PublicFirst 99

Campaigns, Advocacy and R&D

Opinion Research Report

Public First on behalf of the Wellcome Trust and CaSE

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Introduction

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Public First ran a detailed public opinion research project on behalf of Wellcome and CaSE. Our objectives were two-fold: to gauge people's understanding of Research and Development (R&D) in the UK – specifically their appetite for investing more public money in it; and to understand which campaigns shift public opinion. Both of these insights will help us to design future campaigns to promote understanding and support for R&D.

With complex policy areas where knowledge and understanding are relatively low, such as R&D, it is important to supplement opinion polling with focus group work, as we do here. Opinion polling tells us what people think, and face-to-face conversations allow us to explore people's reasoning. In this case, our focus groups were carried out in advance of the poll to help craft the right survey questions for the nationally representative UK-wide poll of 2,018 respondents.

The poll sample was balanced, with a mix of participants across gender, age, region, socioeconomic status, political party affiliation and EU vote. The composition of the sample was representative of the UK's total population. For full details on the demographics of the sample, see Appendix 2.

The four focus groups were balanced to mix age, gender, ethnicity, Labour/Conservative voters and Remain/Leave voters. We selected for two different social demographics: two groups were professional/middle-class (B/C1) and two groups were non-professional lower-middle and working class (C2/D) – two groups were in Watford (London) and another two groups in Derby. Many of the participants of the Derby groups were residents of the small surrounding towns, which provided an additional perspective.

We ran two groups in one location over one evening to ensure that any variations in outcomes between groups were tested and understood.

Impact of COVID-19

This research was conducted against the backdrop of rising concerns about the coronavirus, COVID-19. The focus groups were carried out on 19 and 25 February 2020 – at a time before widespread pandemic containment activities were rolled out across the UK. So, while

COVID-19 will have influenced people's responses, it didn't feature strongly in the focus groups.

The opinion poll, however, was conducted between 6 and 11 March 2020, by which stage public concern around COVID-19 had risen dramatically. While this might seem to explain the very high numbers of people wanting to invest in researching new medicines, it is also true that the NHS and healthcare have always been top issues for people.

Executive Summary

- 1. People support campaigns about issues that most directly affect them and their families. There is a hierarchy of support among the public, led by issues that have a direct impact on people (e.g. cancer), followed by issues that people care about generally (e.g. the environment) and lastly, issues that people feel define the kind of person they are and the values that they hold (e.g. giving to charity).
- 2. People judge the trustworthiness of information by the authenticity of the messenger and by how much they have their best interests at heart. Again, there is a hierarchy of who people believe, starting with family and friends, then trustworthy experts, followed by relevant and knowledgeable celebrities. In the focus groups, there was an open dislike for politicians, who attracted limited levels of trust.
- 3. People are more likely to support R&D campaigns when the impacts feel tangible. Findings from the focus groups suggest that people have difficulty engaging with big abstract campaign ideas, such as colonising Mars. However, they can engage with big ideas like climate change when they understand how it may directly affect their lives, even if that impact is at some point in the future. Our segmentation results support this finding and suggest gaining new support will require messaging that focuses on jobs and tangible outcomes and tackling counter arguments around diverting investment from day-to-day services.
- 4. People value honesty about what might be expected of them. This came out strongly in the focus groups people are aware that change may require them to make a personal sacrifice and they want to be told the truth. They want to understand why certain changes are needed; they want to have a say (and make suggestions) about what those changes should be; and they want fair warning to prepare. For example, people are willing to accept tackling climate change will require changes to their way of life, as they are involved in the consultation process and given adequate time to prepare for instance for rising bills.

- 5. People don't like direct-action campaign tactics but agree that they are effective in raising awareness. In both the polling and the focus groups, Extinction Rebellion and their campaigns had the highest recognition and awareness. Although people generally disliked the campaign's direct-action tactics and thought that they were counter-productive, they all agreed that they had been successful in raising awareness of their issue. The same is generally true of negative campaigns which people said they disliked but can be effective.
- 6. People know what R&D is and prioritise funding for activities such as the discovery of new medicines. People have a relatively good awareness and understanding of what R&D is, and identify research into medicines as a priority. 72% of people responded they at least think they know what it is and 86% of people were able to correctly identify some forms of R&D from a list of options. We can expect these numbers to rise as COVID-19 affects more aspects of people's lives and the economy.
- 7. People are proud that the UK leads the world in R&D and think this should be celebrated. This came out in the polling and was reflected in the focus groups where people were pleased to hear that the UK was a world leader in R&D. They believed this was something that should be better known, particularly to reassure people during the current COVID-19 outbreak.
- 8. People can be willing to trade some short-term impact in favour of long-term solutions from R&D, depending on the sector.

 Our poll findings indicate 39% of people believe Government investment should be balanced between short-term investment (infrastructure and workforce) and long-term investment (R&D). The preference for R&D investment differed across sectors; people preferred longer-term R&D investment in sectors that are more abstract and less visible in daily life, such as International Development and the Environment, as opposed to Healthcare where they preferred more investment in frontline services.
- 9. People are divided on whether academia or industry is better at R&D. Our findings suggest that academia and industry are both seen to be equally effective at conducting R&D in the public's eye. Therefore, other factors may be more important in deciding which voice should lead an R&D campaign, instead driven by who is seen to be the most relevant, knowledgeable, impartial and trustworthy regardless of which sector they come from.

Where People Get Information

Before exploring people's preference for different campaign methods, styles and delivery, we explored where people get their information from. Most of the results in our polling are unsurprising – 63% of the youngest age group (18-24s) use social media for their news, compared to 11% of the oldest (65+).

What is more surprising is that, in total, 66% of people say they are getting their news from national television – and 45% of the youngest age group say the same. This is unusually high, and we would suggest is influenced by the COVID-19 pandemic. It would indicate that at times of national crisis, people revert to major, trusted national news channels.

However, in the focus groups that took place earlier than the poll and before COVID-19 was dominating the news, participants said that they perceived bias and untrustworthiness across all media – print, broadcast, social, local and national.

"What we get is a censored version. It's the version to keep the people happy," Female, 40s, Derby

"A lot of stuff you see on social media is definitely not true - but it still gets shared around by my mates and they all believe it," Male, 50s, Watford

It would be instructive to test this again in a few months, to measure whether people's attitudes towards the national broadcast media continue to become more trusting during a time of national crisis – and whether this varies by demographic.

Public Attitudes To Campaigns

This section will provide an in-depth analysis of the types of campaign methods and delivery styles that are most successful and why. We will take a closer look at who people listen to and why, as well as what types of messages and delivery styles people prefer and remember

Who people listen to



Key conclusions

"I'd listen to Attenborough more than these guys [experts] or any politician... I trust the Queen and royal family more than the politicians." Female, 30s, Derby

"It's difficult to trust anyone these days isn't it politicians and others just never seem to tell the truth," Female, 40s, Watford

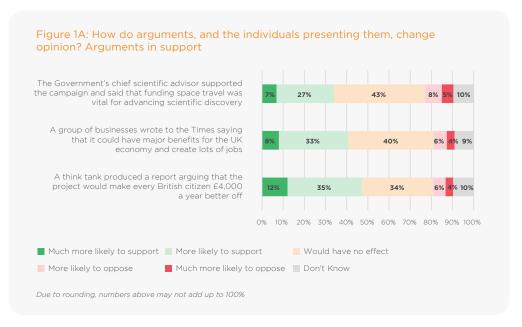
87% of people agreed with the statement that "I want to hear all the information I can before I make up my mind on a political issue;" however, our findings show that who is delivering the message, and how they deliver it, also matters.

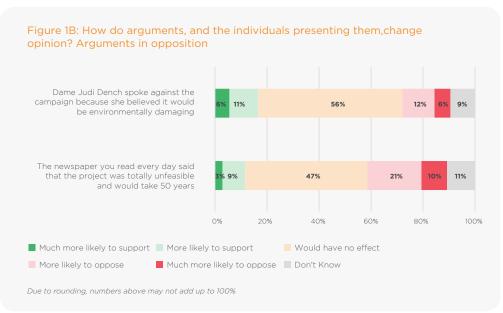
People trust information sources that they believe are authentic, honest and impartial; these qualities may be even more important than subject expertise. Only a few people fit these criteria, including immediate family and those in the public eye – Sir David Attenborough stands out as a trusted figure. We found mixed results regarding trust for experts and businesspeople - this was largely dependent on whether they were seen as 'impartial.' Politicians and celebrities were the two groups most widely not trusted, though there are exceptions for individuals seen as relevant, impartial and knowledgeable about the issue at hand.

