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EXECUTIVE SUMMARY
EXECUTIVE SUMMARY

OVERVIEW
In December 2016, ComRes was commissioned by Research Councils UK (RCUK) to conduct an insight project into public attitudes towards research. ComRes conducted a quantitative survey of 3000 UK adults using a mixed telephone and online methodology. This was followed by segmentation analysis and five qualitative workshops across the country to examine the way people engage with research, the extent to which they trust it and their attitudes towards the public-funding of research.

ENGAGEMENT WITH RESEARCH
The UK public engage with research spanning a variety of topics, through multiple channels. Just 12% of the public say they do not engage with any sort of research-related media in the average month.

However, understanding of what constitutes “research” is limited. Other than who funds it, there is little conscious distinction made between peer-reviewed, academic research and commercial, PR research or personal research to get medical advice from a doctor, for example. While peer-reviewed, academic research is certainly the most trusted when prompted, front of mind attitudes are generally merged with and influenced by all types of research, most of which is mediated through other sources of information and engaged with “passively” as people go about their day-to-day lives.

Television appears to be the primary channel through which the UK public engage with research – for example 59% say they watch science or nature documentaries at least once a month and many come across research when watching news programmes. Links posted on social media are also a common way of coming across information about research, although there tends to be little consistency in the content which people see or hear. The most common activities related to research also tend to be those with wider appeal, such as visiting museums and zoos (particularly prevalent among parents).

The most common form of active engagement with research tends to be following up on news reports about research, either by talking about new discoveries with friends or looking online for more information about research reported in news stories.

Key implications:
- Television should be the priority channel for engaging the public with research, with clips on the news and high quality documentaries likely to reach a much wider audience than other forms of communication.
- Museums offer the chance for parents, who are visiting as a day out for their children, to engage with research when they might not otherwise do so.
- Generally, it may be difficult to engage wide swathes of the public with research via social media, although the creation of “viral content” – especially videos and visual media about topical issues, targeted at Facebook – may offer some opportunities to do so.

TRUST IN RESEARCH
The British public are most likely to trust university academics and researchers to provide accurate and truthful information about research findings. They are least likely to trust the UK Government, politicians or celebrities. With the exception of extremely politicised issues such as Brexit and the Scottish referendum, there is little difference in levels of trust in different areas of research.

Whilst trust in academic researchers is high and makes people open to what they have to say, this trust is very much conditional. Few people will automatically believe what a researcher says just because of who says it, with what they say also being extremely important. Cutting across subject areas, research is most trusted when it:

- is funded by a body with minimal vested interest in the outcome;
- is conducted by independent academic researchers;
- builds on a pre-existing level of knowledge among the public such that they can understand and engage with the research; and
- is supported by other research findings or visual evidence that people can see with their own eyes.

Knowledge of the peer-review process is relatively limited, but where individuals are aware of it, and when it is explained to them perceptions are positive – it is seen as a valuable mark of quality in research indicating a lack of bias.

**Key implications:**

- Where appropriate, there is scope to promote research findings via academic researchers, in particular, highlighting their credentials and qualifications.

- When research is publicly funded, RCUK should highlight the funding source and encourage the perception that this research is unbiased and robust. Secondly, it could be beneficial to raise the profile of safeguards which protect against funding biases, such as the peer-review process.

- When communicating research findings that contradict prevalent existing research (for example, current Government guidance), it could be beneficial to present visual evidence alongside the research findings.

**ATTITUDES TOWARDS PUBLIC FUNDING OF RESEARCH**

The vast majority of the UK public (84%) say that they support public money being used to fund research and a similar proportion (75%) agree that public funding of research benefits their friends and family. When prompted with the amount of money the Government spends on research, few people say that it is too much, with most saying the amount is about right or not enough.

Overall, there is a slight preference for publicly-funded research always having a defined social or economic objective, rather than simply being “research for research’s sake” – although support for the latter does tend to increase in line with higher research capital. Opinions are generally split about the extent to which risks should be taken with publicly-funded research, with people from all backgrounds tending not to have strong opinions and seeing both sides of the argument.
DIFFERENT RESEARCH AREAS
Generally, interest and engagement with different research areas tends to reflect which areas people perceive to be directly relevant to their everyday lives. Medical research consistently emerges as the area of research the UK public are most likely to engage with, be interested in, and wish to be funded by public money. It is followed by research into economics and society, which is perceived to affect everyone, and research into natural environment, with climate change in particular seen to have direct personal impact, if not on people themselves, then to their families and children.

Across attitudinal and demographic groups, improved medical treatments are perceived to be the most important outcome from publicly-funded research.

Key implications:
- Across different research areas, it is generally always important to communicate the real-world impact new research has and why it matters to the day-to-day lives of normal people.

HOW THE PUBLIC SEGMENTS
While engagement with and opinions about different elements of research varies across the population, taking attitudes and behaviours as a whole, around two in five members of the UK public might be termed as “advocates” for research. They can be categorised in two subgroups – the first is Establishment Advocates who make up 25% of the UK population, and combine high levels of engagement with research, support for public funding, and high levels of trust in a range of establishment figures, such as Government officials and businesses, as well as being open to conducting “research for research’s sake”. The second group are Idealistic Advocates, who make up 19% of UK adults and combine relatively high levels of engagement and support for public funding with scepticism of big business and a desire to see research deliver positive social outcomes such as solutions to climate change and global poverty.

Beyond these groups, approaching a quarter of the public (22%) are what might be termed “Pragmatic Neutrals”. This group has generally low interest in research and do not come across it much in their day-to-day lives. But while being slightly hesitant towards research, they will generally support it if they think it can have positive real-world outcomes, such as new dietary and health advice or improved medical treatments.

Traditionalist Sceptics, who make up 18% of the population, are the segment of the population most sceptical of research – despite coming across it relatively frequently in their day-to-day lives. The majority still support public funding of research, but would rather see it focussed on delivering economic and medical benefits to the UK rather than being focussed on wider international issues like global poverty or climate change.
The final group are **the 16% who are Disengaged and Disinterested** and who have extremely low engagement with research, either through the media or discussing it with friends and family. They generally have low levels of interest in research and are suspicious of most organisations, in particular figures of authority.

If attitudinal factors are excluded and instead the focus is on people’s knowledge, behaviours and networks, the public can also be divided in relation to the extent they have “science (or research) capital”, which includes metrics such as having visited a museum in the last six months or personally knowing a university academic. On this front, **just 5% of the public have no research capital** at all where none of the eight metrics apply to them. **Half the public (49%) might be termed to have low levels of research capital**, with between one and three metrics apply to them. **About a third (32%) have moderate levels** (four or five dimensions) and **one in six have high levels of research capital** (six or more).

**Key implications:**

- Across the board, higher engagement with research generally correlates with greater trust and support for research funding. If the former is increased, the latter two are likely to follow.
INTRODUCTION
INTRODUCTION

OVERVIEW OF METHODOLOGY
In December 2016, ComRes was commissioned by Research Councils UK (RCUK) to conduct a public insight project. ComRes partnered with Hopkins Van Mil: Creating Connections (HVM), public dialogue specialists, to deliver this project. The objectives of this research were to understand:

- How general public audiences segment in terms of their engagement with and sentiment towards research; its process, results and implications – including an indication of the relative size of each segment;
- How, when and where the segments access information about research;
- The degree to which the segments either passively consume or actively engage with research; and
- Any significant differences in people’s engagement with or sentiment towards different areas of research.

ComRes designed a methodology consisting of three phases to meet these objectives.

Phase 1:
The first phase was a short ‘immersion’ period which consisted of seven in-depth interviews conducted by telephone with Heads of Communications at the seven Research Councils, as well as a literature review of the existing ‘grey’ literature, culminating in a short summary report which informed the design of the next two phases.

Phase 2:
Survey
The second phase was a nationally representative quantitative survey of 3000 UK adults aged 16+. Fieldwork was conducted online among 16–64 year olds. Due to lower internet penetration levels among adults aged 65+, fieldwork was conducted by telephone among this audience. All fieldwork took place from 20th and 31st January 2017. The survey consisted of 22 questions, inclusive of 6 questions that were specific to NERC, and exclusive of demographic questions.

Max Diff analysis
In order to determine relative importance of research outcomes, a Maximum Difference (MaxDiff) analysis was used. This is a statistical trade–off technique that quantifies the importance of different outcomes by showing respondents multiple ‘sets’ of outcomes and asking them to choose in each case which one they believe to be most and least important from each set, gradually building a picture of which individual outcomes are given the highest priority. The result is an understanding of which research outcomes are particularly important and unimportant to the UK public.

Segmentation
Using the final quantitative data, a segmentation analysis was conducted, in which UK adults were clustered into groups based on shared characteristics, opinions and behaviours using advanced statistical analysis techniques. The final results of the segmentation culminated in five distinct groups of the UK public (see page 12). The segmentation analysis allows RCUK and NERC to better understand who ‘the public’ are, as well as what they think, making it easier to tailor engagement effectively.

Phase 3:
The final, qualitative, stage of the project consisted of five workshops, each lasting three hours, in locations across the UK. Each workshop included two groups of 8–10 people representing distinct
segments. This meant that we spoke to representatives of each segment in two different locations. This broke down as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>21st February</th>
<th>22nd February</th>
<th>23rd February</th>
<th>28th February</th>
<th>1st March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Sutton Coldfield</td>
<td>Glasgow</td>
<td>Bristol</td>
<td>Newport</td>
<td>Belfast</td>
</tr>
<tr>
<td>Segment</td>
<td>Establishment Advocates</td>
<td>Traditional Sceptics</td>
<td>Idealistic Advocates</td>
<td>Disengaged and Disinterested</td>
<td>Pragmatic Neutrals</td>
</tr>
<tr>
<td>Segment</td>
<td>Traditional Sceptics</td>
<td>Disengaged and Disinterested</td>
<td>Establishment Advocates</td>
<td>Pragmatic Neutrals</td>
<td>Idealistic Advocates</td>
</tr>
</tbody>
</table>

This qualitative phase was designed to complement the quantitative findings, providing further insight into engagement, interest and trust, as well as explaining the drivers of attitudes and behaviours. ComRes and HVM facilitated the workshops with one moderator chairing the sessions, introducing key topics and making sure they ran to schedule. At specific points, audio and video stimuli were used to prompt discussion around particular topics and probe perceptions in greater depth. The majority of the workshop discussion was conducted on separate tables split by segment, however the moderator facilitated plenary sessions at key points, bringing the room together and sharing insights between groups. Discussion was structured around the discussion guide created by ComRes, HVM and RCUK. This document is appended, however a sample of the topics discussed is given below:

- **Understanding how the public engage with research**
  Participants brought examples of research they had come across in the past few days and mapped out a “research journey” explaining why it caught their eye, what they thought about the research, whether they trusted it, and whether they followed up with any further engagement.

- **Understanding levels of trust in different channels**
  As part of this, a ranking exercise was used whereby participants were presented with different channels through which they might hear about research. They were asked to rank these by level of trust and discussed the reasons driving their decisions.

- **Understanding of the research process and peer review**
  Participants were presented an animated video about the social sciences, illustrating the research process, peer review, and applications of research. Subsequent discussion about the research video probed perceptions in depth to understand the public’s grasp of these concepts and desire for further information.

- **Establishing preferred forms of engagement with research**
  Participants engaged in a co-creation activity to design a campaign to communicate with the public about a research issue of their choice. Working in groups, they established messages they felt would engage the public, the channels they would use to distribute these messages and opportunities for the public to get involved.

The workshop also included a NERC-specific section that delved more deeply into specific areas of environmental research and how the public would react to them. After the workshops “vox–pops” were conducted with a selection of participants, discussing some of the points they had raised during the discussion.
INTERPRETING THE DATA
Analysis of the quantitative and qualitative data was carried out by the ComRes project team, utilising all of the data gathered to develop a holistic understanding of the public’s engagement with research.

Quantitative data referenced throughout were weighted to be representative of all UK adults aged 16+ by age, gender, region and social grade. With a sample size of 3000 the margin of error for this data is 1.79 percentage points. Differences smaller than this should be treated as indicative not representative.

Qualitative analysis was structured around an analysis framework comprised of key questions meeting the objectives of this project. The qualitative quotes included in this report are illustrative of wider sentiment expressed by participants in the workshop discussions – they are not necessarily representative of the opinion of all members of a particular segment.

This report presents this analysis drawn from the RCUK parts of the research, with NERC-specific elements analysed in a separate output. The report is also accompanied by a short video summary of the “vox–pops” conducted after the workshops.

ACKNOWLEDGEMENTS
The authors would like to express their deepest thanks to the Directors of Communications who took the time to speak to us individually at the outset of project to provide invaluable insight into current public engagement practices and their perceptions about where there were gaps in the evidence base about public attitudes towards research. Special thanks in particular go to Dr Patrick Middleton (BBSRC), Dr Natalia Gillies (BBSRC), Hannah King (NERC), Dr Hannah Collins (NERC), Dr Lewis Dean (RCUK) and Chris Buratta (STFC) who provided regular feedback and thoughts throughout the research process and without whom this project would not have been possible. Many thanks also to Henrietta Hopkins at Hopkins Van Mil: Creating Connections for her vital advice throughout the project, including on discussion guide design for the workshops, analysis of findings and insightful feedback on early drafts of this report.
SEGMENT PROFILES

In order to understand how the public segments in terms of its engagement with and attitudes towards research, survey respondents were grouped together based on shared characteristics, behaviours and opinions that emerged from statistical analysis of the data. The five segments to emerge from this analysis are as follows:

**Segment 1: Establishment Advocates**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>More male (59% vs 41% female)</td>
</tr>
<tr>
<td>Age</td>
<td>Broadly in line with the general population, slightly more likely to be middle aged and older</td>
</tr>
<tr>
<td>Social background</td>
<td>Affluent and educated. One in three (33%) are from the most affluent AB social grades and half have been to university (53%), a far higher rate than among the wider public. One in six live in London (16%).</td>
</tr>
<tr>
<td>Media consumption</td>
<td>High levels of media consumption – particularly broadsheet newspapers, such as The Times and The Telegraph, along with commuting papers like the Metro. Like much of the public, many are Facebook users, but a considerable proportion also use Twitter (30%) or LinkedIn (15%).</td>
</tr>
<tr>
<td>Research engagement</td>
<td>High levels of engagement with research across a wide range of areas and through a variety of mediums.</td>
</tr>
<tr>
<td>Trust in research</td>
<td>High levels of trust in researchers and research – generally trusting of establishment actors more widely.</td>
</tr>
<tr>
<td>Outcome priorities</td>
<td>Generally open to research for research’s sake. Improved medical treatments are overwhelmingly considered to be the most important research outcome for all groups, but Establishment Advocates are much more likely than the average to value new discoveries which expand the scope of human knowledge (12.5) or support Britain’s position as a world leading centre of research excellence (10.1).</td>
</tr>
</tbody>
</table>

Establishment Advocates are one of the most positive groups towards research, being both interested and highly engaged with a wide variety of research areas, including those which other segments of the public think of as more remote, such as engineering and physical sciences or particle physics. Commonly university educated and affluent, they feel they have a good understanding of science and regularly discuss new discoveries over the kitchen table with family members – or possibly with academic friends at the occasional dinner party on evenings when they’re not at home watching the latest series of *Planet Earth*. They regularly read newspaper articles about science, technology, politics...
and economics, often in broadsheets like *The Times* and *The Telegraph*, or in *the Metro* on the morning commute into the office. Despite already being highly engaged, they would be willing to become more so, with 70% interested in going to a science fair and 63% to a public lecture.

