ We included papers such as Wasow (2020) and Mazumer (2018) due to their particularly interesting findings, and methodologies used.

We prioritised the inclusion of papers that were mentioned as being particularly important and/or influential by multiple academics.

There were some journals that were particularly relevant to our research that we searched in specifically, such as *Mobilization* and *Social Forces*. Similarly, top political science and sociology journals (such as *American Political Science Review* and *American Sociological Review*) were searched more extensively than other, smaller journals. To find research in other journals, we used a range of tools such as Elicit, Research Rabbit, and Google Scholar. Keywords and phrases that we used included 'Protest Outcomes', 'Impacts of Protests', 'Protest Effectiveness', and more (forthcoming in future Appendix).

We were also given access to an <u>unpublished analysis</u> (Kenward & Brick, forthcoming) of the literature on protest movements, which we made use of to find relevant research that we hadn't found through searching journals or using other tools. We also performed a citation search - we both looked at the reference lists of useful research we had found in order to find other relevant research as well as looking at other research that had cited articles that we had found - this was useful for identifying articles in journals that we hadn't already searched in.

A.2 Survey Methodology

Research Questions

We investigate the following research questions:

- 1) How does nonviolent direct action (NVDA) influence public beliefs in the severity of climate change?
- 2) How does NVDA affect public support for government policies on climate action, specifically on the demands of the protests?
- 3) Does "extreme" or very disruptive NVDA lead to a loss in support for an issue, in this case, reduced support for pro-climate government policy?
- 4) How does NVDA affect intentions to take collective environmental actions in the wider public?
- 5) How far-reaching are disruptive forms of NVDA in reaching a broad population?

Methodology

- Social Change Lab commissioned YouGov to provide three 2,000-person surveys

 each survey was weighted to ensure that they were nationally representative in terms of age, gender, social grade, region, 2016 EU Referendum vote, and 2019
 General Election vote. All of the data used can be found here.
- Bootstrapped weighted t-tests were conducted to determine whether the mean response to various questions changed significantly between the first survey

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- (conducted before the *Just Stop Oil* protests) and the third survey (conducted after most of the protest activity had occurred). Bootstraps used 10,000 samples.
- We aggregated variables that asked similar questions and had a Cronbach's alpha of above 0.7 - for instance, the aggregated metric that examines a respondent's 'concern about climate' change takes the average of the the respondent's view on two statements: 'climate change is one of the greatest threats to humanity' and 'I feel frightened at the prospect of climate change and the impact it might have' (Cronbach's Alpha = 0.886).

Each of the three surveys had approximately 2000 respondents - the polling conducted before the protests had 2057 respondents, the polling during the protests had 2030 respondents, and the polling that took place after most of the protests had occurred had 2160 respondents. Responses were weighted by demographic information in order to ensure that the survey was nationally representative in terms of age, gender, social grade, region, 2016 EU Referendum vote, and 2019 General Election vote. It is worth noting that although there was no crossover between the sample for the first survey and the second survey, there were approximately 130 people who participated in the third survey who also participated in either the first or the second survey.

Weighted bootstrapped independent t-tests were conducted to determine the difference in means from before the protests to after the protests. All bootstraps used 10,000 samples. Aggregated metrics were created by taking the mean answer of several different questions, and answers are rounded to the nearest integer for use in visualisations. The full set of questions asked can be found here.

Cronbach's alpha was used to check whether each variable was correlated. Each of the aggregated variables had a Cronbach's alpha above 0.7. The alpha for each aggregated metric is reported below:

Likelihood of taking Climate Action	0.866
Concern about Climate Change	0.886
Support for Just Stop Oil's Goals	0.902
Opposition to Just Stop Oil's Goals	0.776

You can also see more about our methodology in this report.

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A.3 Expert interview methodology

We spoke with six academics who either mainly focus on protests and Social Movement Organisation (SMO) outcomes or otherwise have conducted research into protests and SMOs. Academics with papers that were included in our <u>literature reviews</u> into the impact of protests were prioritised for inclusion in these interviews. It should be noted that we do not consider these interviews to be representative of the views of either academics or social movement experts - we selected experts for inclusion on the basis of having particularly useful or important work, rather than because we were attempting to speak with a fully representative sample.

We conducted semi-structured interviews using <u>this set of questions</u> and anonymised the conversation notes for privacy reasons. The academics we spoke to approved the conversation summary notes afterwards, which you can find <u>here</u>.

We used thematic analysis to analyse this interview data, and coded it using <u>taguette</u>. Each quote that was taken from an interview was classified into one of several themes, which had come up multiple times in multiple interviews. This report makes use of select quotes, these were selected either because they give a good summary of the thoughts of several of the academics or because they offer an original piece of insight.

A.4 Policymaker interview methodology

We spoke to 3 UK Civil Servants who either currently work or formerly worked in the following two UK Government departments: Department for Business, Energy and Industrial Strategy (BEIS) and Department for Environmental, Food and Rural Affairs (DEFRA). We asked six civil servants, but some didn't take part due to lack of time, or concerns around the research jeopardising their current roles. We found these civil servants through our networks and personal contacts. In the future, we would like to talk to more civil servants to have greater reliability in our results, and reduce risks of bias due to the people in our personal networks.

We conducted semi-structured interviews using <u>this set of questions</u> and anonymised the conversation notes for privacy reasons. The quotes given below were largely written down verbatim, and sometimes cleaned up to improve clarity. The civil servants we spoke to approved the conversation summary notes afterwards, which you can find <u>here</u>. As a note, they're a synthesised version of full conversations, so some details were left out.

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We used thematic analysis to analyse this interview data, and coded it using <u>taguette</u>. For more information, see details in our <u>methodology section</u> for expert interviews.

A.5 Case study and cost-effectiveness analysis of Extinction Rebellion

Using publicly available data on UK climate policy and some private data on XR UK finances, we conducted a <u>cost-effectiveness estimate</u> on their ability to abate tonnes of carbon dioxide per pound (£) spent. This cost-effectiveness analysis applies to XR UK from their launch, July 2018, until May 2019, which is roughly the time when we consider them to stop being cost-effective at the margin.

It's important to know that our cost-effectiveness estimate (CEA) was done somewhat informally, and not to the rigour of CEAs used in the global health field e.g. the <u>Disease Control Priorities report</u>. This is largely due to the relative difficulty in gathering information, and time spent on this work. To mitigate this, we approached our CEA from several different angles, to reduce any issues or biases in any single approach.¹⁰ The metrics we chose to focus on where:

- 1. The greenhouse gas reduction impact (measured in carbon dioxide equivalent emissions averted) of local authorities in the UK moving their net-zero target to 2030 from 2050, as a result of campaigning by XR.
- 2. The greenhouse gas reduction impact of the UK setting a more ambitious <u>nationally determined contribution</u> (NDC), as part of the UN Paris Agreement framework to mitigate climate change.
- 3. The greenhouse gas reduction impact of the UK setting a 2050 net-zero target a year or two earlier than without the work of XR, leading to a higher probability of achieving net-zero by 2050.
- 4. The increase in government spending on climate finance as a result of XR's advocacy.

You can see more about the methodology in the <u>full write-up</u>.

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¹⁰ For more information on this way of thinking, readers can see these articles on <u>cluster-thinking</u> and <u>many weak arguments</u>.