In terms of trust, friends and family communicating news/information on Facebook ranked much higher than traditional sources of media. Equally the more localised the news was, the more it was trusted. This is partly because it relates directly to people's lives and immediate surroundings. For instance, in the scenario discussed below, targeted communication from the local council or city mayor on local jobs was well received with 42% of people more likely to support the hypothetical campaign as a result.

Methodology

To test which figures are trusted by the public, we used the poll to propose a hypothetical mission to Mars. We then asked how different messengers affected support or opposition to the proposed expedition (Figure 1A & Figure 1B). In questions like this it can be difficult to untangle the argument from the proponent (for example, the data identifies think tanks as influential messengers, but this may relate more to the fact that their argument was about people being financially better off). It does however make clear that certain messengers have limited impact (for example, we saw little impact from a non-expert celebrity advocating against the campaign).





Immediate Family and Friends

In the focus groups, immediate family (especially mothers) were raised as a trusted source of information. Immediate family members were seen to 'have your best interests at heart,' unlike other messengers, especially politicians.

"My mum isn't ruthless. She's kind and lovely and I'd listen to her because she's got my best interests at heart," Female, 20s, Derby

In the focus-group exercise, participants were asked to imagine a campaign to reintroduce wolves into the wild. Here people said that a group of mothers who expressed concerns that wolves might attack small children should be trusted over businesspeople and even over a trusted expert like David Attenborough. This also indicates that people have a hierarchy of incentives - advocating something because of potential financial benefits, or environmental benefits, is not as credible as 'wanting the best for children.'

"I'm like, forget it. Children come first," Retired female, 60s, Derby

While immediate family are a trusted source of information and news, both the poll and the focus groups found that people were not likely to change their mind on an issue based on their friends signing a petition on social media. This suggests that while people trust the veracity of information from their friends and family, they do not necessarily change their opinions based on the views of those closest to them. This could equally be a consequence of the fact people are unhappy to admit that they are swayed by the views of others, or don't even realise they have been swayed.

On this question there were variations within the age groups, with younger people indicating that friends signing a petition might change their mind (30% of 18-24-year-olds said friends signing a petition against a campaign would make them more likely to oppose the campaign, compared to 19% of 65+ year olds). This in part likely reflects the penetration of social media among different age groups only 11% of the oldest group use social media for news, compared to 63% of the youngest group.

Focus group participants also said they trusted 'people like them' - those in professions such as teaching, nursing, engineering - almost as much friends and family, and more than experts and politicians.

"If it was between Richard Branson and Gary the heating engineer, I'd trust Gary down the road." Male, 20s, Derby

David Attenborough

- "You don't feel like he's making money off what he's telling you"
 Male, 30s, Derby
- "He's older as well he's old and experienced" Male, 20s, Derby
- "Instinct tells you he's a good man" Female, 30s, Derby
- "He's in it for the right reasons he knows his stuff and he's genuine" Male, 20s, Watford

After immediate family, and perhaps the Queen, the person cited consistently as the most highly trusted source of information is David Attenborough. We explored this in greater depth in the focus groups. Although people have mixed feelings about experts and celebrities – and Attenborough is arguably both – his trustworthiness stems from him being seen as honest, authentic, well-motivated and, crucially, without a hidden agenda. Understanding why Attenborough is so trusted helps us understand who the public are most likely to listen to and how other campaign messengers should pitch and present themselves.

Attenborough's clear personal and emotional connection with the natural environment was also cited in the focus groups as something that makes him trustworthy. This reflects findings from both the literature review on campaigning techniques and campaign profiling that campaigns which appeal to people's emotions are among the most successful.

"He's passionate about saving the planet," Female, 40s, Derby

Another potential reason Attenborough may appeal to the masses is because he is seen to have the qualities that people trusted in their immediate family – being impartial and honest – and in experts – being knowledgeable and relevant. This suggests the sweet spot for any campaign messenger is perceived impartiality (or at least lack of an agenda), combined with passion and expertise.

Experts

People tend to trust experts in general but are inclined to question their motives and impartiality. When asked whether they agree or disagree with the statement "Experts have their own agenda when they argue what is best for the country", 69% agree. This is high, but they are more trusted than celebrities, businesspeople and politicians; more than half of the poll respondents (55%) agree that experts normally know what is best for the country.

Additionally, even though the margin is more narrow, people tend to disagree that expert opinions are no more valuable than anybody else's (44% disagree, 35% agree).

"It has to be somebody who is knowledgeable and someone who's got experience." Male, 30s, Derby

In the focus groups, we were able to further examine people's trust in experts. We found that many people approach expert opinion with scepticism, particularly experts hired by government or businesses. They often raised concerns that experts were used to push hidden agendas or present their own opinions as fact.

"With facts, I don't think none of them are facts. It's all just people's opinions," Male, 50s, Derby

"You just never know with experts - all the claims and forecasts they make are wrong half the time, how can any of it be believed?" Female, 40s, Watford

In the hypothetical campaign about colonising Mars, our polling showed relatively strong support for experts and expertise - 47% of people said they would support the campaign if a think tank produced a report arguing that it would make everyone substantially better off.

This, though, was not reflected in the focus groups where people found it difficult to engage with an abstract hypothetical idea. On colonising Mars, an older man in Derby caught the mood when he said: "No matter what they told me I'd say it was stupid." Most people didn't know what a think tank was, and the idea of a mission to Mars making money was so remote that no-one really took it seriously. Again, this highlights the extent to which people tend to only engage seriously with proposals that are directly relevant to their lives or have clear quantifiable benefits:

"If there was an abundance of minerals and things, things that you need to make iPhones, if there was an abundance of things like that on Mars, then I think they could get the money to go out there." Male, 30s, Derby

"It would make sense to me if it was for research that was going to improve the NHS or they were using it to find a new technology or treatment, but if not, what's the point? We have so many issues here to solve first." Male, 50s, Watford

The poll also tested whether 'condescending' attitudes from experts can undermine their message. Here we used an example of an expert

astrophysicist calling those opposed to the Mars campaign "stupid". We found that this would increase opposition to the campaign by 33%. As a benchmark, if Judi Dench actively argued against the proposal it would increase opposition by only around half that at 18%. This suggests that experts need to be very wary of appearing belittling when making their case. On this point, the age split is notable, with 39% of those over the age of 65 being more likely to oppose the campaign after comments by the astrophysicist, compared to 28% of those 18-24 (22% of whom actually said they would be more likely to support the campaign). This arguably suggests that younger people are more willing to be told in robust terms why they are 'wrong' about an issue, than older people.

Our findings show a split between Leave/Remain voters in the 2016 EU referendum on their views on expert opinion. 63% of Remain voters agree that experts are normally correct on what is best for the country, compared to 49% of Leave voters. Furthermore 73% of Leave voters believe experts often have their own agenda, compared to 65% of Remain voters. This is perhaps unsurprising, given the Leave campaign was predicated on challenging established opinion. In the context of running any future campaign this suggests that many of the voters who gave the Government its majority are less likely to be swayed by expert opinion alone.

While there was a divide in the level of trust in expert opinion, there was little difference between Leave/Remain voters on whether they like to hear technical information before making up their mind on an issue (74% and 78%), indicating it is the trust of experts themselves which is under question. That said, Leave voters were slightly more likely to say they make their decisions based on gut instinct (58% compared to 48% Remain). Perhaps what is most interesting is that people view expert opinion apart from 'expertise' and information; the phrase "experts" appears to have taken on its own meaning, which is itself a motivator of opposition/support.

Chief Scientific Adviser

We also tested how much the Government's Chief Scientific Adviser (CSA) was able to sway opinion – this time using the role as a proxy for a 'Government Expert'. Again, using the hypothetical Mars expedition, we asked how the Government's CSA arguing that the campaign was vital for advancing scientific discovery would influence people's support or opposition. 34% of respondents said this would make them more likely to support the campaign. Given 'advancing scientific discovery' is relatively abstract, this is surprisingly high support. This finding was not mirrored in the focus groups, where

the CSA's views were met with distrust; one middle-aged woman in Derby referred to the CSA's advice as "dodge". It seems likely that the view that experts have their own agenda is exacerbated by association with Government.