Generally trusting of authority and the establishment, they have high levels of trust in researchers to provide accurate and truthful information, although are also much more likely than other groups to trust the UK Government and politicians. Half strongly support public funding of research, with 89% believing such research benefits themselves and their family.

What distinguishes them from other engaged and enthusiastic segments is that high quality research tends to be seen as a successful outcome in itself. Half (51%) think that publicly funded research doesn’t always need to try and solve defined socio-economic problems and sometimes just discovering things we did not know before is a good use of public money. They are also the group that is by far the most likely to think that expanding the scope of human knowledge and supporting Britain’s position as a world-leading centre of research are the highest priority outcomes for research to deliver.

The qualitative workshops reiterated this segment’s positivity towards research and high levels of engagement. Many had front–of–mind examples of research they had seen or used recently, either in a professional capacity or through personal interest. For example, one Establishment Advocate had looked into new medical technologies for treating shoulder injuries having recently been injured playing football. This segment is quite trusting of the research that they see, but do seek out corroboration of research findings they encounter by looking for the original source of research or cross–validating against other research.

While showing interest in research generally, Establishment Advocates often demonstrated interest in areas which were commonly perceived as less engaging among other groups – for example arts and humanities or particle physics and astronomy. This segment was positive towards public funding of research and also felt research did not always need to be directed at solving a problem – they believed that sometimes research should be conducted for furthering knowledge and that in time this might yield unforeseen benefits.

“I expect it [research] to come from universities. As a history teacher, I rely on research that comes from historians. That’s just as valuable to me as political polling or scientific research. I base my teaching on that.”

**Establishment Advocate, Sutton Coldfield**

“For me, the broadcast media and print media are channels to access all of the others. So through those we can get access to the Government, celebrities, academics and all of that anyway.”

**Establishment Advocate, Sutton Coldfield**

“Every research [project] should have green shoots that lead to other things.”

**Establishment Advocate, Sutton Coldfield**
Idealistic Advocates tend to be younger with many having a higher university degree or still in full time education. They tend to be politically active, with more than average having been to a protest (5%), boycotted an organisation (15%) or signed a petition (55%) in the last six months. Their media consumption includes publications such as *The Guardian*, as well as online news websites such as *The Independent*, *The Huffington Post* and *Buzzfeed*. They also have high Instagram and Twitter usage.

Idealistic Advocates enjoy learning new things even if they do not necessarily have a use and they are positive towards research, strongly supporting its public funding and believing that the Government does not spend enough money on it. This may in part be due to a belief that research can have far-reaching positive social impacts; they think that new discoveries should prioritise reducing poverty around the world and helping society be more resilient to future risks such as climate change, alongside delivering better medical outcomes. This sense that research focussed on human problems is important combines with a wider socially conscious outlook in the form of distrusting the Government and politicians, and being more involved in activism (such as occasionally taking part in protests, boycotts or vegetarianism). It would not be unusual to find Idealistic Advocates signing a petition about climate change.
change (which they believe the Government should do more about) and sharing it with friends over Twitter or Facebook in between reading political biographies and uploading pictures to their active Instagram account.

During the qualitative workshops this segment’s level of education was evident in their engagement with research. With many currently studying for university degrees, they came across research regularly, and often had a specific area of interest. Alongside this academic perspective, they also engaged with a wider range of research topics and were more interested in research on the natural environment and climate change than other segments. Having had a greater exposure to academic research than the less engaged segments, Idealistic Advocates tended to be more familiar with peer review and saw this as a positive protection against potential bias in privately funded research; they shared concerns over funding from private parties with “motives” or “vested interests”, in a way that is highly similar to the other segments.

Engaging with research across a range of channels, a number of individuals in this segment reported changing their behaviour as a result of research they read. For example, one mentioned eating less meat having seen a documentary about factory farming while another reported boycotting facial products which used micro-beads after seeing a story about this on social media. Despite their youth, this group has a relatively sophisticated understanding of research and expressed the desire for quality evidence and detailed reporting rather than “scaremongering” headlines stories.

“I would use Facebook a lot. I follow a lot of science-y pages on there that put up a lot of research that they’ve come across. That would start me off on a trail to other pages, but it would start on Facebook.”

Idealistic Advocate, Belfast

“The end product [of research] is so often for sale. A lot of research is orientated around profit-making.”

Idealistic Advocate, Bristol

“I don’t think you can really lie about natural disasters. I don’t really know what the motivation would be behind that.”

Idealistic Advocate, Bristol

“We like to have data at our fingertips all the time.”

Idealistic Advocate, Belfast
Segment 3: Pragmatic Neutrals

Caught between the weekly supermarket shop and the school run, Pragmatic Neutrals do not tend to have much conscious engagement with research in their day-to-day lives. They are not particularly interested in research, and whilst they may have taken the kids to a museum in the school holidays (40% have been to one in the last year) and may catch the occasional nature documentary, they are not avid newspaper readers and are unlikely to have a copy of *Freakonomics* lying on the bedside table or to discuss new scientific discoveries with the family.

The majority are female and they are the segment least likely to be in full-time work (38%), most likely to have children living at home, with one in ten a stay-at-home parent (10%). They tend to have left education after secondary school (57%), despite often being an age where university attendance was more common amongst their peers, and are more likely than average to be from the C2DE social grades.

When they do come across research, Pragmatic Neutrals tend to think it should have a defined purpose and consequently are most concerned with practical outcomes and benefits, such as its potential impact on better medical treatments, creating jobs and providing good dietary advice about how to live a healthy lifestyle.

| **Age** | Broadly matches that of the public as a whole, slightly more likely than average to be 25–34 (19% vs 17%) |
| **Gender** | Much more likely to be female (66%) than male (34%) |
| **Social background** | More than half come from less affluent C2DE social grades (53%, vs 44% of the general population). Least likely segment to be in full-time work (37%). |
| **Media consumption** | They are not frequent newspaper readers – those they do read most often include the Daily Mail (22%) and the Sun (16%). Two thirds (65%) regularly use Facebook – in line with the national average. |
| **Engagement in research** | Minimal – lower than average reported interest in all of the seven research areas (e.g. two thirds – 64% – say they are not interested in physics). |
| **Trust in research** | Generally, not very trusting of organisations or individuals – less than three in ten (28%) trust university academics / researchers a great deal. Although neither do they vociferously distrust academics or researchers either. |
| **Outcomes** | Most likely of the segments to prioritise better medical outcomes (28.1) – also more likely than the average to mention economic benefits (12.7) and good dietary advice (10.6). |
While they are not particularly interested in the specifics of the latest trip to the International Space Station or the latest carbon dating techniques, it is not to say that they oppose the idea of research – more than four in five (85%) support public funding of research. It may be that they are just not overly excited by it: only a quarter (25%) strongly support it, considerably less than the public as a whole (36%). This slightly weaker support may stem from their lack of engagement with research or understanding of how it can impact on their lives. Indeed, just 37% say they feel they have a good understanding of how science works. Additionally, those who say that publicly-funded research does not benefit them or their family (14%), are most likely to say this is because they don’t know enough about it (40%).

One in three (33%) Pragmatic Neutrals think that research conducted by academics tends not to have a meaningful impact on the lives of normal people, highlighting the importance of clearly demonstrating to this segment how research benefits ordinary people.

In the workshops, the opinions and attitudes of Pragmatic Neutrals generally fitted the profile expected. The vast majority had young children, and were overwhelmingly concerned with issues that affected them or their family directly. This meant that they were particularly interested in medical research into cures or treatments for diseases, as well as research into health and lifestyle more generally. They were much less interested in research that they did not feel affected them, for example particle physics or bioscience. While generally supportive of public funding of research, they were perhaps slightly more sceptical than expected. This scepticism extended to the Government, private companies, charities and the media, perhaps driven by their overall lack of engagement. By far their most trusted source of information (and by extension research) was their family and friends.

“If you see small children suffering, hungry, no parents, you think, well I’ve got children, I can empathise.”

Pragmatic Neutral, Newport

“I was listening to the radio in the morning and they were saying what the pound is against the dollar, and they do research into that, and they try and say what it’s going to be after Brexit, but I’m just more interested in my next holiday – how much I can get for my pound.”

Pragmatic Neutral, Belfast

“My least trusted area [of research] is particle physics and astronomy, purely because we have to believe whatever we’re told, we can’t really relate to it.”

Pragmatic Neutral, Newport
Segment 4: Traditionalist Sceptics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Slightly more likely to be male than female (54% vs. 46%).</td>
</tr>
<tr>
<td>Age</td>
<td>Older, 30% aged 65+ (vs 22% of general public).</td>
</tr>
<tr>
<td>Social background</td>
<td>Most likely to have left education after school, but social grade make up in line with general public. 22% retired on a private pension.</td>
</tr>
<tr>
<td>Media consumption</td>
<td>Most likely to read the Daily Mail (26%) or The Sun (16%); high viewership of historical documentaries (48%) / costume dramas (33%); low social media usage</td>
</tr>
<tr>
<td>Research engagement</td>
<td>Medium engagement with all types of research – slightly higher with history / politics.</td>
</tr>
<tr>
<td>Trust towards research</td>
<td>Low levels of trust in most people / organisations to provide accurate research.</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Most interested in research with outcomes that allow for economic gain for Britain; very low priority for international development or research into climate change.</td>
</tr>
</tbody>
</table>

While coming across research relatively frequently, Traditionalist Sceptics tend not to say they find it interesting – and sometimes even hold antithetical opinions about it. Although unlikely to be found live-tweeting their opinions about a public lecture or expressing a desire to visit a laboratory, they do come across research during afternoons spent watching historical documentaries or episodes of Downton Abbey and through current affairs issues they read about in the Daily Mail over their morning cup of tea. Despite being more exposed to research than other disengaged groups, they also tend to say they are not interested in a range of research areas – in particular those which they may see as unrelated to their lives, such as arts and humanities, bioscience, the natural environment and particle physics.

They tend to trust researchers talking about their own research. However, there are a number of issues which this segment is more hesitant to believe researchers about when they turn up on the television offering their opinion – in particular, these include politics (which 58% of Traditionalist Sceptics distrust researchers to present accurate and honest information about) or politicised issues like Brexit and climate change (53%).

Indeed, one in three say it is better to deal with environmental issues only once they affect us rather than trying to predict and prevent potential future issues. When it comes to what they consider should be the most important outcomes of research, managing future risks like climate change is overwhelmingly deprioritised by Traditionalist Sceptics (5.3) – as is reducing poverty around the world (3.5). Instead, they are much more interested than other segments in research which can bring material...
benefit to UK adults; for example, through providing information about how taxpayers’ money can be spent most effectively (12.2), new and better paid jobs (14.3) or new products which normal people can use (11.4).

More likely to be older, some of Traditionalist Sceptics’ hesitancy about research appears to come from wider concerns – around four in ten say they often feel like the world is changing too quickly (42%) or that new ideas and products developed by governments and corporations tend to make life worse or more complicated for normal people (38%). But equally, the vast majority (84%) still support publicly-funded research and, while a minority want more money spent on it (21%), fewer want the budget reduced (16%) and instead tend to be satisfied for the £160 per person per year budget to stay as it is (51%).

Mostly having left school at 16, Traditionalist Sceptics appear keen to keep things in their own hands – they are the most likely segment to say it is better to be sceptical of new research and discoveries until you have seen the evidence for yourself (59%). This attitude appears to extend to people who might try and speak for them – they are also the group most likely to distrust charities (39%), as well as campaigning organisations (59%).

The qualitative workshops further illustrated Traditionalist Sceptics’ lower engagement with most forms of research. The exception to this is medical research. Due to their slightly older demographic, most have personal experience with a medical condition or know of a family member or friend who does, which sparks their interest. However, they tend to define “research” widely, covering a broad range of activities from speaking to their doctor to reading leaflets put through the door about screening tests. Medical research is likely the easiest topic on which to engage Traditionalist Sceptics.

Prioritising their own experience over expert opinion, this segment is less engaged and less trusting of research topics which they perceive to be less visible – for example, particle physics and astronomy, and bioscience. Most likely to come across research via television and radio, these are also relatively well-trusted sources of information for Traditionalist Sceptics. Sentiment towards celebrities and politicians was strong – they are generally seen as biased and less trustworthy sources of information.

Understanding of the concept of risk in funding research was quite limited – taking risks was seen positively under the umbrella sentiment that “life’s a risk” rather than operating a cost–benefit analysis.

“You get good information on Radio Scotland, Radio 4. Sometimes you get experts on there and they debate – sometimes they agree, sometimes they disagree but the information you get is really good. I wouldn’t tune into radio Clyde or Capital or anything, but Radio 4 or Radio Scotland I would listen to.”

Traditionalist Sceptic, Glasgow

“I don’t think you can avoid celebrities. They tend to jump on the bandwagon and have a voice about everything. I don’t know why their viewpoints should be so prominent. It irritates me.”

Traditionalist Sceptic, Sutton Coldfield

“I ranked particle physics and astronomy last for interest. Astronomy is too far away. It’s out of sight out of mind as far as I’m concerned.”

Traditionalist Sceptic, Sutton Coldfield
Segment 5: Disengaged and Disinterested

Generally, less affluent than average, this group tends to have low levels of both engagement and interest in research. While a minority may occasionally watch a science or nature documentary, most have not been to a museum in the past year, do not read science magazines or historical fiction, and a considerable proportion (40%) do not read newspapers. Correspondingly, they tend not to come across research into any of the seven areas in the average month, with only one in three coming across topics which generally have high cut through, such as the natural environment (33%), medicine (31%) and economics and society (32%). This lack of engagement is reflected in that they also tend not to be interested in any of the areas of research, and while the majority of this segment support public funding of research, one in six oppose it (18%) – the highest proportion of any segment. Additionally, while half trust scientists working in university (57%), a quarter do not trust them (27%).

"There are lots of things you see but you don't register it unless it's relevant to you"

Disengaged and Disinterested, Glasgow

<table>
<thead>
<tr>
<th>Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Equally likely to be male (52%) as female (48%).</td>
</tr>
<tr>
<td>Age</td>
<td>Generally younger than average – 21% aged 16–24 (compared to 14%).</td>
</tr>
<tr>
<td>Social background</td>
<td>Tend to be less affluent – many are in full-time work, but likely to have left education after school, and they’re the most likely segment to be currently unemployed (7%). Underrepresented amongst AB social grades (21% vs 26% overall).</td>
</tr>
<tr>
<td>Media consumption</td>
<td>Very low – two in five (40%) do not read a newspaper regularly, although perhaps reflecting their younger profile, have a wide use of social media – one in five (20%) use Snapchat and a quarter (24%) Instagram.</td>
</tr>
<tr>
<td>Research engagement</td>
<td>Extremely low – just two in five (41%) have visited a museum in the past year and three in ten (31%) have discussed research with friends and family. Interest in research areas is much lower than among other groups, e.g. almost half (45%) are not interested in finding out more about economics and society.</td>
</tr>
<tr>
<td>Trust in research</td>
<td>While not quite as distrusting as Traditionalist Sceptics, this group has generally low levels of trust in organisations and people – just 14% trust university academics or researchers a great deal.</td>
</tr>
<tr>
<td>Outcome priorities</td>
<td>Financial benefits of research are particularly important to this group – they prioritise information about how taxpayers’ money can be spent most effectively (11.1) and how businesses can have greater social and economic impact (7.1).</td>
</tr>
</tbody>
</table>
On the whole, they tend to be younger (42% are aged under 34) and left education when they finished school, with many now working in manual occupations. The vast majority are white, but ethnic minorities are slightly overrepresented in this group. Whilst they are one of the groups most likely to be in work, they are also the most likely segment to be out of work and looking for employment (7%) or out of the workforce due to long term illness or still being in education (9%).

Their lack of engagement with research may reflect a general lack of interest, or a wider sense of being slightly unsure of themselves. They are much more likely than others to refrain from offering their opinion on most issues, often saying they “don’t know” when asked about their interests, priorities and preferences, also suggesting that they may not have given these topics much thought in the past.

In the workshops, the Disengaged and Disinterested segment reflected about how much different information there was and how it often changed or contradicted each other (“They used to say it was bad to eat fat now it's sugar”). This may have helped cause elements of scepticism which tended to be initially expressed towards the media, experts and research – especially if the conclusions were contrary to their lived experiences. However, there was little conscious sense of differentiating between academic or peer reviewed research with commercial or PR research seen in the media, suggesting that opinions towards the former may be influenced by less robust research. Additionally, despite claiming not to trust academics, when presented with research first hand (such as in a video of a university scientist talking about the impact of pollution on bees), all participants from this segment accepted what was being said without question, possibly reflecting a division between opinion and behaviour.

“Technology means there’s experts for everything, it’s information overload. There’s so much – how do you know what's right?”

Disengaged and Disinterested, Glasgow

“I was watching TV research where they get people to test out products and get the facts and figures – Sensodyne and hair dye and things like that. I don’t really do social media so it’s just catching adverts like that.”

Disengaged and Disinterested, Newport

Whilst their traditional print–media consumption is low, which combined with their lack of interest may cause any engagement activity to have a low return on investment, there may be opportunities for engaging them through mainstream television (although not through current affairs programmes), as well as possibly through social media. Reflecting their age, many use Facebook, as well as being the most likely to be found chatting to their friends on Snapchat or posting photos on Instagram.
HOW, WHEN AND WHERE INFORMATION ABOUT RESEARCH IS ACCESSED
HOW, WHEN AND WHERE INFORMATION ABOUT RESEARCH IS ACCESSED

This chapter explores the way in which people engage with research. Firstly, the ways in which people come across research in their day-to-day lives actively or passively is explored. Following this, the way their wider networks and understanding form "research capital" is discussed, alongside how this influences and informs their wider attitudes.

Summary

✓ Despite the increasing prominence of social media, **television still dominates the public's engagement with research**, with reading news articles about new discoveries or findings the next most common means of consuming research.

✓ While written sources of information are read widely amongst the affluent and those engaged with research, **visual sources of information appear to have wider consumption**, especially amongst older UK adults and those otherwise less engaged with research. Just 12% of the public do not engage with any sort of research-related media in the average month.

✓ **The most common activities related to research are visiting museums and zoos** (particularly prevalent amongst parents), and following up on news reports about research by **talking about it with friends or looking for more information about it online**. Throughout the discussion groups, many participants from all backgrounds talked of supplementing news stories they had seen with their own internet research at least some of the time.

✓ Although just 5% of the public report that none of the eight dimensions of “science capital” apply to them (reconfigured to research capital for this report), **around half of the public might be deemed to have low levels of research capital**, compared to one in three who have moderate levels and 17% high levels. **Research capital is largely correlated to socio-economic affluence and education**, with attitudinal dimensions (e.g. agreeing that academic research impacts the day–today lives of normal people and believing yourself to have an understanding of science) particularly strong distinguishing factors.

Implications

✓ When prioritising different forms of public engagement work, **television is likely to have the widest reach**.

✓ **Museums may offer a second chance to engage** parents bringing their children and who did not build a resilient engagement with research growing up themselves.

✓ Given the prevalence of follow-on internet research, **ensuring that robust web sources appear high up in search engine results could help support people to access reliable information**.
ENGAGEMENT WITH RESEARCH–RELATED MEDIA

In order to understand how people engage with research and through what means, research–related media consumption was examined. Television dominates public engagement with research, with documentaries overwhelmingly having the widest reach across the UK public. Perhaps helped by the BBC’s popular Planet Earth II series (which had just finished airing in the month prior to the quantitative fieldwork for this study taking place), science and nature documentaries appear to be most popular form of research–related media, with three in five UK adults saying they watch them at least once month (59%). Historical documentaries also appear popular, with around half of UK adults (49%) saying they regularly watch them.

Q. Which of the following, if any, would you say you do at least once a month? Base: UK adults (n=3,000)

The dominance of television was echoed throughout the workshops, where many of the reference points used by participants were specific television programmes or items seen on the news.

“Sometimes you do get things for research [on TV], like Dispatches or on the Tonight Programme. You do get some information about research that’s going on.”

Traditionalist Sceptic, Glasgow

After television, newspaper articles appear to be the most common source of information about research, with around two in five UK adults coming across articles relating to politics or economics (46%)
or science and technology (39%) at least once a month. As might be expected, people who read broadsheets tend to come across articles about research the most (politics/economics: 72%, science/technology: 63%) - although around half of tabloid readers (56% and 46%) and readers of new media like Buzzfeed or the Huffington Post (55% and 51%) also say they read articles about research in these areas once a month or more.

More widely, around one in three UK adults (32%) read non-fiction books, with a similar proportion exposed to related subjects through less direct means such as by watching science fiction films (38%) or historical costume dramas (32%).

In terms of who engages with research through different media, there are some notable differences according to people’s educational backgrounds. Generally, those who have been to university are more likely than those who have not to engage with research through written sources, be that by reading newspapers articles about politics or economics (53% vs 40%), newspaper articles about science and technology (47% vs 32%) or non-fiction books (40% vs 26%). These differences disappear, however, when it comes to visual media. People who are not university educated are as likely as their graduate counterparts to watch science or historical documentaries, science fiction films and historical dramas.

Q. Which of the following, if any, would you say you do at least once a month? Base: UK adults (n=3,000)
When it comes to the **breadth of sources people engage with**, around one in eight UK adults (12%) do not engage with any of the ten research–related media tested. Around a quarter (26%) read or watch one or two different sources each month (with documentaries the most popular as explored as above). People are most likely to engage with between three and five sources each month (39%), while a quarter engage with six or more (24% – of which just 3% engage with nine or more). This illustrates that while most people have at least some engagement with research, it tends to be through only a few forms of media.

**• Those who have been university educated tend to engage with a slightly wider range of research–related media**: 29% engage with six or more per month, although 20% of non–university educated people do the same. 8% of university educated adults do not engage with any of the media tested, slightly lower than the 14% of non–university educated UK adults.

**• There are slightly greater differences when it comes to affluence**, with just 6% of people from the higher managerial AB social grades not engaging with any of media, compared to 17% of those from the least affluent DE social grades. In line with this, people from AB social grades engage with a mean average of 4.2 media sources per month, compared to 3.1 for the those from DE social grades.

**• There appears to be a relationship between people’s breadth of engagement and their attitudes towards research**. Generally wider engagement with research–related media corresponds with greater support for public funding of research – just 11% of those who oppose public funding read or watch more than six different sources of information per month, compared to a quarter (26%) of those who support public funding. One in five people (19%) who oppose public funding do not engage with any of the ten media tested in the average month – twice the proportion of those who support it (9%).

**• The most positive segment groups tend to have higher engagement** – just 2% of Establishment Advocates and 8% of Idealistic Advocates say they do not engage with any media each month, compared to a quarter of the Disengaged and Disinterested segment (25%) and 15% of Pragmatic Neutrals. This is also borne out if the mean averages are examined, with Establishment Advocates on
average engaging with twice as many types of research–related media (4.6 per month) as people in the Disengaged and Disinterested segment (2.3) – Idealistic Advocates engage with an average of 4.0 and Pragmatic Neutrals with 3.1. The slight exception is Traditionalist Sceptics whose breadth of research–related media consumption (average of 3.4) is broadly in line with that of the general public (3.6), despite having more reserved attitudes.

Overall this suggests that greater engagement with research does tend to improve attitudes generally towards it (if not to wider issues), and that most UK adults do have some engagement through a few different sources each month, with television on the whole reaching the widest number of people.

ACTIVIES INVOLVING RESEARCH
Away from the media, people can also engage with research through taking part in research–related activities. The most common of these would appear to be to educational visits to the likes of zoos and museums (both 54%) or exploring research for personal interest through conversations with friends and family (53%) or looking it up on the internet (54%).

Interestingly, parents with children under the age of 18 typically engage with less research–related media than non–parents do (24% of parents read non–fiction books at least once a month compared to 36% of non–parents, for example), possibly reflecting the time constraints involved with looking after younger children. When it comes to activities however, this trend is reversed:

- 70% of parents have visited a zoo, aquarium or nature reserve in the past year, compared to just less than half of non–parents (46%);
- 62% of parent’s have visited a museum or planetarium, compared to 51% of non–parents.
• Around three quarters of parents (78%) have also helped a child with homework over the past year.

This would suggest that parents taking their children on trips and visits or helping with homework may offer an additional chance to engage adults with research, even if they themselves did not build a resilient interest in research growing up. It illustrates that even child–focussed exhibits at museums, zoos or science fairs could offer additional opportunities for adult engagement – such as adults taking away books or DVDs of popular documentary series.

USING THE INTERNET TO FOLLOW UP ON RESEARCH

Follow–on engagement with research appears to be relatively widespread, with around half of the public (54%) saying that they have Googled a piece of research they have come across in order to find more about it in the past year. This was also a major theme of the qualitative workshops, with a cross–section of participants from all different segments saying that they supplemented the research they came across passively with their own active research on the internet.

Case Study – Idealistic Advocate, Belfast

Two of the Idealistic Advocates in Belfast worked in the healthcare profession and therefore took an active interest in medical and healthcare research. They reported going to a variety of sources to find out about such research; they received App updates from trusted news establishments such as the BBC, they used Twitter and they looked on official websites, with one stated example being the NICE guidelines. Such guidelines were highlighted to be highly trustworthy sources. Examples of such research they had recently accessed were research into lowering the screening age for Breast Cancer and research into non–talking therapies for depression.

Due to their profession, both these Idealistic Advocates said that they take any research they come across into their team meetings at work where they can be discussed and it can be decided if they need to take action within their professional capacity in relation to the research. They also said that they would actively seek more information about any research that they found to be of interest to themselves, largely in a professional capacity.

“Both of the things we were talking about related to our job roles and they are quite specific. It got your attention because it is your day to day work.”

Idealistic Advocate, Belfast
The more engaged Establishment and Idealistic Advocate segments tended to conduct their follow-up research by seeking to go as close to source as possible. They tended to do this in order to evaluate whether research they had seen in the media was reported accurately and to establish if it was trustworthy. This possibly even included examining if the original research had been “published in an academic journal” or analysing the methodology of the research itself, with “the size of the study” or “the number of people in the sample” often treated as particularly indicative of how trustworthy a piece of research was.

Members of the less engaged segments would also occasionally follow up on research they had come across with their own internet research. However, the sources of the internet pages found tended to be less important than for their more engaged counterparts, with some even preferring less established and more grassroots websites as a means of verifying what was in the mainstream media. This was usually due to a perception that the mainstream media are “scaremongers” or do not cover some issues (this is explored in greater detail in the following chapter). Generally, participants suggested they would look at the number of articles for and against a certain conclusion and make a conclusion based on the balance between them.

A small number of participants from a range of different segments suggested that if they were being completely honest, their follow-up research often reflected their own opinions. Indeed, these people stated that when searching for additional information online, the sources they tended to focus on were those which presented the side of the story which reinforced their existing world view. When other members of group were asked the extent to which they did this too, they tended to give some indication, although not in any overwhelming sense, that they did too.

“I have an agenda as well, I want to find out the stuff I agree with and will discard what I don't.”

Disengaged and Disinterested, Glasgow

As well as conducting internet searches to follow up on research they had seen in the news, the web was also often used to start off the process of engaging with a piece of research. Many participants referenced clicking on a link to an article posted on social media (with Facebook particularly common) and a number spoke of “the spiral”, where you follow a series of links from one page to another, landing on a subject they had not initially been looking for and without a firm idea of how they got there.
"I saw something, it was a study I saw on Facebook first, then I looked into it a bit more. It’s a glass of wine at night can be good for you – I looked into it. It linked to something on the Telegraph website, a study that people from Harvard had done and it was saying about drinking up to six alcoholic drinks a week can increase your risk of stroke and heart attack, but then they were saying that the study contradicts the new guidelines, that maybe a few drinks actually can help you. It was the headline that got me interested."

Pragmatic Neutral, Belfast

While such stories were common, there tended to be little crossover in the pieces of research that people had come across via social media other than when it was a headline piece of news in the mainstream media anyway (such as the health effects of burnt toast or advice about eating ten fruit and vegetables a day). This may reflect that social media tends to reinforce existing media narratives and when new ones are created, it tends to be a large number of a micro level, which do not impact on large numbers of people.

INTEREST IN ACTIVITIES INVOLVING RESEARCH

There appears to be demand for taking part in a range of research–related activities across the public. Most popular is visiting a museum, which the vast majority of UK adults (83%) say they would be interested in doing over the next year, including nearly half (46%) who say they would definitely be interested in this. Around half of UK adults also say that they would be interested in visiting a science laboratory (49%) or a science fair (49%) – while far fewer say they would definitely be interested (16% and 14% respectively), this may suggest that at least part of the population might take up the opportunities for such visit if they were offered to them.