It seems that the influence of the CSA's support for a possible colonisation of Mars tracks closely with people's trust in experts. There is a split along party-political lines, which likely represents the extremes of the Leave-Remain split with 38% of Remain voters more likely to support the campaign after the CSA's endorsement, compared to 31% of Leave voters. From the 2019 General Election, 44% of those who voted Lib Dem would support his advice while only 28% of those who voted Brexit Party would.

It is worth noting that for the groups that were less supportive, it was not so much that they opposed the CSA's advice, but rather said it would have no effect on their support (50% among Brexit Party voters). It is also important to note that the sample of Brexit Party voters was small (53).

In the polling, expert opinion was better received among younger and more financially comfortable people, as well as Remain voters. To better understand this finding, we ran a regression on the CSA's argument, which is a statistical method used to determine the nature and strength of the relationship between variables (for details on regression approach, please see Appendix 2). The regression results suggest that this finding is better explained by the demographics (age, financial comfort, gender (more likely among those who identified as Male) and education) than the EU vote, although none of these are particularly strong predictors. Again, this is not to say that other groups tend to disagree with the views of experts, but that they tend to say they would not change their opinion based on these expert opinions.

It would be instructive to review this topic in light of the high profile of the CSA during the COVID-19 pandemic. It may result in people making a clearer distinction between what is the impartial machinery of Government and what is party politics and parliament – perhaps restoring some of the trust lost during the widely-watched Brexit debates.

Celebrities

Our findings show that celebrity endorsements either for or against a cause generally have minimal impact on the public's opinion of a campaign. The exceptions are if the celebrity is seen to be relevant, knowledgeable and trustworthy. Celebrities can be a powerful tool in campaigning when deployed in the right way.

When discussing the merits of Mars exploration, Judi Dench, who was used as a proxy for celebrities' views, was less powerful at shifting opinion than an expert. This may be partly explained by the fact that she has no scientific or astronomical expertise that would make her relevant. People did, on the other hand, listen to David Attenborough's opinion on a campaign to reintroduce wolves to the wild, perhaps regarding him as an environmental expert first and a celebrity second. This suggests the possibility that celebrities can influence opinion, but they must be relevant to the campaign and knowledgeable.

"If people that you respect and admire and have a certain expertise lend their weight to a campaign, it does have an effect." - Male, 60s, Watford

At the heart of this is a belief that celebrity endorsements must be sincere rather than jumping on a bandwagon. For example, when discussing celebrity endorsements for environmental activist groups, focus group participants in Derby thought that celebrities were hypocritical for flying around the world in private jets and then preaching about the need to address climate change.

"Celebrities just want to make themselves look pious." Male, 40s, Derby

The timing and delivery of celebrity endorsements is also important. Older focus group participants expressed their disapproval of celebrities using platforms such as the BRIT Awards to make endorsements, especially politically charged endorsements. However, this was not a universally held view, younger participants tended to support celebrities making endorsements during large-scale entertainment events. Campaigns must therefore consider who their target audience is and how best to reach them with different platforms.

How to craft the message

Making people care

Findings from both the focus groups and polling suggest there is a hierarchy of support for different types of campaigns among the public. First and foremost, the public care about campaigns that have a direct impact on their lives. This came out in the focus groups, with a middle-aged woman in Derby explaining that she actively supports cancer campaigns because her family had been directly impacted by the disease.

"We've had cancer in the family so it's more direct."

- Woman, 40s, Derby

Secondly, people support campaigns about issues they care about more generally. For example, the poll findings showed that support for Extinction Rebellion among those who list climate change as one of their top issues was 23%, whereas support among those who did not was only 8%. This also came across in the focus groups; when discussing a campaign to reintroduce wolves to the wild, people were receptive to the argument that it was important for biodiversity and combatting climate change, but that consideration was secondary to the argument that the wolves could be a danger to their children.

Finally, our findings suggest that people care about campaigns that align with their values. A woman in Derby explained that her support for the Royal British Legion's poppy campaign was because she was proud of her grandfather's military service. This also came through in the polling when people were asked to explain the reasons why they support certain campaigns. For instance, those participants who supported Rainbow Laces, a campaign to tackle homophobia in sport, said they did so because of their commitment to equality. A standard response was 'it is essential that we have equality for all in sport, including LGBT+. There should be no discrimination in sport'. When it came to the campaign to tackle fixed odds betting terminals, one participant explained they supported them because 'they are working hard to stop people exploiting other peoples' addiction.'

Ideas can be big, but they must be real and relevant

Abstract questions such as the hypothetical colonisation of Mars were tested in our polling, but what was clear in the focus groups was that people found it very difficult to engage with ideas that they didn't regard as real – or realistic. However, when we switched the proposition from colonising Mars to meeting net-zero climate change targets, people became much more animated and thought more carefully about who to believe and what information they would want to make up their own minds.

This suggests that people are not afraid of big concepts beyond their immediate understanding – but the idea must have some bearing on their life now or in the foreseeable future. This is an important consideration for the success of campaigning, particularly on complex issues like R&D where returns tend to be long-term: these returns must be made relevant to people.

The value of honesty

The importance of honesty and 'levelling with people' came out very strongly in all the focus groups – people understand that sacrifices may be needed, for instance to tackle climate change, but they want to have those explained to them honestly, to prepare and to make informed decisions. It was the feeling that they might be misled that was most likely to be met with anger or irritation.

Again, this would be interesting to repeat in a few months once the full social and economic impact of COVID-19 starts to be understood - to see how well the Government managed to offer honesty and transparency without inducing panic among the public and investors.

"It's the underhandedness - you're trying to pull the wool over my eyes... If he's honest about it, you can make an informed decision," Male, 30s, Derby

In one of the Derby groups, a young man commented that he had watched a documentary about veganism, which he felt highlighted corruption in the meat industry, including how it was making money out of unhealthy practices. The young man became a vegan for three weeks until he found out that the film maker had shares in a vegan product. He was angry with this but explained that if the film maker had made clear that he was so committed to veganism that he had invested in vegan products, then he wouldn't have lost trust in his message.

"You've just not been upfront about it," Male, 20s, Derby

Overall, the importance of being given all the facts came out strongly in the focus groups and campaigns should give thought to how they present the less appealing parts of their proposition. For R&D specifically, that could involve being clear about how long it takes for research to lead to new discoveries and the rate of failure.

It is also worth noting - on the issue of trust - it is a case of 'one strike and you're out'. In both the Derby and Watford focus groups, when discussing reintroducing wolves, people agreed that they would trust David Attenborough if he said it was safe for children, but if a child were harmed it would end their respect for him. Being aware of the fragility of celebrity endorsement is key to running a careful campaign.

"Lobbying"

With honesty in mind, it is worth quickly analysing the perception of lobbying. The results of the poll are clear on this; lobbying is

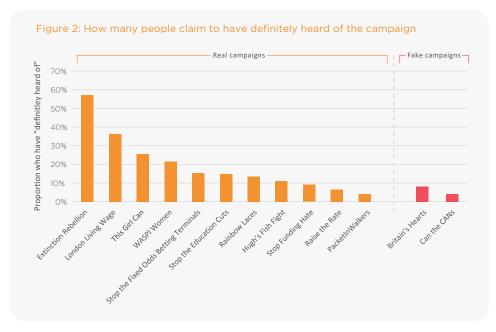
highly unpopular. For a Mars campaign, there was strong opposition (average of 38% opposed) to both forms of lobbying listed – organising a dinner for MPs, and building up strong relationships with a small number of MPs. Opinions on both forms of lobbying were very similar across the board, demonstrating that little distinction was seen between them by respondents. Opposition to lobbying is slightly lower among the youngest age group (average of 24% opposed), and slightly higher among leave voters (average of 42% opposed), but there is a generalised opposition to this across the whole sample. This ties into the public's desire to be 'kept in the loop' and 'levelled with'. Campaigns which operate largely behind closed doors could be perceived as not being upfront with their intentions. Whilst this is not an issue when a campaign remains out of the public eye, as soon as these actions see light of day the damage to a campaign's viability is immense.