Potential interest in research–related activities

Q. To what extent, if at all, would you like to do each of the following in the next year? Base: UK adults (n=3,000)
Again, much of the demand for research-related activities appears to be driven by parents, who are around twice as likely as non-parents to say they would definitely be interested in visiting a science laboratory (22% vs 13%) or a science fair (20% vs 11%). This was also seen in the workshops conducted in devolved regions (Bristol, Glasgow and Newport), when across different segments it tended to be parents who said they would be interested in visiting the Sir David Attenborough (or “Boaty McBoatface”) if it docked nearby, in order “to take the kids along”.

More widely, younger adults are also more likely than their older counterparts to be interested in such activities, with around one in five 16–24 year olds (21%) and 25–34 year olds (20%) saying they would definitely be interested in visiting a science laboratory (22% vs 13%) or a science fair (20% vs 11%). This was also seen in the workshops conducted in devolved regions (Bristol, Glasgow and Newport), when across different segments it tended to be parents who said they would be interested in visiting the Sir David Attenborough (or “Boaty McBoatface”) if it docked nearby, in order “to take the kids along”.

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SCIENCE AND RESEARCH CAPITAL

Engagement with research can of course occur outside of media consumption or taking part in defined research-related activities, and the concept of “science capital” has been developed in order to help measure this.1 While it is broadly focussed on science (rather than research in general), and was originally aimed at school students, the eight dimensions used to calculate each individual’s “capital” can be amended to make them appropriate for research in general.2 For example, rather than asking people whether they discuss “science” with family once a week, this can be amended to talking about “research”. The only exceptions this are on Literacy and Transferability knowledge, where substituting “science” for “research” does not provide a direct alternative, and have therefore been left as they are as “science”. The eight-metrics used to represent the eight capital dimensions were:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Metric</th>
<th>UK incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participation</td>
<td>Applies: I have been to a museum in the past six months</td>
<td>45%</td>
</tr>
<tr>
<td>2. Family knowledge</td>
<td>Applies: Members of my immediate family (parents, siblings, children) have been to university</td>
<td>53%</td>
</tr>
<tr>
<td>3. Research networks</td>
<td>Applies: I have friends or family who are academics at a university</td>
<td>32%</td>
</tr>
<tr>
<td>4. Talking about research</td>
<td>Applies: I talk about research or new discoveries with friends or family at least once a week</td>
<td>27%</td>
</tr>
<tr>
<td>5. Literacy</td>
<td>Applies: I feel I have an understanding of the way science works</td>
<td>48%</td>
</tr>
<tr>
<td>6. Transferability knowledge</td>
<td>Applies: If I were to study for a new scientific qualification, it would help lead to jobs in non-scientific fields</td>
<td>13%</td>
</tr>
<tr>
<td>7. Research disposition</td>
<td>Agree: Research conducted by academics tends to have a meaningful impact on the lives of normal people</td>
<td>51%</td>
</tr>
<tr>
<td>8. Research consumption</td>
<td>Watch documentaries / read newspaper articles about research at least once a month</td>
<td>82%</td>
</tr>
</tbody>
</table>

2 While it was the not the primary scope of this project and to explore it in detail would require a dedicated survey, basic metrics can be used to gain an understanding on how “research capital” breaks down across the population and which can provide additional light on public attitudes towards research.
Of the different metrics, consuming at least some research-related media was the most common dimension of research capital to have (82%), with knowledge about the transferability of scientific qualifications the rarest (13%). In some instances, wider contextual factors may have partially impacted the metrics, in particular men (57%) being far more likely than women (39%) to say that they feel they have an understanding of the way science works – reflecting the wider tendency found across surveys for men to express greater confidence and knowledge regardless of the subject. Other than this though, the metrics broadly provide an indicative picture of the distribution of research capital across the country.

- Across the public, relatively few people appear to have no research capital at all – just 5% do not report having any of the eight dimensions apply to them.
- However, around half of the public (47%) could be termed to have “low” research capital, having between one and three dimensions apply to them. This is most likely to be having watched/read research-related media (73%), believing academic research has a meaningful impact on normal people (35%), or having a member of their immediate family who has been to university (33%).
- One in three UK adults (32%) have “moderate” research capital (four or five dimensions), with the feeling that they have an understanding of the way science works (68%) the second–most common dimension amongst this group, after media consumption (97%).
- Finally, about one in six UK adults (17%) have “high” levels of research capital, with six or more of the eight dimensions applying to them.
Across the population, the average research capital score is 3.5, with average scores higher amongst:

- AB social grades (4.3 vs 2.9 for DE social grades);
- People who are university educated (4.2 vs 3.0 for non-university educated people);
- Broadsheet (4.5) and new media (4.4) readers (vs 3.1 for people who do not read newspapers regularly).
- Social media users have the same average science capital score as non-users of social media (both 3.5) suggesting this form of engagement does not overwhelmingly determine wider levels of research engagement.

The research capital dimensions also reflect the segments identified, which take into account a wider range of attitudinal factors such as support for publicly-funded research and priorities for the outcomes research should deliver. Around a quarter of the most positive groups have high levels of research capital (28% of Establishment Advocates and 25% of Idealistic Advocates), while they correspondingly also have higher than average mean scores (4.4 and 4.1 respectively).

The remaining groups all have lower than average scores, with Pragmatic Neutrals (3.1) and Traditionalist Sceptics (3.1) both having average research capital scores below that for the public as a whole, with the majority of each segment having “low” levels of research capital (58% and 56% respectively). The Disengaged and Disinterested segment have the lowest average score (2.5) and around one in seven (15%) have no research capital at all (at determined by the eight-metrics used in this project).
The extent to which the eight dimensions were applicable across the segments did vary to some extent. Two dimensions in particular have large distinguishing effects:

- The first is agreement that academic research has a meaningful impact on the lives of normal people, which had the joint greatest high–low spread (32 points between 65% of Establishment Advocates and 33% of Disengaged and Disinteresteds) and the highest standard deviation between the segments (12.7).

- The second distinguishing dimension is the feeling of having an understanding of the way science works, which also has a 32-point spread (64% vs 32% of the same two segments) and a standard deviation of 12.1.

Both of the metrics which have the greatest distinguishing impact are based on attitudes, rather than behaviours or networks. This suggests that when seeking to improve trust in researchers and attitudes towards publicly funded research, whilst improving behaviours (such as engagement) are important, improving wider attitudes to research should also be a consideration.
TRUST IN RESEARCH AND RESEARCHERS
TRUST IN RESEARCH AND RESEARCHERS

Having established how the UK public engage with research and through which channels, the following chapter will explore whether the public trust the information they access and the channels that they use. Factors that make research findings seem more or less trustworthy are also discussed, as well as the most and least trusted channels of engaging with research.

Summary

✓ The UK public are most likely to trust university academics and researchers to provide accurate and truthful information about research findings. They are least likely to trust the UK Government, politicians or celebrities.

✓ Despite high levels of trust in academic researchers, the public rarely draw a distinction between academic and non–academic research.

✓ Many individuals in the qualitative workshops mentioned that newspaper headlines often misrepresented research in favour of brevity and having a "shock factor". It was often acknowledged that the research itself might be robust but that media reporting of it, and in particular headlines, might be inaccurate.

✓ Personal experience is the most trusted source of information. Where individuals’ own experiences (or that of friends/family) contradict other sources of information such as academic or professional experts, personal experience is seen as the “trump–all” voice. When personal experience is not a factor, images or video content is often highly influential – it appears that seeing is believing for many.

✓ Cutting across subject area, research is most trusted when it is: independently funded; conducted by independent academic researchers; and builds on a pre–existing level of knowledge among the public such that they can understand and engage with the research.

✓ Knowledge of the peer–review process is relatively limited, but where individuals are aware of it and when it is explained to them perceptions are positive – it is seen as a valuable mark of quality in research, indicating a lack of bias.

Implications

✓ Highlighting the involvement of university academics and researchers in creating research is likely to promote trust in research findings.

✓ Where research projects are entirely supported by public funding, highlighting this would be beneficial. Where private funding contributes, it would be prudent to make clear what safeguards are in place.

✓ Given the public’s lack of distinction between academic and non–academic research, the reputation of RCUK–funded research is likely to be impacted by the reputation of “research” understood in its broadest sense by the public.
TRUSTED SOURCES OF INFORMATION

By a considerable margin, university academics (81%) and prominent TV presenters such as David Attenborough and Mary Beard (80%) are the sources UK adults believe to be most trustworthy when providing information about research. Around a third (32% for academics and 34% for TV presenters) say they would trust them a great deal, and around half (48% and 46% respectively) say they would trust them a fair amount. While trust in university academics is high among all groups, it is particularly high among Idealistic Advocates (94%), Establishment Advocates (90%), broadsheet readers (90%), ABs (87%), and university graduates (86%).

University academics and researchers tend to be trusted

University academics and researchers are broadly uncontroversial – even among the segments who are generally the most sceptical of research (Traditionalist Sceptics and Disengaged and Disinterested), a majority (76% and 57%) still say that they trust researchers and academics to provide accurate and truthful information. While less than three in five members of the Disengaged and Disinterested segment say that they would trust them, this is mainly driven by the fact this group is particularly likely to say don’t know in response to this question (16%) rather than respond with negative sentiment.

These sentiments were broadly reflected in the qualitative data, with university academics widely perceived as highly trustworthy. This was often attributed to a sense that they conduct research in the
pursuit of knowledge, rather than with a hidden agenda and therefore are less likely to report the data misleadingly. Where knowledge of academic research processes is higher (most often among Establishment Advocates), the peer-review process is seen to contribute to a higher level of trust in academic research.

“I think they [academics] are people we identify as not having an agenda.”

**Establishment Advocate, Bristol**

“You might not agree with the research, but you can see the full picture...the media just present an abridged version. Quite often they [academics] put their own limitations of the research in there. Their job is to present the facts and also to present the limitations of those facts.”

**Establishment Advocate, Bristol**

Despite this high level of trust in academic researchers it is important to highlight that the trust placed in academic researchers was not unconditional. Where workshop participants did profess trust in this groups, it tended to be accompanied by a perception that academic research is also more likely to be of high quality, to cite original sources, and be subject to more rigorous publication standards. Therefore, the trust in academic researchers is also bound up with other perceived marks of quality – academic researchers are unlikely to be trusted if commenting on poor-quality research.

**The plurality trust charities**

A greater proportion of UK adults say they trust (70%) than say they do not trust (24%) charities and not-for-profit organisations, although opinion seemed more mixed in the qualitative workshops. **Those who trust charities tended to see charities as working for the public interest without financial motives.** This sympathetic view tended to be attributed to medical charities and those tackling social problems such as homelessness. **Those who trust charities less often equated charities with campaigning organisations**, thinking of charities with a strong lobbying voice such as Greenpeace. In this instance, because charities were seen to have a clear perspective on an issue and be lobbying for it, it is thought that they wouldn’t present independent research but would conduct and report research which would support their position.

“Charities that are big non-profit organisations, they don’t have a set agenda like some charities that get money from you. We thought that next to experts, charities that have no agenda and aren’t getting your money for it [research], we’d trust them.”

**Traditionalist Sceptic, Glasgow**

**Campaigning organisations divide opinion**

Other institutions, for example **campaigning organisations, are more polarising.** While they are trusted by a slim majority of UK adults (53%) to provide accurate and truthful information, this trust varies considerably depending on demographics. For example, just two in five UK adults aged 65+ (39%) trust campaigning organisations, compared to three in five 16–24 year olds and 35–44 year olds (58% for both). Similarly, broadsheet newspaper readers (63%) are significantly more likely than those who do not regularly read newspapers (45%) to trust campaigning organisations. Finally, opinions differ significantly by segment – a clear majority of Idealistic Advocates (70%) trust them to provide accurate and truthful information about research findings, compared to just two in five Traditionalist Sceptics (40%) and just a third of those who are Disengaged and Disinterested (32%). These findings indicate that while campaigning organisations can be a powerful tool for communicating research findings among some groups, they are viewed with suspicion by a considerable portion of the population.
“To me campaigning organisations have a very strong view one way and will not see any other way. No matter what information is shown to the other side, they’re not going to listen to anyone else. So, for me they are very one-sided.”

Pragmatic Neutral, Newport

Trust in campaigning organisations to provide accurate information about research findings

<table>
<thead>
<tr>
<th>Organisation Type</th>
<th>Establishment Advocates</th>
<th>Idealistic Advocates</th>
<th>Pragmatic Neutrals</th>
<th>Traditionalist Sceptics</th>
<th>Disengaged and Disinterested</th>
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<tr>
<td>Trust in campaign organisations</td>
<td>63%</td>
<td>70%</td>
<td>52%</td>
<td>40%</td>
<td>32%</td>
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Q. To what extent, if at all, would you say that you trust each of the following types of organisation or people to provide accurate and truthful information about research findings or discoveries which affect you? Base: all Establishment Advocates (n=758), all Idealistic Advocates (n=661), all Pragmatic Neutrals (n=596), all Traditionalist Sceptics (n=513), all Disengaged and Disinterested (n=472).

Experts working for private companies are somewhat less trusted

Trust in experts working for private companies is twelve percentage points lower than in university academics (69% vs 81%). These experts are particularly distrusted by older UK adults – more than two in five aged 65+ (42%) and around a quarter of 45–54 year olds (25%) and 55–64 year olds (27%) say that they would not trust experts working for private companies to provide accurate and truthful information about new research and discoveries. UK adults who do not regularly read newspapers are also particularly likely to say they distrust experts working for private companies (29%), as are Traditionalist Sceptics (33%) and those in the Disengaged and Disinterested segment (31%).

Experts working for private companies were not frequently mentioned among the qualitative workshops, and they were rarely raised unprompted as a source of engaging with research. Where they were discussed it was apparent that the association with private funding was a factor which detracted from trustworthiness – whereas academics were often seen to be funded independently and having no bias towards their research outcomes, experts working for private companies were sometimes thought to be driven by their companies’ interests.

Perceptions of media vary significantly

Trust in the media to provide accurate and truthful information about research findings or discoveries that affect people differs according to the channel – broadcast media, for example, is trusted by two thirds of the UK public (65%), while print and digital media is trusted only by half of UK adults (49%). Similarly, twice as many UK adults (15% vs 7%) say they trust broadcast media a great deal as say the same of print or digital media. By far the least trusted sources to provide accurate and truthful...
information about research findings and discoveries that affect people are politicians (24% trust) and celebrities (19% trust).

Qualitative insight replicated the quantitative results, with broadcast media generally perceived to be most trustworthy. Among a few older adults, the radio was noted to be a trustworthy source of information, although few reasons in particular were given for trust in this medium. Tabloid newspapers were generally felt to portray research less accurately than broadsheets, and were frequently accused of “scaremongering”, particularly when reporting research into medical conditions or food and nutrition. Many individuals also noted that newspaper headlines often misrepresent research in favour of brevity and having a “shock factor”. Where this was the case, it was often acknowledged that the research itself might be robust but that the reporting of it, and in particular the headline, might be inaccurate.

“TV you would tend to trust, newspapers – especially tabloids – you tend not to trust as it often has “scaremongering” stories. The tabloid press is a bit more dramatic in the way they portray research.”

Traditionalist Sceptic, Glasgow

In most workshops, a few individuals drew a distinction between the media (broadcast, print and digital) and the other sources tested, mentioning that the media was a means through which they accessed research from other sources, rather than being a primary source of research. Among the more engaged groups for example, they mentioned coming across pieces of research reported in the media which they then followed up further by reading expert commentary on the issue or looking for the research publication itself. It is particularly important to note that academic research (usually the most trusted) was seen to be inaccessible by a majority of individuals, with the media operating as the only contact point between themselves and academics. Despite this, there was no evidence to suggest that an academic featured in a tabloid newspaper would be less trusted than an academic featured in a broadsheet newspaper. Broadly, the level of trust in academics appears to outweigh distrust in the medium through which the public come into contact with them.

“It is great that they [academics] do speak about research but they need to get into the mass media. I’m not going to go into the website of Cambridge University and read about the most recent research on economics. It needs to be picked up in the mass media.”

Establishment Advocate, Bristol

“We don’t have access to the academics’ research until we hear something in the media.”

Traditionalist Sceptic, Glasgow

Television presenters seen as accurate and trustworthy
Four in five UK adults (80%) say they trust prominent TV presenters to provide accurate and truthful information about research findings and discoveries. Given the fact that UK adults are particularly likely to engage with research on the TV (59%, for example, say that they watch science or nature documentaries at least monthly), this finding indicates that a successful way in which to engage the public with research findings would either be through university academics or researchers on the TV, or through well-known academic TV presenters who are already largely trusted and liked by UK adults. Indeed, in the qualitative research, David Attenborough and Brian Cox were often mentioned as examples of academics who feature on TV and are highly trusted as sources of information. This sense of trust appears to stem from the combination of their academic credentials and TV personality, making them more trusted than either unknown academics or TV presenters without an academic background.
We trust environment research because increasingly based on what you’re seeing from unbiased personalities that you’re seeing on the television. And then the stuff you see from Brian Cox and Dara O’Brien and what they’re doing with engineering and the physical sciences and astronomy. They’re doing it for the love of it.”

**Traditionalist Sceptic, Glasgow**

Communicating about research on TV via presenters and academics may also have the benefit of engaging the more disengaged segments (particularly Traditionalist Sceptics and Pragmatic Neutrals), as these groups are particularly likely to engage with research on TV.

**Politicians and celebrities least likely to be trusted**

Echoing the quantitative data, politicians and celebrities were least likely to be trusted in the qualitative workshops across all segments. Politicians in particular were frequently perceived to be guilty of manipulating research findings to suit their own purposes. With political campaigns around the EU referendum, US election, and the Scottish Referendum still in mind and many examples of statistics being used to support campaign objectives, the timings of this research may have influenced levels of distrust in politicians.

"Politicians are probably the biggest liars."

**Disengaged and Disinterested, Newport**

Despite this, there was a sense that both politicians and celebrities could offer useful insight into research topics when they were an expert in that field. For example, a celebrity who had spent time in a foreign country campaigning for human rights there would be trusted if speaking on that particular subject as their personal experience was seen to make them a more trusted source. One individual raised the example of Russell Brand speaking about drug addiction, stating that his personal experience made him qualified to speak with authority on this subject. Likewise, politicians were seen as more trustworthy if they were to be speaking about research in their specialist policy area – where this view was professed it tended to be among Establishment Advocates and Idealist Advocates.

“He [Russell Brand] has personal input on it [drug addiction], he’s not just a celebrity, he’s gone through it and has personal experience. It means more than just the suit in Government saying it.”

**Pragmatic Neutral, Newport**

**Variable trust in UK Government**

Reflecting the quantitative results, the UK Government was generally rated as one of the least trustworthy of the messengers tested, although opinion was split in some of the qualitative workshops. Where the Government was trusted, this tended to be through a sense of “blind faith” that they would do the right thing due to their position of authority. Among those who did not trust the Government to provide accurate research findings, this was often due to a conflation of UK Government with politicians, with similar assertions of distrust being levelled against the Government as a whole as were levelled against individuals working in politics. A few individuals explicitly noted that there should be a distinction drawn here and asserted a higher degree of trust in Government departments that are independent, than in politicians.

“There is a difference between Government and Government organisations though. The environment agency and the food standards agency I’m inclined to trust them, but the ministers who are in charge of them I don’t.”

**Establishment Advocate, Bristol**
Other reasons for distrust in the Government included a few specific examples of Government advice conflicting with other research they believed or their own first-hand experience.

“I did trust the Government but at one stage they said if you’re pregnant you can have 7 units of alcohol. Then I was pregnant and I was watching this programme on the BBC or possibly Channel 4. The lady [on the show] was pregnant and they scanned the baby as she was drinking alcohol and the effect was quite horrendous. The Government wouldn’t change the recommendations even though they had all of this scientific investigation to show that it does have an effect. Why would they still say you can have certain units of alcohol? They should say “Don’t touch it” because this is what can happen.”

Establishment Advocate, Bristol

It is important to note that in this example it was the individual’s experience portrayed on TV that had the greatest effect on the woman’s perceptions of trust, rather than the research that the documentary also featured. This highlights the ability of visual evidence gathered by the individual themselves to override research that may come from a source which might otherwise be trusted with authority.

A few individuals mentioned a higher level of trust in information received from local Government – such as through their local council – than from national Government. This may reflect the relative distrust of national politicians.

**Case Study – Traditionalist Sceptic, Glasgow**

This Traditionalist Sceptic took an active interest in seeking out new research regarding food and nutrition in order to improve her own health but also that of her children. She accessed this research through two main sources. Firstly, she reported hearing a lot about nutrition research by watching television and found this to be a highly-trusted source. Secondly, she mentioned that her children often bring resources about healthy eating home from school. These come from the local council which she says she does trust, but “blindly” with the assumption that as it comes from the Government is must be “at least 90% correct.”

“The kids come home from school with things about healthy eating or they’ll have a health week. Things that come from school tend to come from the council and therefore the Government. I kind of blindly trust the Government. I think it must be right or at least 90% correct.”

Traditionalist Sceptic, Glasgow

With two main motivations behind her interest in this research – improving her own health and that of her children – she did act upon what she read, making changes to the family’s diet in accordance with recommendations. She also noted that the research shared via school did increase her children’s interest in nutrition, raising their awareness about it and encouraging them to make healthy choices. Despite this, she did reserve an element of scepticism due to often seeing conflicting research in nutrition science, and therefore did not always follow new research she read.

“I’m conscious of what I’m eating because I want to avoid whatever I can – cancer, dementia – I want to be as healthy as I can for my children. And then I’m also trying to educate them to make their own choices.”

Traditionalist Sceptic, Glasgow
Trust is greatest in first-hand experience
Throughout the qualitative workshop discussions, it became clear that UK adults trust first-hand experience over research presented through most other channels, whether this is their own experience, a friend or family member’s, or something they see with their own eyes. For example, a number of individuals mentioned medical conditions which they had personally experienced (or a family member had) despite them having none of the predisposing lifestyle factors they had seen linked to the condition through reported research, or having originally been told by an “expert” such as their doctor that they did not have the condition. These experiences led to the perspective that personal experience is a “trump-all” source of information, having been more accurate for them than previously-trusted experts or research.

**Case Study – Traditionalist Sceptic, Glasgow**

This Traditionalist Sceptic initially visited his doctor thinking he had diabetes, but was told it was unlikely he had the disease and advised to come back in 6 months’ time. Convinced that he did in fact have the disease, he did his own research online, searching for the symptoms and comparing to his own experience. He revisited the doctor to reiterate his concerns and asked to be tested for diabetes. Following a series of tests, he was in fact diagnosed with the illness. This situation where personal experience contradicted medical expertise has led to a distrust in medical experts, exemplifying how personal experience is often reported to outweigh expert opinion among the public.

Similarly, where individuals have gathered evidence through their own eyes which contradicts research they have heard – even if this research is presented by a trusted source such as an academic – their first-hand perception is often held as the more trustworthy evidence. This personal source of visual evidence may come through seeing something in real life, on a TV documentary, or while browsing the internet.

“Has anyone actually gone on the moon? I haven’t seen anyone do that with my very own eyes. Unless I could go there myself [I wouldn’t trust it].”

*Disengaged and Disinterested, Newport*

For RCUK this emphasises that using visual content when communicating about research is likely to consolidate individuals trust in that research finding. By providing individuals with a sense of first-hand experience, visual evidence will help build trust in the research presented.

**TRUST IN RESEARCHERS ON SPECIFIC ISSUES**

The majority of UK adults (81%) say they would trust a researcher they saw on TV talking about research in general. Unsurprisingly, more polarising issues, such as the economy (61%), politicised issues such as Brexit or climate change (52%), and politics more broadly (46%), are the issues that UK adults are least likely to trust researchers on when they talk about them. It is important to note, however, that a significant minority of UK adults would still trust researchers talking about every issue tested (politics scores worst here at 46%), highlighting the overall high regard which researchers enjoy, even when discussing controversial topics.
While talking about research in general is the topic on which researchers are most likely to be trusted, there are still some groups of the public who are less willing to trust researchers talking about this. For example, one in six adults in both the C2 and DE social grades (17% for both) say they would not trust researchers talking about research in general, and around two in five UK adults who are opposed to the public funding of research (37%) say they would not trust researchers talking about this. Although this is a large proportion, a majority (57%) still say they would trust researchers in this instance, suggesting that even among the most hostile group they are likely to be given a fair hearing.

Interestingly, with the exception of more politicised issues, levels of trust in researchers on each issue tested do not differ significantly. For example, while four in five UK adults (79%) say they would trust researchers talking about the history of Britain, seven in ten (71%) say the same of health and diet. This suggests that generally, there are few topics that a large proportion of UK adults would not trust researchers on, and that the channel or source matters more than the topic in engaging people with research.

When it comes to talking about more politicised issues such as Brexit or climate change, UK adults are much more divided over whether or not they would trust researchers when talking about them. For politicised issues, those in the DE social grades are particularly unlikely to trust researchers (47%), as are adults aged 55–64 (49%) and 65+ (47%), those who oppose public funding of research (60%) and Traditionalist Sceptics (53%). There is also a clear difference in levels of trust between broadsheet readers (61%), tabloid readers (53%) and those who do not regularly read a newspaper (46%), indicating that people who are less knowledgeable about current affairs are also less trusting of research.
demonstrates the importance of increasing knowledge about research – doing this would be likely to increase support and interest in it.

A number of conditions are required for research to be trusted
Throughout discussion in the qualitative workshops about trusted research, it became clear that a number of conditions need to be fulfilled for a piece of research to be perceived as trustworthy. These principles apply across research areas and topics. Research is most trusted when:

- It is **conducted by independent academic researchers**. The UK public perceive academic researchers to be the most trustworthy source of information about research. This tends to stem from a belief that academic researchers conduct research without bias and "for the love of it", rather than having a vested interest in a particular outcome. Knowing an academic’s credentials tends to lend a greater sense of trust. One implication of this would be to ensure their qualifications feature after their name when featured in media coverage of research.

- The **public have some basic level of understanding of the subject matter**. This allows people to feel that they can evaluate research findings for themselves, rather than blindly trusting research. Such understanding may come through personal experience or through education. Where it is unlikely the public will have such experience, utilising the other sources of building trust will be vital.

- It is **funded by a body with minimal vested interest in the outcome**. Where research has been privately funded, there is usually scepticism over the credibility of the results. Ensuring peer-reviewed research is clearly marked as such and communicating about the peer-review process may mitigate against this.

- A **source is quoted for the research**. Among all segments, and particularly among the Establishment Advocates and Idealistic Advocates, research is more trusted when a source is given for the research, allowing individuals to follow this up and make their own judgments as to the validity of the findings. Promoting such referencing of research will help increase trust particularly among the most engaged segments.

While no one of these criteria is sufficient alone to guarantee trust in research, each contributes towards a trustworthy perception.

**PERCEPTIONS OF RESEARCH INTEGRITY**
As mentioned above, the public have a number of concerns over research integrity, particularly with regard to the funding of research. To further understand the public’s views on trust in research, a number of ethical scenarios were tested in the quantitative phase and explored further in the qualitative workshops.

**Private funding of research**
Almost two in five UK adults (37%) believe that, if private companies fund a piece of academic research, they always have the option of determining what the findings are. This notion is not well understood by UK adults – with the exception of Establishment Advocates, at least two in five UK adults in each segment say they don’t know whether this applies or not. Similarly, there is little difference by social grade, education level or type of newspaper readership in terms of whether or not people think this applies, implying that there is widespread lack of awareness of the role of private companies in funding research.
In the qualitative workshops, there was limited understanding of the role of business in funding research. In line with the quantitative survey findings, a number of individuals expressed concern that if a company was sponsoring research then the findings and reporting of the findings were more likely to be biased towards the outcome the company would desire.

"Some research is funded by companies that are looking for an outcome, for example tobacco companies. They sometimes do it and the information that they put out, they’re trying to mask some of the other information is out there. I think it’s about who funded the research and what the motive is behind it."

Establishment Advocate, Bristol

This concern spread wider than business, with a few individuals in most workshops mentioning that charities often have strong agendas and where research is funded by a charity the findings could be subject to bias. One such example given was research into the natural environment funded by Greenpeace. The assumption was that a charity with a strong campaigning mission would have a vested interest in determining a certain outcome, and therefore such research is less trustworthy when funded by any organisation with a clear agenda or campaign.

"Sometimes there will be a conflict of interest, sometimes your research will be funded by a company that has a vested interest in the outcome. There’s no such thing as research without a motive. Of course, there is a motive, that’s why it’s done in the first place…but the outcome shouldn’t be determined in advance."

Establishment Advocate, Sutton Coldfield

More than half of the UK public (56%) say that research organisations using public money should sometimes work with private companies on projects as they can provide significant value. Around three in ten (28%) do not believe that publicly-funded research organisations should ever work with private companies on projects as this will always impact on the independence of the research.

Q. As far as you are aware, does each of the following apply or not apply to academic research in the UK? Base: UK adults (n=3,000)

![Bar chart showing responses to the question]

Opinions of independence safeguards

It is possible to put safeguards in place to ensure that research funded by private companies is impartial and objective

52%

It is not possible to put safeguards in place to ensure that research funded by private companies is impartial and objective

28%

Q. The UK Government allocates money to a number of different organisations which they then use to invest in and conduct research. When thinking about the public funding of research, which of the following statements come closer to your opinion? Base: UK adults (n=3,000)
The proportion of those who do not believe publicly-funded research organisations should ever work with private companies on projects is consistent across segments (around three in ten for all), but the proportion who do believe research organisations should sometimes work with private companies does vary. For example, around two thirds of Establishment Advocates (64%) agree with this, compared to less than three in five Traditionalist Sceptics (57%). Those in the Disengaged and Disinterested segment are least likely to agree (33%), but this is mainly driven by a large proportion who say don’t know (37%).