Assessing Existing Campaigns

Awareness and Recognition

To judge opinions on existing campaigns we asked individuals in the poll whether they had heard of a set of high-profile public campaigns – taken from those we had already profiled – as well as two fake campaigns to act as a baseline. For those aware of some of the campaigns, we asked a series of follow-up questions to probe their perceptions of the campaign. The focus groups discussions were centred around the same campaigns.

Of the campaigns discussed, it was clear that Extinction Rebellion has drawn outsized public attention (Figure 2) and been met with strong opinion. The results also show that some of the campaigns have very low recognition rates, equal to or even below the levels of recognition for the fake campaigns. It is therefore clear that the campaign tactics of Extinction Rebellion have been much more successful at raising awareness than others. Equally some campaigns - such as Raise the Rate - are very deliberately targeted at policy makers and politicians, rather than the public and so we would not expect to see high levels of recognition.



What makes Extinction Rebellion's success more remarkable is that when opinions of the campaign were tested, they were neither trusted as experts nor popular with most people – with only 23% of people in the polling saying they supported them. This was also

reflected in the focus groups:

"By a lot of people, they are seen as crackpots - rich crackpots." Retired male, 60s, Derby

"I just think they're totally annoying and I don't want to pay any attention to them," Male, 40s, Derby

Yet the polling and focus group findings show that they have high levels of recognition. When tested in polling, 57% of people had heard of the group - in contrast the next most recognised campaign, the London Living Wage campaign, had 36% overall recognition (with most others barely hitting 10% recognition). Furthermore, 59% of people agreed that the group had been successful in raising awareness of climate change.

In the focus groups, if people hadn't heard of them immediately, they only needed to be prompted by a photograph of their demonstrations. There was a clear difference in the reasons for not supporting them between the groups in Watford and those in Derby. This is likely because more Watford residents commute into London for work and will have been directly affected by Extinction Rebellion. The fact that some of the demonstrations led to people not being able to work made many of the participants in Watford less supportive of the campaign.

"I knew of people losing their wages and struggling to pay the rent at the end of the month because of their protests. It isn't right and doesn't do them any favours," Female, 40s, Watford

Although Derby participants hadn't seen any demonstrations in their city, the groups there had still heard of Extinction Rebellion and were aware of the campaigns they ran – and there was very little support for their tactics, even if people agreed with their objectives.

"The substance behind what they're trying to argue, that nature is coming to an end and we have to protect it, all of those things have enough weight behind them without having to rely on the crackpot things." Female, 40s, Derby

People dislike negative campaigns, but they can be effective

Based on this public awareness, the success of Extinction Rebellion highlights a dilemma for anyone building a campaign: even though most people disagreed with the tactics of Extinction Rebellion and thought that they were alienating people, no-one could deny how successful they had been at raising awareness and influencing

political discussions. People say they like campaigns that highlight positive policies, but when asked about different types of campaigns it is positive campaigns that have the lowest recognition rates.

Examining the campaigns that we polled, those which adopted a positive approach saw high support, such as Rainbow Laces (47%) and WASPI Women (51%), particularly when compared to Extinction Rebellion (23% support the campaign). Yet only 14% of respondents had heard of the Rainbow Laces campaign, as opposed to 57% who had heard of Extinction Rebellion

The Derby focus group spent quite a while discussing Greta Thunberg, the young climate activist. Only two people really knew who she was but the way they described her to the rest of the group was revealing. One younger man was highly supportive of her and was angry at the way she was being treated. He said the negativity towards her was making him more supportive of her:

"A lot of the American politicians came across really conceited and patronising" Male, 20s, Derby

On the other hand, an older participant who thought that the activists were "crackpots" said:

"I mean, that Greta Whatever-her-name-is. She never went to school. She was taught by rich parents at home. She's never mixed with normal people." Male, 60s. Derby

This highlights the inherent challenge of running a negative campaign, it is clearly effective at increasing recognition, but it is also necessarily more polarising, and some people will recoil from it. It explains why all the participants in Derby and Watford agreed that David Attenborough was a good example of a positive and popular campaigner. He was not divisive – and crucially all ages and backgrounds can enjoy watching his programmes.

On positive campaigning, people in Watford were particularly supportive of the use of humour in campaigning and said a humorous message would likely catch their attention more than a serious or negative one.

"Humour appeals to people because it's a relief amongst all the serious and negative stories that make up the news constantly" - Male, 40s, Watford

However, some participants remarked that humour is not always appropriate; a Government campaign, for example, should be more serious. Ultimately, it is important that the tone of the message is congruent with the campaign.

Public Attitudes To Research And Development

We have explored in some detail people's attitudes to the "who" and "how" of campaigning. We should expect those attitudes to change against the backdrop of the COVID-19 pandemic – perhaps significantly shifting people's opinions on who they trust.

The global pandemic is also promoting the role of science, medicine, and research in the headlines. R&D is finding itself at the forefront in the battle against COVID-19 in a way that we could not have imagined when we began conducting this research. Based on the emerging public discourse, it is likely that over the coming years people's attitudes to R&D will improve – not just in terms of understanding its value, but also in a desire to keep ahead of future crises. This is an evolving story.

This section on people's attitudes to R&D is mostly derived from the statistical polling evidence rather than the focus groups; the latter concentrated on people's feelings about campaigns to understand where R&D might best fit.

Awareness of research and development

Awareness of R&D is high, with around 31% confidently saying they know what it is, and 41% saying they think they do. When asked to identify what counts as R&D from a list, only 13% answered entirely correctly, although 86% were able to identify at least some R&D options from the list.

Most people were confident in identifying the most straightforward examples of R&D. Testing new medicines, for example, was identified as R&D by 77% of respondents, contrasted with 44% identifying taste-testing a new mayonnaise as R&D. This suggests clarity and tangibility are key when trying to sell the value of R&D.

"Simplify it. Do it for the common person who has a basic understanding of life without all the technical jargon," Female, 40s, Derby

"The problem you have is that it all sounds too complicated - what will it actually mean for me and my life?" Male, 40s, Watford

That doesn't mean that a campaign for R&D must focus on new medicines - but that campaigns seem to cut through more easily if

people recognise the importance of the investment and understand why we need it. In the context of the current COVID-19 situation, that could involve highlighting that other areas – such as the development of new ventilators, or digital innovations to allow remote working – are also R&D activities.

Prioritising research and development

When asked about the prioritisation of Government investment, around 19% of people placed R&D or scientific research in their top three (although obviously other areas include elements of research investment too) (Table 1). We find no effect of switching between the wording of "R&D" and "scientific research" when looking at how people treated it compared to competing areas of public spending, therefore it is fair to consider the two groups as a single dataset.

Table 1: Percentage who selected the following areas as one of their top three most important for the Government to invest in

Area to invest in	Scientific Research Phrasing	Research and Development Phrasing	Total
Healthcare/The NHS	84%	83%	83%
Crime and Policing	47%	46%	46%
The Environment	37%	35%	36%
Education	34%	35%	35%
Housing	30%	33%	31%
Scientific Research/Research and Development	19%	19%	19%
Defence	14%	15%	15%
Public transport	15%	14%	15%
Other	2%	2%	2%
None of the above	2%	1%	1%

This suggests that an effective way to generate support for R&D investment might be to relate it to other areas that the public rate as important – and which are of greater relevance to people's day-to-day lives. When asked how public spending should be prioritised, around half of people (47%) would prefer to focus on day-to-day services while most of the other half would prefer an equal split between day-to-day services and R&D (39%). Very few (5%) prefer spending to be purely on R&D. These results seem to somewhat contradict the focus group findings, which suggest people's priorities were focused on tangible and short-term benefits; the poll may demonstrate that people are more open to long-term investment in R&D than our initial findings suggested. There are, however,

important caveats to this, which we will discuss below.

When people were asked to allocate a hypothetical budget in various policy areas between two short-term options (infrastructure and workforce) and R&D as a long-term option, they put on average about a third (35%) into the R&D option. This varies across policy areas (see Table 2), with green energy R&D receiving an average of 42% of spending, and new educational technologies receiving around 26%. These results have limitations: if given more options, it is likely that people's spending on R&D would have decreased. Further, different ways of phrasing the question may have affected the motivation to spend in a certain area.