These findings suggest that a significant portion of the public support some private involvement in research, as long as it is couched in terms that highlight the value (i.e. funding) it can offer.

These conclusions are supported by the qualitative findings. Generally, participants were sceptical about private funding for research when first considering the issue, raising concerns over potential for biased reporting of the results to align with the sponsor’s interests (as previously discussed). However, where these perceptions were probed in more detail a number of individuals believed that extensive amounts of research are funded privately and this is necessary to ensure sufficient funds for research. For example, a few Idealist Advocates stated that a lot of research in engineering and the physical sciences is funded by private companies, and this has brought major technological advancements to everyday life.

“A lot of this research is carried out by private companies… The end product is often for sale, it is about profit-making.”

Idealist Advocate, Bristol

As above, around half of UK adults (52%) say that it is possible to put safeguards in place to ensure that research funded by private companies is impartial and objective, while three in ten (28%) disagree.

### Opinions of independence safeguards

<table>
<thead>
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<th>It is possible to put safeguards in place to ensure that research funded by private companies is impartial and objective</th>
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Q. The UK Government allocates money to a number of different organisations which they then use to invest in and conduct research. When thinking about the public funding of research, which of the following statements come closer to your opinion? Base: UK adults (n=3,000)

Traditionalist Sceptics are the segment by far the most likely to think that it is not possible to put safeguards in place to ensure research funded by private companies is impartial – 38% think this, compared to around a quarter of all other segments.

These findings suggest that overall, around three in ten UK adults are opposed to the idea of private companies being involved in research funding at all, while half are generally happy with the principle. There is a further fifth who do not appear to have necessarily given the concept much thought, but are likely to be open to being persuaded of the benefits of private involvement in research.

### Lack of distinction between types of research

Throughout discussion in the qualitative workshops it was clear that the public rarely distinguish between publicly funded and privately funded research or between academic and non-academic
research without prompting. This means that the reputation of RCUK-funded research is bound up with the reputation of "research" as understood in its broadest sense by the UK public.

This presents a challenge for RCUK which can be met in two ways. Firstly, RCUK could take steps to distinguish the research it funds more clearly from other academic research, alongside taking steps to build RCUK’s reputation for funding high quality research. This may have greatest cut-through among the more engaged segments who already have some knowledge of the research landscape, but could have limited effect on those with low engagement with research. Alternatively, RCUK could aim to build the reputation of research more broadly, without drawing such distinctions between RCUK-funded research and other research. Whichever strategy is adopted, one way to build the reputation of academic research funded by RCUK would be to communicate about the peer-review process.

Understanding of peer-review
While half of UK adults (49%) correctly think that all publicly-funded research is peer-reviewed before it is published to ensure that it is high quality, more than a third (36%) don’t know if this is the case, and a further 15% do not think that peer-reviews are undertaken before publication. The youngest age group (16–24 year olds) are particularly likely to say that peer-review takes place before research is published (54%), which may be down to the fact a large proportion of this group is currently at university or has recently attended, meaning they are likely to be more familiar with the concept than average. However, while university graduates are less likely than non-graduates to say that they don’t know if this is the case or not (31% vs 40% respectively), it is still important to note that peer-review does not appear to be a well-known practice among the UK public.

Similarly, around two in five UK adults (37%) think that researchers sometimes just publish new discoveries without the research being reviewed by a peer, while a further third (35%) say they don’t know whether this applies or not. Just three in ten (28%) say they don’t think this is the case – the fact that more people gave an incorrect answer than a correct one implies that there is widespread misunderstanding and that highlighting the process by which research is published would be beneficial for increasing engagement.

Unprompted awareness of peer-review was generally low in the workshops with the exception of Establishment Advocates, students, and those working in research or using research professionally.
When peer-review was discussed and explained, the public were **broadly positive to it as a way to minimise bias** in research, particularly if used to assess research that had been privately funded. Very few individuals raised questions over the peer-review process or questioned its validity – among the vast majority of individuals it was seen as a mark of quality research.

“At a higher level, there are scientific journals which are reputable because they have peer review – The Lancet for example.”

**Establishment Advocate, Bristol**

“Academic research gets tested by different people in the group who have a different opinion.”

**Traditionalist Sceptic, Glasgow**

Highlighting information about how research is conducted, particularly the ethical safeguards that are in place to make sure that research is independent and robust, would go some way to dispelling myths that people believe about research, as well as potentially increasing interest and engagement. While many individuals’ concerns centre around privately funded research, **there is a lack of unprompted distinction between research that is publicly and privately funded.** This means it will be important to **communicate the safeguards in place for publicly funded research** to avoid it being subject to the scepticism expressed over private funding.
ATTITUDES TOWARDS PUBLIC AND PRIVATELY FUNDING OF RESEARCH
ATTITUDES TOWARDS PUBLIC FUNDING OF RESEARCH

The source of funding for research studies was frequently mentioned unprompted in the qualitative research as a factor affecting trust in research. This chapter summarises the insights gathered in the workshops and during the quantitative survey, covering the extent of public support for research being publicly funded and the impact publicly-funded research is felt to have on people’s lives.

Summary

✓ The British public are generally supportive of public money being used to fund research. Support appears highest when it is targeted towards medical research, or other research they perceive to bring tangible benefits to society.

✓ UK adults are more likely to say that the UK Government spends about the right amount or too little money on research, than that it spends too much.

✓ Three quarters of the British public (75%) believe that public funding of research benefits them, their family or their friends. This is a positive finding and may go some way to explaining the high levels of support for public funding.

✓ Overall, there is a slight preference for publicly-funded research always having a defined social or economic objective, rather than simply being “research for research’s sake” – although support for the latter does tend to increase in line with higher research capital. Opinions are generally split about the extent to which risks should be taken with publicly-funded research, with people from all backgrounds tending not to have strong opinions and seeing both sides of the argument.

Implications

✓ Despite a high proportion of the public saying that public funding of research benefits them, their family or friends, it was evident in the qualitative research that there is further appetite to hear about research with “real-world impact”. Highlighting how publicly funded research impacts people’s day-to-day lives should continue to be a high priority in communications. In particular, highlighting how public funding has helped deliver major medical breakthroughs.

✓ More widely, it is generally optimal to emphasise the social and economic problems new research is trying to solve, although over the long term, support for research for research’s sake may improve if engagement with research increases. Given attitudes towards risk are relatively soft, there may be scope to influence public opinion in this area.
SUPPORT FOR PUBLIC FUNDING

The vast majority of the UK public (84%) say that they support public money being used to fund research, while less than one in ten (8%) oppose. A further 8% say that they don’t know whether they support or oppose it.

Support for public funding of research increases with age – for example, while 77% of 16–24 year olds support it, almost all of those aged 65+ (93%) do. This is in part driven by the fact that younger people are more likely to say don’t know in response to this question (11%), but it is a noteworthy trend nonetheless, especially considering twice as many 16–24 year olds (12%) as those aged 65+ (6%) oppose it. While support for public funding of research is high across all social grades (at least 80% support), the extent of support does differ. For example, while almost all ABs (89%) support public funding, this support is slightly weaker among DEs (80%).

At least four in five members of every segment report support for public funding of research, with the exception of the Disengaged and Disinterested segment (60%). Indeed, more than a fifth of this segment (22%) say they don’t know, indicating that this may simply be an issue that a significant minority have not given much thought to, rather than that they are opposed to the public funding of research per se.
Current spending on research

After being told how much money is spent by the Government on research and development per year (£160 per person), the plurality (43%) of UK adults say that this is about the right amount, while three in ten (31%) think this is too little, and 13% too much.

These findings indicate that when a per person figure for Government spending on research is given, the vast majority are comfortable with the current spend or would be happy for the Government to spend more on research and development. Men (34%) are slightly more likely than women (28%) to say that they think £160 per person per year is too little, although this is mainly driven by the fact that women are more likely than men to say that they don’t know (15% vs 10%). Using this figure when communicating research is likely to have a positive impact on UK adults’ overall opinion of publicly-funded research. This may be down to the fact that this figure is much easier to understand than the overall one of several billion pounds, as people can easily compare it to their own spending.
Impact of research
From the qualitative research, it emerged that people are most positive towards the public funding of research when there is clear potential for a large proportion of society to gain from it. For example, public funding of medical research was strongly supported as the findings could result in new medical treatments which may benefit a large proportion of people. In contrast, public funding of research in arts and humanities or economics and the social sciences was less well-supported – these were typically seen as “nice-to-have” areas of research rather than bringing about significant improvements to people’s lives. Similarly, funding for research into space was often seen as less valuable because the topic was deemed interesting as opposed to important, and less likely to offer positive impacts for the majority of the population, and therefore should not a priority.

“I think medical research should be funded by the Government because we pay taxes. They [the Government] are not going to get anything out of it whatever the outcome. It’s not going to make a difference if we get A or B from the results.”

Traditionalist Sceptic, Sutton Coldfield

Support for public funding of social sciences research was also tested through showing a video explaining social science methods. When considering specific examples of social sciences research – such as how employment and long-term health are linked – people were more positive towards public funding of the discipline and many specifically mentioned their desire to see more examples of the real-world impact of research. This is a key point: the public want to see real-life examples of the outcomes of research. It is overwhelmingly clear that individuals are most interested in research which is relevant to them and could have an impact on their life. Ensuring that the public are presented with examples of publicly funded research which has brought wide-scale benefits to society would therefore be prudent when communicating about public funding.

PERCEIVED BENEFIT OF RESEARCH TO ORDINARY PEOPLE
Three quarters of the UK public (75%) agree that public funding of research benefits them, their family or their friends. However, those who agree with this are twice as likely to say they tend to agree than strongly agree (50% vs 26%). The qualitative research suggests that benefits to ordinary people are most likely to be felt from medical research. A majority of individuals mentioned research in relation to a medical condition that they themselves had suffered from, or a friend / family member had.

Perceptions of the benefits of research to ordinary people

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Tend to agree</th>
<th>Tend to disagree</th>
<th>Strongly disagree</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td>50%</td>
<td>11%</td>
<td>3%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Q. To what extent do you agree or disagree that public funding of research benefits you or your family and friends? Base: UK adults (n=3,000)

---

3 https://www.youtube.com/watch?v=BiLj35g_cAU&feature=youtu.be
There is no difference in opinion based on whether or not people live in urban or rural areas (75% for both), although social class is a delineating factor – four in five ABs (81%) agree that research benefits them and their family or friends, compared to seven in ten DEs (69%).

UK adults who do not believe that research benefits them, their family or friends are most likely to say this is because they don’t know enough about it (40%), followed by the feeling that the money would be better spent on other things (36%). Both Traditionalist Sceptics (46%) and Pragmatic Neutrals (45%) are particularly likely to say they don’t know enough about it, demonstrating a need for basic information about what research entails, the different types of research that are conducted, and the impact that it has. This last point is crucial – when communicating with the UK public about research, **emphasising the benefits it brings or could bring** to them directly is most likely to resonate with them and encourage their interest.

**Reasons for believing research does not benefit ordinary people**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't know enough about it</td>
<td>40%</td>
</tr>
<tr>
<td>The money would be better spent on other things</td>
<td>36%</td>
</tr>
<tr>
<td>It has no relation to my life</td>
<td>29%</td>
</tr>
<tr>
<td>New discoveries are mostly for the benefit of other people</td>
<td>28%</td>
</tr>
<tr>
<td>Research just tends to create new problems that weren't there in the first place</td>
<td>19%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
<tr>
<td>Don't know</td>
<td>3%</td>
</tr>
</tbody>
</table>

Q. Why would you say that the public funding of research does not benefit yourself, your friends or family?  
Base: UK adults who do not agree that public funding of research benefits them or their family and friends (n=416)

**PERCEIVED IMPACT OF ACADEMIC RESEARCH**

Within a paired statements grid, UK adults were also asked whether they believe that research conducted by academics has a meaningful impact on the lives of normal people. Results for this were mixed – while half of UK adults (51%) do think that research conducted by academics tends to have a meaningful impact on the lives of normal people, three in ten (29%) do not think this is the case. The difference in wording is likely to be a factor in explaining the differing results compared to the previous question – while ‘public funding of research’ may have brought to mind medical or engineering developments, the phrase ‘conducted by academics’ may resonate less well as the majority of UK adults do not come into contact with academics. Indeed, it was raised in the qualitative research that many individuals feel that they do not have access to academics and have to rely on media outlets to interpret academic research for them. Where this is the perception, it is likely that individuals feel there is a gap between academic research and themselves.
“Very few of us are actually going to be using peer-reviewed articles to make our decisions. We’re very much second-hand consumers of research.”

Establishment Advocate, Sutton Coldfield

Finding ways to narrow the perceived gap between academic research and the lives of normal people – such as by academic researchers presenting in TV programmes – would likely bring benefits to the public’s perceptions of academic research.

Research conducted by academics tends to have a meaningful impact on the lives of normal people

- 51%
- 29%

Q. Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair. Base: UK adults (n=3,000)

**ATTITUDES TOWARDS RISK-TAKING IN PUBLICLY-FUNDED RESEARCH**

The extent to which specific outcomes should be pursued in publicly funded research is also an area of debate, with the role of “research for research’s sake” particularly pertinent. Generally, UK adults are more likely to say that public money should only be used to try and solve a defined economic or social problem (49%) than that research just to discover things we did not know before is a good use of public money (37%), highlighting that more people think it is important for publicly funded research to have a goal than for it to be conducted in the hope of finding new things. This view is particularly prevalent among Pragmatic Neutrals (60% think this), a crucial segment of the population as they are not particularly opposed to the idea of research – rather, they are very concerned that, if it is going to be conducted using public money, it needs to have a clear and defined purpose. They could be defined as ‘floating voters’ when it comes to their research attitudes, and as they could be relatively easily turned in to advocates, focusing on the defined outcomes research has may be one way of ensuring support among this group.

Opinions of public funding of research

- Conducting research just to discover new things that we did not know before is a good use of public money - 37%
- Public money should only be spent on research trying to solve a defined social or economic problem - 49%

Q. The UK Government allocates money to a number of different organisations which they then use to invest in and conduct research. When thinking about the public funding of research, which of the following statements come closer to your opinion? Base: UK adults (n=3,000)
It also generally seems that support for “research for research’s sake” increases with the more engaged someone is with research.

- Half (52%) of those with no research capital say that they don’t know whether publicly funded research should always attempt to solve a defined social or economic problem or whether it should be conducted to learn new things, reflecting that they may not have enough engagement and awareness to have an opinion.

- However, among those with low levels of research capital, twice as many say that research should have a defined outcome (54%) as say conducting research just to discover new things is a good use of public money (27%).

- Opinions are then divided among those with moderate levels of research capital – 50% say research should have a defined outcome, while 44% say conducting research just to discover new things is a good use of public money.