Table 2: Average amount of a hypothetical budget assigned to immediate investments in Infrastructure and Workforce, and long-term investments in Research*

	Infrastructure	Workforce	R&D
Healthcare	30%	39%	31%
Military	31%	36%	34%
Environment	35%	22%	45%
Education	32%	42%	26%
International Development	31%	28%	42%

^{*}Question: Imagine the Government has a large amount of money to spend on [topic] in the UK. How would you distribute the money between the following areas: Your answers must add to 100%. Due to rounding, proportions above may not add up to 100%

Table 2 demonstrates that people value more tangible short-term investments in the sectors that most immediately affect their daily lives, such as Health and Education. Conversely, they prefer longerterm investment in R&D for sectors that are more abstract and less visible in their daily lives, such as the Environment and International Development. This makes sense because short-term investments in sectors such as Health and Education are very visible and tangible - building a new school or hiring 50,000 new nurses. Short-term investments in International Development and the Environment, however, may be less obvious and more difficult to relate to people's lives in the UK, which is why people are more comfortable with long-term investments in R&D for these sectors. It is also possible that people see sectors such as the Environment and International Development as having more long-term problems that require research; they may view Education and Health, on the other hand, as much more current problems requiring immediate solutions. Using the Environment for example, there is a distinct lack of interest in

the workforce option of 'hiring more conservation workers' which represents a very immediate and tangible solution to a problem that comes across more abstract.

People are split on whether private companies are better at research than academic institutions (26% vs. 27%). Perhaps counterintuitively, people with postgraduate degrees were more likely to rate private companies as better (36% vs. 25% of non-postgraduates), though the small number of those with PhDs in the sample did not share this same preference towards private companies. The reason for this is unclear; it could represent a disillusionment with academic approaches to research which postgraduates feel, or perhaps it demonstrates a stronger opinion being held by those who have seen both sides of the debate from within (35% of those with postgraduate degrees and 25% with PhDs had no strong opinions either way or said they didn't know, compared to 56% of those with GCSEs, 50% with A Levels, and 38% with University degrees). However, the rest of the polling and focus groups tended to indicate that, when it comes to expert messaging, whether the messenger comes from industry or academia is not overly important.

Respondents were also divided on the statement, "we currently invest too much in Research rather than solving issues that matter now" (33% agree vs. 35% disagree). Interestingly, the youngest age group particularly agreed with this statement (48%), whilst also tending to agree with the statement, "investing in long-term improvements is more than important than solving short-term problems" (68% agree). This could be a product of demographic differences around what are seen as current issues; for some, climate change may be seen as an immediate issue – 'the climate emergency' – which requires short-term improvements; for others, it may be seen as something to tackle in the long term. Again, this highlights the need to tackle the abstract nature of R&D and to engage the public directly on the problems it is trying to solve.

People's research priorities

As discussed, the rapid escalation of the COVID-19 pandemic during fieldwork may have pushed the importance of R&D into new medicines to the front of people's minds. 57% of people put medical research among their top three areas for investment (See Table 3).

This is supported by the fact that 49% of 18-24 year-olds selected it, compared to 69% of 65+ year-olds, potentially reflecting the known age-related differences in the dangers of COVID-19, but also more broadly the fact that older people are more likely to need and seek medical treatment.

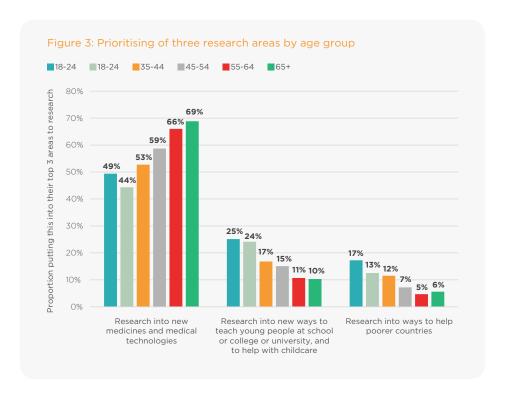
After healthcare, we find strong support for prioritising R&D into novel environmental solutions (41%), and then a mix of middle tier priorities including security (26%), transport (23%) and economic growth (22%). What makes these results more interesting is the variation in priorities between demographic groups – perhaps indicating the need for audience targeting by demographic.

Table 3: If the Government has money which it is intending to invest in Research, which areas would you most like to see the money invested in? Please select up to three

		Age Bands (years)					
	Total	18-24	25-34	35-44	45-54	55-64	65+
Research into new medicines and medical technologies	57%	49%	44%	53%	59%	66%	69%
Research into new technologies for reducing carbon emissions and helping the environment	41%	39%	34%	36%	45%	43%	48%
Research into new security technologies to help police and prevent crime	26%	24%	23%	23%	23%	29%	30%
Research into new types of transport, for example to reduce traffic, or increase journey speed, or travel in a more environmentally friendly way	23%	18%	20%	23%	29%	22%	27%
Research into ways to generate economic growth	22%	17%	20%	20%	26%	24%	25%
Research into supporting ways to build new houses and other buildings	18%	16%	19%	19%	18%	16%	18%
Research into new ways to teach young people at school or college or university, and to help with childcare	17%	25%	24%	17%	15%	11%	10%
Research into animal life and finding new species, or protecting existing ones and allowing endangered ones to survive	16%	22%	16%	13%	15%	17%	15%
Research into new military and defence technologies	11%	9%	10%	11%	12%	15%	10%
Research into new manufacturing/packaging materials	10%	8%	11%	11%	10%	9%	12%
Research into ways to help poorer countries	10%	17%	13%	12%	7%	5%	6%
Research into new technologies and Artificial Intelligence (AI) to make computers "smarter"	7%	8%	7%	8%	5%	6%	6%
Research into general mathematical and scientific problem solving, which might be applied in an array of fields	6%	5%	6%	8%	7%	6%	7%
Research into new technologies to automate or create new ways of doing some jobs in the labour market	5%	8%	9%	7%	2%	4%	3%
Research into understanding space and space exploration	5%	8%	5%	6%	4%	4%	2%
Other (Please Specify)	1%	1%	1%	1%	0%	1%	1%
Don't Know	4%	5%	7%	6%	4%	3%	1%

We find younger people lend higher priority to educational R&D (25% compared to 10% for 65+), and higher priority for R&D into how to help poorer countries (17% compared to 6% for 65+). On the other hand, older respondents show a preference for R&D relating to economic growth (25% compared to 17% for 18-24) and transport

(27% compared to 18% for 18-24) (see Figure 3). Investment in research on ways to build new houses is one of the few areas that attracts a similar level of middling support across all age groups.



In terms of political split, there is a partisan divide between these hypothetical areas of R&D. Leave voters tend to be more supportive of research on security technologies (32% compared to Remain 20%), and less supportive of environmental R&D (35% to Remain 48%). We ran binary logistic regressions (for details on regression approach, please see Appendix 2) to get a better understanding of what factors were driving the differences in support for different types of R&D investment. Our results indicated that younger age; higher formal education level; and being a Remain voter, all have a significant but small effect on an individual's likelihood of supporting environmental R&D. On the other hand, regarding investment in security R&D, identifying as Female, and being a Leave voter had an effect. In both instances, explained variance was low which indicates there are likely numerous other aspects shaping these opinions, but there is at least a preliminary indication that a preference for investment in environmental R&D is motivated by demography as well as politics.

There was some evidence in the focus groups that people were keen to hear more about R&D, particularly which areas were being explored and what the outcomes might be:

"You need to be more open and honest about what you're doing. They'd be like, have you heard that

they're trying to do this - that they're trying to find a cure for this?" Female, 40s, Derby

Promoting UK R&D

It was also clear that there was a sense of pride in the UK's position as a world-leader in R&D.

"We are genuinely good at all this stuff. We've invented so many things and it's obvious we lead the way on so much." Male, 40s, Watford

This was reflected in both the polling and the focus groups, with 72% of people surveyed saying that the UK's position as a world-leader in R&D made them feel proud. A further 65% of people believed that the UK should lead the world in R&D. This suggests that campaigns in the UK could benefit from tapping into arguments about national pride. The R&D community will have to consider how to potentially leverage this emotion, given it could run against the instincts of the R&D community to regard themselves as part of global, cooperative network.

Segmentation

To understand how a campaign around R&D should adapt to speak to different audiences, we split the sample to separate out a group of individuals who are more motivated by R&D spending - the research enthusiasts in the sample. We also produced the opposite - a group less motivated by R&D than the norm - research sceptics to compare their responses to the questions on different campaign approaches. Tying this together, we can explore how to avoid a common campaign pitfall of running a campaign which only motivates those who are already onside and how to avoid alienating those who need convincing the most. These are early findings, and a more extensive piece of research would be required to properly hone the segmentation and messaging.

Campaign approaches to promoting research and development

As a caveat, segmenting respondents based on these opinions is challenging given the noisiness of the data, and the fact that people tend to take each question on its own merits. This is likely to be a recurring issue – the public don't think about R&D in the same way as those who are engaged with the concept all the time. For example, we see people strongly agree the UK should spend more on R&D, but also agree that other areas of spending are more important. Investing in long-term improvements is viewed as more important than short-term problems, yet people are split on whether we invest too much in R&D versus solving issues that matter now. Even so, these are not contradictory opinions – it is perfectly consistent to want more R&D spending and still say that R&D is not the most important priority.

This highlights challenges that may emerge in any message testing and base-line polling in the future. People don't think about R&D in a rigid way and tend to take each issue and question on its own merits – it's what the R&D is for that matters. This also demonstrates the importance of having a clear narrative when campaigning on such an abstract issue; the campaign objectives must be obvious from the start, or risk being too confusing to garner support.

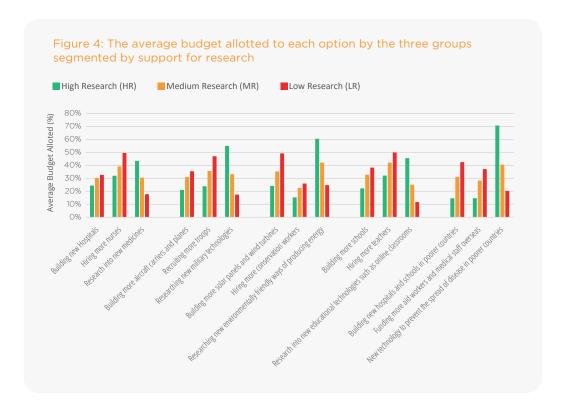
To counter this issue in the poll, we presented respondents with the five sectors discussed above and asked them to balance spending priorities:

- Healthcare;
- Military;

- Environment:
- Education; and
- International aid.

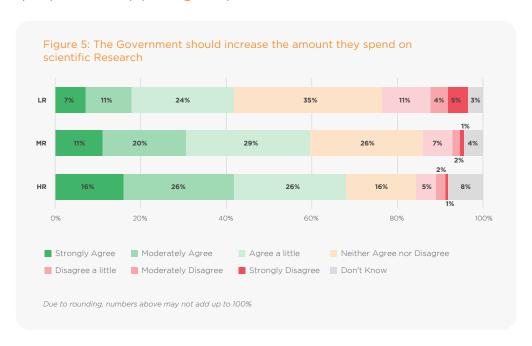
Within each of the sectors listed above, people were tasked with splitting a budget between three funding options: workforce; infrastructure; and, research. Looking at the budget that each person assigned to the research funding option across each of the sectors, we see that it averages out at about a third (35%), as might be expected.

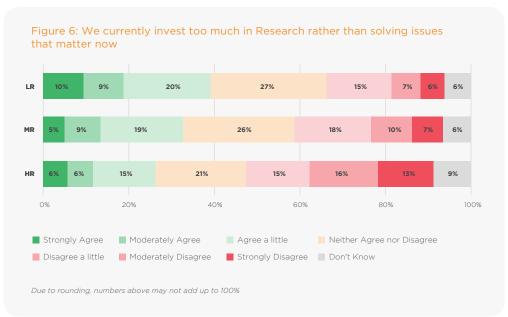
On visual inspection, the results appear to be normally distributed. This means most of the observations cluster around a central peak and then taper off equally in both directions, so extreme values in both tails of the distribution are similarly unlikely. This is the type of distribution we would expect to see for a public opinion study on this type of issue – most people fall somewhere in the middle with equally unlikely extreme opinions at either end. If we take the results at the extremes (the top and bottom ~8%), we get a group of people who put more into research (High-Researchers, HR, *N=168*), and the opposite (Low-Researchers, LR, *N=149*). For comparison we have also included the average (Middle-Researchers, MR, *N=1701*).



When we do this, we find that the HR group assigned an average of 55% of the budget to the various research options, the LR group assigned an average of 18%, and the rest (Medium-Researchers, MR, N=1701) an average of 34%.

We find that 68% of HR agree that the Government should increase the amount they spend on scientific research, compared to 42% of LR and 59% of MR (see Figure 5). Equally, when asked if the UK currently invests too much in R&D rather than solving issues that matter now, HR tend to disagree (44% responding no to 27% responding yes), LR tend to agree (28% to 40%) and MR remains split (35% to 33%) (see Figure 6).





With these groups in mind, we can compare which campaign approaches are more likely to be successful in solidifying support (targeting HR) or gaining new support (targeting MR and LR).

There are interesting demographic differences between the groups: both LR and HR groups contain more males, but HR is notably more represented among young people (15% falling into the 18-24 year-olds category compared to 6% for LR). HRs tend to be more likely to live in urban areas, and there are substantial divides on formal education – 42% of LR list A Levels as their highest formal education compared to 29% of HR, while 28% of HR select undergraduate degrees compared to 21% of LR.

We do not see a Remain and Leave divide in these groups, but in terms of party allegiance HR tend to lean more Conservative (42% versus 32% for LR) and LR more Labour (30% versus 20% for HR).

There is a divide on which issues these groups consider to be the most important: 64% of LR say the NHS is most important compared to 52% of HR. LR put an average of 50% of the hypothetical budget into hiring nurses, compared to HR's 32% (HR puts 44% into new medicine research, compared to just 18% in LR). This may point to differences in their desired responses to COVID-19; LR want the immediate 'treatment' response to be prioritised, whilst HR look more towards the long-term possibilities of resolution. This also comes through when we asked what areas of research should be prioritised; 57% of HR and 59% of MR said new medicines, compared to just 38% of LR. There was only one research area that was selected more by LR than HR and MR, which was research into supporting ways to build new houses and other buildings (26% compared to 18% MR, 10% HR).

Table 4: Some of the key differences between LR, MR and HR

Question	Answer Hig Rese (Hi		Medium Research (MR)	Low Research (LR)
Which do you think are the most important issues facing the country at this time? Please tick up to three	Quality of the NHS	52%	58%	64%
If the Government has money which it is intending to invest in Research, which areas would you most like to see the money invested in. Please	Research into new medicines and medical technologies	57%	59%	38%
select up to three:	Research into supporting ways to build new houses and other buildings	10%	18%	26%
Investing in long-term improvements is more important than solving	Agree	69%	65%	58%
short-term problems	Disagree	8%	10%	11%
Britain should lead the world in	Agree	70%	66%	56%
scientific discovery	Disagree	5%	6%	12%
I am happy for the government to invest in research, even if it does not	Agree	57%	54%	42%
lead to anything in the future	Disagree	19%	22%	33%

There are also differences in how these groups get their news: 37% of HR use social media (29% of LR), and 64% of LR use national TV compared to 56% of HR. Age will play a role here but reaching these respective groups may require different approaches on message delivery.

On what campaign approaches influence the two groups, there are several key differences (Table 5). The first is that LR are less likely to say that they like to hear technical information before making a judgement on an issue (66% compared to 77% of HR, 76% of MR). But when asked whether they tend to decide on issues based on 'gut instinct', there was no real difference between the groups. Further research may be needed to see if there is a specific format of information presentation which better appeals to LR.

HR were more likely to say that celebrities should not comment on political issues (57%, MR 48%, LR 44%). Looking at the hypothetical Mars mission, advice from the Government's Chief Scientific Advisor appealed to HR (34% support, 17% oppose) and MR (35% support, 12% oppose), but split LR (22% support, 23% oppose). This is likely because the argument here is based around the abstract idea of 'scientific discovery', which is probably more appealing to those who express an *a priori* preference for R&D. The hypothetical arguments from other experts such as think tanks around jobs and the economy did not show the same pattern.