- And the majority of those with high levels of research capital support public money being on spent of research which simply discovers new things (57%, vs 38% who say it should always have a defined outcome).

This was a trend seen throughout the qualitative workshops too. The more engaged segments often – although not exclusively – cited the benefits of simply learning new things and would reference the importance of discoveries that people did not know they were looking for. The less engaged segments on the other hand tended not to reference such benefits, instead emphasising specific outcomes, such as medical cures, and suggesting that public money should be spent on research which would have a tangible impact – ideally on them or their families.

“I think you have to accept with research that any step is in the right direction.”

Idealistic Advocate, Belfast

“With research for research’s sake, you never know what it’s going to bring up. It could discover something with huge benefits. I sometimes think why spend money on space research? But there could be benefits to that which otherwise wouldn’t have happened.”

Establishment Advocate, Bristol

“All research is vital – but not necessarily to you.”

Traditionalist Sceptic, Sutton Coldfield

Overall, this suggests that while there is some support for “research for research’s sake”, when communicating with less engaged segments of the public, it may be beneficial to emphasise research with clear social and economic objectives.
Opinions are more mixed – and less easily segmented – when it comes to the extent risks should be taken with public money in order to deliver positive outcomes. Two in five UK adults (40%) say it should focus on research which could deliver major social or economic benefits, but might have a low chance of success, while a very similar proportion (39%) say that it should focus on research that has a high chance of success, even if the potential social or economic benefits are not as large.

![Opinions of public funding of research](image)

Q. The UK Government allocates money to a number of different organisations which they then use to invest in and conduct research. When thinking about the public funding of research, which of the following statements come closer to your opinion? Base: UK adults (n=3,000)

Opinions are on the whole are divided regardless of levels of engagement with research – although there is slight preference for risk taking among those with high levels of research capital (52% vs 40% who say public funding should focus on research with a high chance of success), as well as among Idealistic Advocates to a slightly greater extent (51% vs 32%).

The difficulty people have making the trade-off was seen regularly across the workshops, with participants often seeing both sides of the argument and struggling to come to a firm view themselves. Positive sentiment towards taking risks was expressed when prompted, with broad agreement that taking risks could be necessary to make the biggest breakthroughs. A number of individuals mentioned examples of research which they felt had progressed through taking risks: cancer treatments, child psychology and electricity were specifically mentioned.

However, there was also an awareness that trade-offs needed to be made in terms of public funding, and therefore, the larger the risk, the bigger the potential benefit should be in order to justify funding. Several respondents suggested “cost–benefit analysis by an independent accountant” should be undertaken in order to decide what gets funding, while others expressed similar sentiment in a less conscious way through referring to specific research areas and suggesting that it was appropriate to take greater risks there – for example in medical research given the potential benefits.

Generally, risk was not an area where people had especially strong views or levels of understanding however, particularly among the less engaged segments, and often views were positive towards it but without being particularly considered.

“Yes, you should take risks. Life is a risk.”

Traditionalist Sceptic, Glasgow

It also is worth noting that risk–taking with regard to research was rarely mentioned unprompted, suggesting it is not a key concern or front-of–mind consideration among the public. Nevertheless, the lack of consensus about the issue suggests that people can be persuaded if presented with a clear and convincing case.
OUTCOMES OF RESEARCH

Using a series of paired statements, the quantitative survey explored UK adults’ opinions and attitudes towards research and change in society more broadly. Paired statements are a useful way of testing both sides of a debate or question simultaneously, and to see, when respondents are pushed to make binary decisions, which side has greater cut-through. It allows RCUK to understand, broadly, what proportion of people sit on both sides of debates regarding research and research funding.

Benefits to the lives of normal people

A majority of UK adults (53%) say that new ideas and products developed by governments and corporations tend to bring benefits to the lives of normal people, while 28% say that they tend to make life worse, indicating that a slim majority are broadly positive about research and its impact, while a significant minority are more hesitant about this. Establishment Advocates (66%), members of the AB social grades (64%), broadsheet readers (64%), Idealistic Advocates (63%) and university graduates (61%) are all groups who are more positive than average about the impact of new ideas and products on normal people. On the other hand, opponents of public funding of research (46%), Traditionalist Sceptics (38%), adults aged 65+ (36%) and members of the DE social grades (36%) are particularly likely to think new ideas and products tend to have a more negative impact on normal people. With this negative feeling being held by a considerable proportion of some groups of the population, it is imperative to demonstrate clearly the link between ‘new ideas and products’ and the tangible benefits these can bring.

<table>
<thead>
<tr>
<th>New ideas and products developed by governments and corporations tend to bring benefits to the lives of normal people</th>
<th>53%</th>
</tr>
</thead>
<tbody>
<tr>
<td>New ideas and products developed by governments and corporations tend to make life worse or more complicated for normal people</td>
<td>28%</td>
</tr>
</tbody>
</table>

Q. Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair. Base: UK adults (n=3,000)

Change and new ideas

When considering change and new ideas more broadly, the picture looks similar. More than half (56%) of UK adults think that change and new ideas are usually a good thing for society, while a third (34%) say that they often feel the world is changing too quickly. This latter attitude is particularly felt by older UK adults (those aged 65+ (47%)), those in the DE social grades (44%) and Traditionalist Sceptics (42%).

<table>
<thead>
<tr>
<th>Change and new ideas are usually a good thing for society</th>
<th>56%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often feel like the world is changing too quickly</td>
<td>34%</td>
</tr>
</tbody>
</table>

Q. Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair. Base: UK adults (n=3,000)
Learning new things

Encouragingly, seven in ten UK adults (69%) say they enjoy learning new things even if that knowledge doesn’t necessarily have a use, while one in five (21%) say they tend to find learning things for the sake of it and without a purpose is pointless. The trend here in terms of demographics is similar to that seen for the other paired statements – Idealistic Advocates (83%) and Establishment Advocates (82%) are particularly likely to say they enjoy learning for its own sake, while just two in five (43%) adults in the Disengaged and Disinterested segment say this.

Q. Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair. Base: UK adults (n=3,000)
ATTITUDES TOWARDS AND ENGAGEMENT WITH DIFFERENT RESEARCH AREAS
ATTITUDES TOWARDS AND ENGAGEMENT WITH DIFFERENT RESEARCH AREAS

In addition to understanding the public’s perceptions of research in general, this study explored attitudes towards specific research areas covered by the Research Councils. This chapter illustrates reported levels of engagement, interest, trust and importance for future funding, and identifies the drivers of opinions.

Summary

✓ Combining quantitative and qualitative findings, medical research emerges as the area which UK adults are most interested in. From the qualitative evidence, it appears this stems from the fact that almost everyone has personal experience with a medical condition themselves or through a close friend or family member.

✓ This also reflects a broader tendency for people to be interested in research which they perceive to be directly relevant to them. Particle physics and astronomy tends to be seen as least relevant and therefore less interesting for example, as people perceive this to have little impact on their everyday life.

✓ There is a notable gap in the quantitative findings between people’s reported engagement and reported interest in each area of research, indicating scope for greater engagement with the public about research. The public most want to hear about high quality research, particularly on topics such as climate change or health, where there is already perceived to be a wealth of evidence, sometimes with conflicting findings.

✓ Medical research is by and large the highest priority for the public – it is considered the area that it is most important for the Government to invest in and improved medical treatments is overwhelmingly thought to be the most important outcome that research should deliver.

✓ After medicine, the most important perceived priorities for research vary significantly by segment. In particular, although reducing poverty around the world and providing information about how to be resilient against future risks such as climate change have the second and third highest average priority scores, they are also the most polarising of the potential outcomes, with the greatest variance in the priority that people give them.

Implications

✓ Medical research may provide a useful starting point to engage the UK public with research, especially for the least engaged segments.

✓ Highlighting the impact that research can have on individuals’ day-to-day lives is likely to generate the strongest support for public funding of research. Making explicit the links between academic research and real-world impact should be a priority.
ENGAGEMENT WITH RESEARCH

The UK public are most likely to say that they have seen, read or heard about research about the natural environment (54%), medicine (52%) and economics and society (47%) in the last month. UK adults are less likely to say they have actively engaged with research into subjects such as particle physics and astronomy in the past month (27%). The qualitative workshops illustrated that this is because the public see natural environment, medicine and economics & society as highly relevant to their daily life.

**Engagement with different areas of research**

- Natural environment: 54%
- Medicine: 52%
- Economics and society: 47%
- Bioscience: 38%
- Arts and humanities: 33%
- Engineering and physical sciences: 33%
- Particle physics and astronomy: 27%

Q. Have you actively seen, read or heard about research in any of the following areas in the last month? By actively seeing, reading or hearing we mean reading an article or book or listening to a TV or radio programme, or visiting a museum, gallery or conservation centre. Base: UK adults (n=3,000).

The types of research that the UK public engage with vary according to demographic differences.

- **Older UK adults (aged 65 and over)** are more likely than their younger counterparts to say that they have actively engaged in a majority of the research areas tested. For example, seven in ten (71%) of those aged 65 and over say they have actively engaged with medical research in the past month, compared to 44% of 25–34 year olds. In contrast, a third (35%) of 16–24 year olds report having actively engaged with particle physics and astronomy research in the past month, compared to only a quarter (27%) of 65+ year olds.

- **Those from higher social grades are more likely to say they have engaged with each of the research areas tested.** The difference is slightly more pronounced with engagement levels with research into the natural environment, where more than three in five (63%) of those from social grade AB say they have actively engaged with research on the natural environment in the past month, compared to around half of UK adults from all other social grades (55% of C1, 50% of C2 and 48% of DE).

- **Those who have attended university are more likely than those who have not to say they have actively engaged with each of the research topics tested.** This difference is clearer for research into arts and humanities: two in five UK adults (42%) who have attended university say they have actively engaged with this in the past month, compared to a quarter (26%) of those who are not university
educated. The **difference is less pronounced for medical research**, where three in five (58%) of those who are university educated say they have actively engaged with this, compared to around half (47%) of those who are not university educated.

- **UK adults who live in rural areas are more likely than those from urban areas to say they have actively engaged with natural environment research in the past month** (61% vs. 53%). There are no differences between rurality for other research topics.

- **Engagement with research topics also varies significantly according to the segmentation.** Established Advocates and Idealistic Advocates are significantly more likely than UK adults from all other segments to say that they have actively engaged with each research topic in the past month. This difference is most pronounced for research into particle physics and astronomy.

The qualitative workshops reflected these findings. While engagement with medical research was generally present across all segments including the least engaged, **engagement with research in other areas was most prevalent among Establishment Advocates and Idealist Advocates.** This was most noticeable for research areas which people saw as further removed from their daily life such as particle physics and astronomy, or bioscience. Individuals in these most engaged segments often used research or research skills in their professional life, or had a particular area of interest which they might have followed up on. For example, one Establishment Advocate who works as a history teacher reported regularly using education research to inform his teaching methods and actively seeks out research in this field.

> "I come across teaching research. That does make a difference to teachers in their day-to-day life. Looking at educational research does make a difference to what I do in the classroom."

**Establishment Advocate, Sutton Coldfield**

The **less engaged segments** (Pragmatic Neutrals, Traditionalist Sceptics and the Disengaged and Disinterested) tend to consume research passively, engaging with it when it features on television or on their social media feeds. Their levels of passive engagement with different topics of research (e.g. seeing or hearing about research) are therefore **likely to be determined by media coverage**, with engagement levels highest for research topics that are featured most often in broadcast media (their most common channel for accessing research).

> "I was watching TV research where they get people to test out products and get the facts and figures – Sensodyne and hair dye and things like that. I don’t really do social media so it’s just catching adverts like that."

**Disengaged and Disinterested, Newport**

**Active engagement** among these segments tended to emerge when they **had a personal interest in the research they passively came across.** For example, if they saw a research study featured on the news about a medical condition they have, they may have followed this up by finding related information on the internet or talking to friends and family about it. Ensuring that media content featuring research offers opportunities to follow up areas of interest (such as links to further articles or opportunities to share on social media) would help facilitate this further engagement.
“I saw a bit of research about ADHD medication and how it’s not really working. I saw it on Sky News a few weeks ago, and I was interested in it because I have ADD myself.”

**INTEREST IN DIFFERENT AREAS OF RESEARCH**

UK adults are more likely to say they are interested in each of the research topics tested than they are to report they have actively engaged with them in the past month. At least half of UK adults say they are interested in research into each of the research topics tested (50% – 77%). UK adults are most likely to say that they are interested in research into medicine (77%) and the natural environment (76%) with the proportion reporting interest being significantly lower for engineering and physical science (52%) and particle physics and astronomy (50%).

These relative rankings of research areas by interest were broadly replicated in the qualitative workshops. It became apparent through qualitative discussion that how relevant a research area is perceived to be for every-day life usually drives interest levels. Almost all participants had experience with medical research through a medical condition either themselves or a close friend or family member had contracted. This was often the trigger for an increased interest in medical research. Research into

Q. How interested, if at all, would you say you are about research in each of the following areas? Base: UK adults (n=3,000)

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**Interest in different areas of research**

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Very interested</th>
<th>Fairly interested</th>
<th>Not very interested</th>
<th>Not at all interested</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>32%</td>
<td>45%</td>
<td>14%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Natural environment</td>
<td>31%</td>
<td>45%</td>
<td>15%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Economics and society</td>
<td>25%</td>
<td>42%</td>
<td>21%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Bioscience</td>
<td>19%</td>
<td>41%</td>
<td>25%</td>
<td>13%</td>
<td>2%</td>
</tr>
<tr>
<td>Arts and humanities</td>
<td>19%</td>
<td>38%</td>
<td>28%</td>
<td>14%</td>
<td>2%</td>
</tr>
<tr>
<td>Engineering and physical sciences</td>
<td>18%</td>
<td>34%</td>
<td>31%</td>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>Particle physics and astronomy</td>
<td>16%</td>
<td>34%</td>
<td>28%</td>
<td>20%</td>
<td>2%</td>
</tr>
</tbody>
</table>
the natural environment was often highly rated for interest in the qualitative workshops due to the potential impact climate change was perceived to have on people’s lives. It was seen as an important area for future research and could bring benefits to individuals themselves. Despite this, however, a number of individuals mentioned a lessened degree of interest in natural environment research due to the perceived quantity of conflicting evidence. Confusing information or mixed messages tends to decrease interest, as people report not knowing what to believe.

There are also demographic differences in interest in research topics, similar to demographic differences described for engagement with research topics.

- Interest in research topics varies according to gender with men being more likely to say they are interested in engineering and physical science (65% vs. 39%) and physics and astronomy (56% vs. 45%) whilst women say they are more interested in arts and humanities (60% vs. 52%), bioscience (62% vs. 58%) and medicine (83% vs. 71%).