Table 5: Some of the key differences between LR, MR and HR on campaign approach

Question	Answer	High Research (HR)	Medium Research (MR)	Low Research (LR)
I like to hear technical information on the costs and benefits of an idea	Agree	77%	76%	66%
before making up my mind on it	Disagree	5%	4%	10%
Celebrities should not comment on political issues	Agree	57%	48%	44%
	Disagree	20%	26%	26%
The Government's chief scientific advisor supported the campaign	More likely to support the campaign	34%	35%	22%
and said that funding space travel was vital for advancing scientific discovery	More likely to oppose the campaign	17%	12%	23%

On motivations for supporting research and development, when it came to the earlier question about pride in Britain's leadership status in R&D, LR responded less positively (60% respond that they are proud, compared to HR 72%, MR 73%). Equally on the question of whether Britain should lead the world in R&D, LR agree at 56%, MR at 66% and HR at 70%. It seems that LR simply do not attribute as much

importance to 'scientific discovery'; as such they are less proud of, and less interested in, Britain being a world leader in research.

Overall, this segmented approach indicates that the expert messenger matters far less than the message, at least on a surface level. Experts are popular and trusted, but if their argument draws on the excitement and wonder of R&D (no matter how compelling it may be) rather than its tangible impacts on the economy and jobs, then the campaign may bias itself towards those who already view R&D as an exciting and worthy prospect.

Solidifying support is less of an issue; HR would not take much convincing on an R&D campaign. Gaining new support (appealing to LR) is where campaign messaging needs to be focused. That means focusing on jobs and tangible outcomes, and tackling counter arguments around investing in day-to-day solutions, such as hiring and infrastructure improvements. The challenge with this group will always be to explain why investment is not being spent on the very tangible 'more nurses', but rather on less direct returns in the form of R&D.

Appendix 1: Full Questionnaire

I) Where do you tend to get your news? Please select any that apply*
[] National newspapers (e.g. Daily Mail, Times)
[] National TV news (e.g. BBC, ITV)
[] Local newspapers
[] Local TV
] National Radio (e.g. Radio 4)
[] Local Radio
[] Social Media websites (e.g. Twitter, Facebook)
] News websites (E.g. BBC Website, Mail Online)
] Word of mouth (e.g. friends and family)
None of the above
2) If a general election was called tomorrow, how likely would you be to vote? Please rate from 0 to 10, where 0 means certain not to vote, and 10 means certain to vote.*
010
[] Don't Know
3) Have you ever NOT voted in an election or referendum (either local or national), which you were old enough to vote in?*
() Yes
() No
() No () Don't Know
() Don't Know
() Don't Know 4) Do you know what Research & Development (R&D) is?*
() Don't Know 4) Do you know what Research & Development (R&D) is?* () Yes, I'm certain I know what it is
() Don't Know 4) Do you know what Research & Development (R&D) is?* () Yes, I'm certain I know what it is () I think I know what it is
() Don't Know 4) Do you know what Research & Development (R&D) is?* () Yes, I'm certain I know what it is () I think I know what it is () I don't think I know what it is
() Don't Know 4) Do you know what Research & Development (R&D) is?* () Yes, I'm certain I know what it is () I think I know what it is
() Don't Know 4) Do you know what Research & Development (R&D) is?* () Yes, I'm certain I know what it is () I think I know what it is () I don't think I know what it is
() Don't Know 4) Do you know what Research & Development (R&D) is?* () Yes, I'm certain I know what it is () I think I know what it is () I don't think I know what it is () No, I'm certain I don't know what it is

[] A pharmaceutical company running clinical trials for medicines
[] A company testing the breakbility of their existing products
[] A hospital buying an MRI machine
[] A company developing longer phone batteries
[] Taste-testing a new mayonnaise
[] The government building new universities
[] A company running teambuilding exercises
[] An oil company looking for new locations to drill
[] A theme park opening a new ride
[] None of the above
6) Which of the following areas is it most important for the Government to invest in?
You may select up to three*
[] Education
[] Defence
[] Healthcare/The NHS
[] Scientific Research
[] Public transport
[] Housing
[] Crime and Policing
[] The Environment
[] Other (Please Specify):*
[] None of the above
7) Which of the following areas is it most important for the Government to invest in?
You may select up to three*
[] Education
[] Defence
[] Healthcare/The NHS
[] Research and Development
[] Public transport
[] Housing
[] Crime and Policing
[] The Environment
[] Other (Please Specify):*
[] None of the above

8) Which of the following comes closest to your view?*	
() The government should heavily focus spending on delivering day-to-day services	
() The government should prioritise spending on delivering day-to-day services	
() The government should pretty much evenly split spending between delivering day to-day services and scientific research	y-
() The government should prioritise spending on scientific research	
() The government should heavily focus spending on scientific research	
() Don't Know	
9) Which of the following comes closest to your view?*	
() The government should heavily focus spending on delivering day-to-day services	
() The government should prioritise spending on delivering day-to-day services	
() The government should pretty much evenly split spending between delivering day to-day services and research and development	y-
() The government should prioritise spending on research and development	
() The government should heavily focus spending on research and development	
() Don't Know	
10a) Imagine the Government has a large amount of money to spend on Healthcare i the UK. How would you distribute the money between the following areas:	n
Your answers must add to 100%	
Building new Hospitals	
Hiring more nurses	
Research into new medicines	
10b) Imagine the Government has a large amount of money to spend on the Military the UK. How would you distribute the money between the following areas:	in
Your answers must add to 100%	
Building more aircraft carriers and planes	
Recruiting more troops	
Researching new military technologies	
10c) Imagine the Government has a large amount of money to spend on environment solutions in the UK. How would you distribute the money between the following area	
Your answers must add to 100%	
Building more solar panels and wind turbines	
Building more solar panels and wind turbinesHiring more conservation workers	

Your ansv	vers must add to 100%
	Building more schools
	Hiring more teachers
	Research into new educational technologies such as online classrooms
, ,	ine the Government has a large amount of money to spend on international tent in the UK. How would you distribute the money between the following
Your ansv	vers must add to 100%
	Building new hospitals and schools in poorer countries
	Funding more aid workers and medical staff overseas
countries	Research into new technology to prevent the spread of disease in poorer

11) Do you agree or disagree with the following?* $\,$

	Strongly Agree	Moderately Agree	Agree a little	Neither Agree nor Disagree	Disagree a little	Moderately Disagree	Strongly Disagree	Don't Know
The Government should increase the amount they spend on scientific Research								
Private companies are better at Research than Academic researchers in Universities								
Other areas of Government spending are more important than Research								
Investing in long-term improvements is more important than solving short-term problems								
We currently invest too much in Research rather than solving issues that matter now								
Research does not benefit people like me								
Select Don't Know								
I feel proud that Britain is a world-leading producer of scientific discoveries								
Britain should lead the world in scientific discovery								

I am happy for the government to invest in research, even if it does not lead to anything in the future				
There is not much point in funding research, as it rarely produces important discoveries				

12) If the Governmen you most like to see Please select up to the	the mone			ending to	o invest i	n Resear	ch, whic	h areas	would
[] Research into new	v medicin	es and n	nedical te	echnolog	ies				
[] Research into new	v military	and defe	ence tech	nnologies					
[] Research into new	v security	technol	ogies to	help poli	ce and p	revent cr	ime		
[] Research into new	v technolo	ogies for	reducing	g carbon	emissior	ns and he	elping the	e enviro	nment
[] Research into new labour market	v technolo	ogies to	automat	e or crea	te new w	vays of d	oing son	ne jobs i	n the
[] Research into new	v technolo	ogies an	d Artificia	al Intellig	ence (Al) to make	e compu	ters "sm	arter"
[] Research into und	lerstandir	ng space	and spa	ce explor	ration				
[] Research into anir endangered ones to		nd findin	g new sp	ecies, or	protecti	ng existir	ng ones a	and allov	wing
[] Research into way	/s to gene	erate eco	onomic g	rowth					
[] Research into new with childcare	v ways to	teach y	oung ped	ople at sc	hool or	college o	r univers	ity, and	to help
[] Research into new or travel in a more er					reduce	traffic, oi	r increas	e journe	y speed,
[] Research into new	/ manufa	cturing/	oackagin	g materia	als				
[] Research into sup	porting v	vays to k	ouild new	houses a	and othe	r building	gs		
[] Research into way	s to help	poorer	countries	5					
[] Research into gen an array of fields	eral math	nematica	al and sci	entific pr	oblem so	olving, wh	nich migl	nt be ap	plied in
[] Other (Please Spe	ecify):							*	
[] Don't Know									

13) Have you heard of any of the following? Please check each carefully before responding*

	Definitely have heard of	Think I have heard of/not entirely sure	Definitely have not heard of
Extinction Rebellion			
WASPI Women			
Stop the Fixed Odds Betting Terminals (FOBTs)			
Stop the Education Cuts			
This Girl Can			
Hugh's Fish Fight			
Rainbow Laces			
London Living Wage			
Stop Funding Hate			
Raise the Rate			
PacketInWalkers			
Britain's Hearts			
Can the CANs			

14) Do you agree or disagree with the following?*

	Strongly Agree	Moderate- ly Agree	Agree a Little	Neither Agree nor Disagree	Disagree a Little	Mod- erately Disagree	Strongly Disagree	Don't Know
I want to hear all the informa- tion I can before I make my mind up on a political issue								
Adverts typically lie about what they are trying to sell								
I don't trust adverts								
Experts, such as scientists and economists, are normally correct on what is best for the country								
I like to hear technical information on the costs and benefits of an idea before making up my mind on it								

I tend to form opinions on a current issue based on gut instinct				
Experts often have their own agenda when they argue what is best for the country				
Expert opinions are no more valuable than everyone else's opinion				
Celebrities should not comment on political issues				

15) Imagine there was a group arguing that the UK should lead a mission to build a base on Mars by 2040. Do you think the following events/actions would make you more likely to support or oppose the campaign?

Try to consider each one individually, as if this was the only event/action you saw about this campaign

*

	Much more likely to support	More likely to support	Would have no effect	More likely to oppose	Much more likely to oppose	Don't Know
A group of businesses wrote to the Times saying that it could have major benefits for the UK economy and create lots of jobs.						
A group of doctors and nurses produced an online advert asking for the money to be invested in the NHS instead.						
The Government's chief scientific advisor supported the campaign and said that funding space travel was vital for advancing scientific discovery.						
Dame Judi Dench spoke against the campaign because she believed it would be environmentally damaging.						
A think tank produced a report arguing that the project would make every British citizen £4,000 a year better off.						
The newspaper you read every day said that the project was totally unfeasible and would take 50 years.						
A number of your friends on social media sign a petition against the project, arguing that it will damage the environment						
The UK Space Agency, who would lead the mission if it went ahead, come out in support of the idea						

You receive a leaflet from your local council/city mayor, highlighting the jobs which are going to be created in your local area by the campaign			
A newspaper finds out that they have been organising dinner events for MPs, featuring speakers who support the idea			
A newspaper finds out that the leaders of the campaign have been building up strong relationships with a small number of MPs			
An astrophysicist and ex-astronaut goes on Question Time and says those who disagree with the idea are 'stupid'			

<u>The following questions are asked to those who have definitely heard of the respective campaigns:</u>

16) Thinking about the campaign, [Extinction Rebellion/WASPI Women/Rainbow Laces/London Living Wage/Stop the FOBTs]. To what extent do you feel that the following are accurate descriptions of the campaign:*

	Very inaccurate description	lnaccurate description	Neither Accurate nor Inaccurate	Accurate description	Very accurate description	Do not know enough about the campaign
Deceitful						
Wholesome						
Unimaginative						
Daring						
Expert						
Unsuccessful						
Pretentious						
Sophisticated						
Tough						
Weak						
Transparent						
Divisive						

34) Thinking about the campaign, [Extinction Rebellion/WASPI Women/Rainbow Laces/London Living Wage/Stop the FOBTs], to what extent do you agree or disagree with the following?*

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do not know enough about the campaign
The campaign speaks to people like me						
The campaign has made me aware of something I did not know about before						
The campaign raised public awareness of an issue						
The campaign has actually damaged the cause it tries to support						
The campaign changed people's minds on the issue						
The campaign changed my mind on the issue						
The campaign is asking too much						
The campaign does nothing to help me						
I support the campaign						

35) What, in general, do you think about [Extinction Rebellion/WASPI Women Rainbow Laces/London Living Wage/Stop the FOBTs]?	/
You may leave this blank	

Appendix 2: Research Details

Poll

Public First carried out a poll of 2018 UK adults for the Wellcome Trust and the Campaign for Science and Engineering. The results of the poll were weighted to Nationally Representative proportions on age, gender, region and social grade.

Composition of the quantitative sample

Demographic	Group	Unweighted Proportion	Weighted Proportion
Gender	Male	48%	49%
	Female	52%	51%
Age	18-24	14%	14%
	25-34	17%	17%
	35-44	17%	17%
	45-54	16%	17%
	55-64	14%	14%
	65+	21%	21%
Region	South West	8%	8%
	South East	13%	13%
	London	14%	14%
	East of England	9%	9%
	West Midlands	9%	9%
	East Midlands	7%	7%
	Yorkshire and the Humber	8%	8%
	North West	11%	11%
	North East	4%	4%
	Scotland	9%	9%
	Wales	5%	5%
	Northern Ireland	2%	3%
Social Grade	Α	4%	4%
	В	23%	23%
	C1	26%	26%
	C2	21%	22%
	D	16%	16%
	E	9%	9%
2019 Vote	Conservative	44%	44%
(Those who voted)	Labour	33%	33%
voted)	Liberal Democrat	11%	11%
	Green	3%	3%
	Brexit Party	3%	3%
	Other Parties	6%	6%
EU Vote (Those	Leave	50%	50%
who voted)	Remain	50%	50%

Public First is a member of the BPC and abides by its rules.

Full tables of the results can be found here.

For any questions on the poll, please contact: seb@publicfirst.co.uk

Note on Regression Analyses

Regression analyses in this research controlled for gender (binary), age (continuous), education level (taken as continuous), perceived financial comfort (taken as continuous) and EU Referendum vote (binary – non-voters/DKs excluded).

For regression on the CSA's argument, support/opposition to the argument was taken as a continuous scale from 1-5 with Don't Know responses excluded. Results for gender, age and perceived financial comfort were significant at the p<0.001 level, for education at the p<0.01 level, and no significant relationship was found between EU vote and CSA argument.

For Binary Logistic regression on the types of research favoured, this was taken as a binary variable, with those who selected it compared to those who did not select it. For environmental research, age and EU vote were significant at the p<0.0001 level, and education at the p<0.01 level. For security, EU vote was significant at the p<0.0001 level, and gender at the p<0.01 level.

Focus Groups

The four focus groups were spread across Derby and Watford, with 8 participants in each group (32 in total). The demographics of the different groups are as follows:

Derby:

Group 1: Professional (B/C1), mixed male/female, mixed ethnicity (2/3 BAME), mixed Leave/Remain, mixed Lab/Con 2019, spread of ages between 25-70, and have lived in UK for 5 years.

Group 2: Non-professional (C2/D), mixed male/female, mixed ethnicity (2/3 BAME), mixed Leave/Remain, mixed Lab/Con 2019, spread of ages between 25-70, and have lived in UK for 5 years.

Watford:

Group 1: Professional (B/C1), mixed male/female, mixed ethnicity, (4 White, 4 BAME), lean Remain, lean Labour, spread of ages between 25-70, and have lived in UK for 5 years.

Group 2: Non-professional (C2/D), mixed male/female, mixed ethnicity, (4 White, 4 BAME), lean Remain, lean Labour, spread of ages between 25-70, and have lived in UK for 5 years.

This research was produced by Public First under commission from the Wellcome Trust and the Campaign for Science and Engineering (CaSE) as part of their R&D Decade project (see website for more information).



Wellcome exists to improve health by helping great ideas to thrive. We support researchers, we take on big health challenges, we campaign for better science, and we help everyone get involved with science and health research. We are a politically and financially independent foundation.



The Campaign for Science and Engineering (CaSE) is the UK's leading independent advocate for science and engineering. Our mission is to ensure that the UK has the skills, funding and policies to enable science and engineering thrive. We represent over 115 scientific organisations including businesses, universities, professional bodies, and research charities as well as individual scientists and engineers. Collectively our members employ over 336,000 people in the UK, and our industry and charity members invest over £32bn a year globally in R&D. We are funded entirely by our members and receive no funding from government



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