- Younger UK adults are more likely than their older counterparts to say that they are interested in research into bioscience (63% of 16–24 year olds say this vs. 50% of 65+ year olds) and particle physics and astronomy (58% vs. 35% respectively). Conversely, older UK adults are more likely to say that they are interested in research into medicine (84% of 65+ year olds say this vs. 74% of 16–24 year olds).

- Those in social grade AB are more likely than those from all other social grades to say that they are interested in all research topics tested. This difference is most pronounced with interest into economics and society, which three quarters (76%) of those from social grade AB say they are interested in it, compared to around three in five (58%) of those from social grade DE.

- Those who have been to university are more likely than those who have not to say that they are interested in each of the research topics tested. For example, 65% of university educated UK adults say they are interested in arts and humanities research, compared to 49% of those who are not university educated.

The segmentation also highlights the differences in interest in research. Establishment Advocates and Idealistic Advocates are more likely to be interested in each of the research topics tested, whilst the Disengaged and Disinterested are the least likely to be interested in each. For example, at least seven in ten Established Advocates (75%) and Idealistic Advocates (70%) say they are interested in arts and humanities research, compared to around a third (36%) of the Disengaged and Disinterested segment. This compares to around half of Pragmatic Neutrals (47%) and Traditionalist Sceptics (46%) saying they would be interested in such research.

The qualitative workshops echoed these findings and established what drives these views. Arts and humanities research was generally perceived to be of low interest among the less engaged segments (Pragmatic Neutrals, Traditionalist Sceptics and the Disengaged and Disinterested). Among Establishment Advocates and Idealist Advocates there were a few individuals in each workshop who ranked arts and humanities at a high level of interest, either because it was relevant to their work (e.g. a history teacher ranked it first for interest) or because of a personal interest (for example, in their family history).

“I have been looking into research to do with ADHD and Autism because I have nephews and cousins with ADHD and Autism…I also work part-time in a hairdressers
where we deal with children with Autism. It’s quite helpful because we’re able to see each child differently and see how our approaches can work with them… I think it’s nice to do the research to understand the different rates [of different types of Autism] and understand what the positives and negative are and how they’re approached. The research in that interests me.”

**Idealistic Advocate, Belfast**

A few individuals drew out a distinction between interest and importance unprompted within the groups. In each workshop, a few Establishment Advocates reported finding a particular area – such as engineering and physical sciences – relatively uninteresting, yet also recognised it would be highly important for funding to be invested there as important technological developments may come out of that field. This point was most often made for engineering and physical sciences and particle physics and astronomy. While individuals may not directly engage with research published in these areas, they are likely to support funding of them.

"Maybe it’s because we’re upset about flooding in Bangladesh, or maybe because we think it will impact polar bears and the arctic. I don’t think there’s any arguing that farming research matters. If we have a bigger population in the world, we’ll need more food. Is it interesting? No. Is it important? Yes.”

**Establishment Advocate, Bristol**

![Bar chart](chart.png)

Q. How interested, if at all, would you say you are about research in each of the following areas? Base: UK adults (n=3,000)

Whilst Pragmatic Neutrals and Traditionalist Sceptics are less likely to say they are interested in each research topic, the topics they are most likely to say they are interested in are those perceived to be more closely connected to their lives. For example, the differences between segments are less pronounced in interest towards medical research. Whilst around nine in ten Establishment Advocates (89%) and Idealistic Advocates (86%) say they are interested, three quarters of Pragmatic Neutrals (76%) and Traditionalistic Sceptics (76%) say the same. It is important to note that even half (52%) of the Disengaged and Disinterested say they are interested, suggesting this is a topic that it would be relatively easy to engage the UK public on.
The qualitative workshops supported this, with medical research mentioned in all workshop groups as an area of great interest and importance. While for most individuals this stemmed from a personal connection with a medical condition (either their own or that of a close friend or family member) even among those who had no such strong connection they held medical research to be one of the most interesting, appreciating a relevance to everyone’s life or a belief that at some point in the future they would likely need medical treatment.

“It was rare disease day yesterday and I tend to be interested in science and medical things, so I just had a Google of those.”

Idealistic Advocate, Belfast

“Because I work in IT and I sit at my computer all day, I was looking up health risks associated with it and things you can do to combat those risks to improve your health in future.”

Idealistic Advocate, Belfast

While the quantitative data indicates that just half of the Disengaged and Disinterested segment report an interest in medical research (52%), this is still the area they are most likely to report interest in (alongside Natural Environment research – also 52%). In the qualitative workshops, the Disengaged and Disinterested segment gravitated towards talking about medical research, indicating a slightly higher interest level than perhaps is suggested by the quantitative data. However, in practice they often equated medical research with seeing a doctor or Googling a medical condition in the qualitative workshops rather than academic research. Nevertheless, it remains the area of research most likely to engage this least engaged segment.
DEMAND FOR ADDITIONAL INFORMATION

UK adults are significantly more likely to say they are interested in each research topic, than to report currently engaging with each.

There are fairly consistent gaps between the research topics that UK adults are currently engaging with and are interested in. This suggests that those topics that people currently engage with the most are those that they want to engage more with in the future and hear more about. The difference is largest for medicine (25 percentage points) suggesting that this is the research topic that UK adults are most interested in hearing more about. The gap is smallest for research into engineering and physical sciences (19 percentage points), suggesting this is the topic that there is the least demand for additional information on. However, it is worth noting, that the percentage point difference is similar for each research topic, suggesting openness for more information among UK adults across a wide variety of research topics.

This was borne out to some extent in the qualitative phase too, but it became clear that there are caveats to individuals’ levels of interest. Firstly, there is a sense that a plethora of research is available in the public domain, with people frequently mentioning the sheer quantity of evidence that is reported in the media. Particular examples of this included food and nutrition science, where the public reported seeing new research which is often contradictory to existing paradigms. In some cases, where it is felt there is a lot of contradictory evidence on a research topic, engagement appears to drop, as people report simply not knowing what to read or believe.

“I don’t want opinions. I’ve got my own opinions. I just want the truth.”

Traditionalist Sceptic, Sutton Coldfield
Secondly, it is apparent that the public want more quality research and not research which they feel is biased, misrepresented or contradictory. This detail was particularly stark among Establishment Advocates when asked to name a research area they would like to hear more about over the coming year. While the topics listed where wide-ranging from outer space to medical cures, the word “quality” was frequently stated. Given that academic, peer-reviewed research consistently emerged as the most trusted form of research and the form of research the public are least likely to feel they have access to, the dissemination of such academic research into the public domain should be a priority.

TRUST IN DIFFERENT RESEARCH AREAS
As previously discussed, trust in research tends to depend on a number of criteria: source of research funding; involvement of academics; background understanding; and cited sources. These criteria were important to participants in the qualitative workshops regardless of the research topic being discussed. However, some interesting distinctions emerged when considering trust in each research area. Indeed, some topics which were deemed most trustworthy by some groups were seen to be least trustworthy by others. This variation appeared to be due to personal interests rather than segment differences, and the most noteworthy variations in views are drawn out below.

Particle physics and astronomy
Particle physics and astronomy was one research area that divided opinion in the qualitative workshops. Approximately half of the participants felt research in this area would be highly trustworthy. This was often attributed to a perception that research in this area is usually carried out by expert academic researchers and funded through universities without hidden agendas or a clearly desired outcome. However, among those who trusted particle physics and astronomy, a significant proportion felt that their trust had no strong foundation, given they had no means to evaluate the validity of research conclusions, and therefore thought they were putting “blind faith” in it and had no option but to trust it.

“You have to take a third person blind faith in that [particle physics and astronomy]”
Establishment Advocate, Sutton Coldfield

“Has anyone actually gone on the moon? I haven’t seen anyone do that with my very own eyes. Unless I could go there myself [I wouldn’t trust it].”
Disengaged and Disinterested, Newport

The other half of participants tended to express a low level of trust in particle physics and astronomy. Whereas with medical research they may have personal experience which confirms or contradicts a study’s conclusions (and as previously noted, personal experience is highly trusted), lack of perceptible experience of particle physics and astronomy means they have no reference points to evaluate research in this area. This lack of personal experience meant they ranked particle physics and astronomy as one of the least trustworthy areas of research.

“The more I know about the topic the more I would trust it, I know where to go and therefore would trust the source.”
Disengaged and Disinterested, Glasgow

Medical research
Medical research also divided opinion, but for different reasons. Among those who rated it as highly trustworthy this tended to be due to a perception that it was carried out by experts in their field and that a great deal of importance rests on “getting it right”. On the other hand, there was a notable sentiment that people trusted in medical research because they wanted it to be true and to a lesser extent because they felt they had no choice but to trust it. Although this view was most prominent among Traditionalist
Sceptics and Pragmatic Neutrals, a number of Establishment Advocates also subscribed to this sentiment. Among those who said they did not trust medical research, reasons often included funding for medical trials coming from pharmaceutical companies with vested interests in the outcomes. Pharmaceutical companies – and by extension the funding they provide – were generally distrusted by almost all individuals. It is important to distinguish publicly funded research in medical sciences from that funded privately in order to avoid this being tainted by the same brush.

“When it comes to medicine you have to trust it, you don’t have a choice.”

Traditionalist Sceptic, Glasgow

Engineering and Physical Sciences
In comparison, engineering and physical sciences received mid to high rankings of trust. This was usually attributed to the perception that it can be clearly seen whether products developed from this research. For example, a number of individuals mentioned that it is quite clear whether a building stands or falls, and this ability to see the results led to a higher ranking of trust than particle physics and astronomy for many individuals.

“Engineering I think is quite trustworthy – the proof is in the pudding.”

Disengaged and Disinterested, Newport

Economics and society
Economics and society was one area which was consistently less trusted across the segments. Examples given in support of this view included statistics being manipulated to support campaigns and inaccurate polling predicting recent referendum results. In the former case, it is expected that research in this area is commissioned by those with strong interests or agendas. Participants rarely differentiated between independent research conducted in this area, the application of such research to support political campaigns or agendas, or the politicians quoting the research. As such, due to the low levels of trust in politicians and research used for political purposes, any research produced within the field of economics and society was generally less trusted.

“It is a controversial topic and it is hard to trust one source ... as they all push their own agenda.”

Idealistic Advocate, Belfast

“The very last one [ranked for trust] was economics and society. That’s just a mess as an area of research. There are so many different competing arguments there and every one of them seems to be agenda led. They all have an agenda and they’re trying to force it down your throat. A lot of the time the research can be shown up later on as having a false premise or a flawed premise.”

Traditionalist Sceptic, Glasgow

IMPORTANCE OF RESEARCH AREAS
While personal interest and engagement with different research areas are correlated, it emerged that people were often broadly supportive of research being conducted in an area, even if they were not interested in or engaged with that particular area themselves. In line with this, for each of the seven areas tested a majority of the public report that it is important for the Government to fund them. The comparative importance of public funding of each area does reflect the order which people are individually most interested in, with 92% of the public saying that it is important for the Government to
fund research in medicine, including three quarters who think it very important (74%). After this, research into the natural environment and economics and society are perceived as important by the largest proportion of people (both 86%) – with just more than half thinking it very important (55% and 52% respectively).

There are a number of differences between the segments when it comes to perceptions of the importance of funding the different research areas.

Across the seven different areas, the Disengaged and Disinterested segment are consistently far less likely than other segments to say each area is important (for example, 51% say funding research into bioscience is important, compared to 84% of Pragmatic Neutrals and 97% of Establishment Advocates). Even on medical research, only 62% say it is important, compared to 95%+ for all the other segments.

Among the other groups, however, the difference in attitudes between the “advocate” segments and the more mixed segments (Pragmatic Neutrals and Traditionalist Sceptics) tend to vary according to the research area:

Q. How important, if at all, do you think it is that the UK Government funds research in each of the following areas? Base: UK adults (n=3,000)
There is very little variation when it comes to medical research, with more than 95% of all four segments saying that it is important.

There is also little difference in the perceived importance of research about the natural environment. While Traditionalist Sceptics rate it slightly less highly (83%), reflecting their more cautious attitude towards climate change, more than 90% of the three more engaged segments do classify it as important, even if they are not personally interested in it.

"Maybe it's because we're upset about flooding in Bangladesh, or maybe because we think it will impact polar bears and the arctic. I don't think there's any arguing that farming research matters. If we have a bigger population in the world, we'll need more food. Is it interesting? No. Is it important? Yes."

Establishment Advocate, Sutton Coldfield

The difference in perceived importance between different segments increases to around ten percentage points for research into economics and society (96% of Idealistic Advocates vs 86% of Traditionalist Sceptics), and to around 15–20 points for bioscience (97% of Establishment Advocates vs 82% of Traditionalist Sceptics) and engineering and physical sciences (94% of Establishment Advocates vs 74% Pragmatic Neutrals).

The difference in perceived importance between the more and less engaged segments is greatest for the research areas perceived to be of lower priority overall – around thirty points for research into the arts and humanities and particle physics and astrology. For arts and humanities, the proportion of Establishment and Idealistic Advocates saying it is important for the Government to fund this falls from more than nine in ten for the other research areas (90–99%) by about twenty percentage points to just more than seven in ten (78% and 73% respectively). The same is the case for particle physics and astronomy (81% and 73%). For the less engaged segments, the fall is from around nine in ten for other areas like medicine, to around half for arts and humanities (52% of Pragmatic Neutrals and 54% of Traditionalist Sceptics) and particle physics and astrology (51% of Pragmatic Neutrals and 53% of Traditionalist Sceptics) – a fall of around forty percentage points.

This suggests that those in the middle of the spectrum (i.e. those neither the most nor least engaged) are in turn the most variable in their perceptions of the importance of different research areas, expressing a greater range of opinions towards the different topics than the most engaged and completely disengaged do.

In line with the above, the greater number of research areas people have come across in their day-to-day lives, the greater their support for Government investment in each of the different areas is – although again the extent of this does depend slightly on the research area. For example:

- 84% of people who have come across information about six or seven of the research areas in the past month think funding arts and humanities research is important – falling to:
- 67% of those who have come across four or five research areas;
- 57% of those who have come across between one and three; and
- 46% of those who have not come across any of the seven research areas in the past month.
The trend is similar, albeit less pronounced, for medical research. 98% of people who have engaged with six or seven research areas say that it is important to fund it, as do 94% of those who have only come across between one and three research areas, although the proportion then falls slightly to a still considerable 79% of those who have not come across any of the research areas in the past month.

With this in mind, it would appear that engagement with a wider range of research topics is related to support for investment in a wider range of research topics – although there are some areas (especially medical research), which people will tend to think is important even if they do not personally come across such research themselves.

OUTCOMES FROM RESEARCH

The importance attributed to medical research can be seen not just in the public’s attitude towards different areas and topics of research, but also in terms of what people think should be the priority for the outcomes which research should deliver.

In order to calculate this and evaluate the relative priority the public give to potential outcomes, survey respondents were shown a selection of five outcomes and were asked which they thought it was most and least important for research to deliver. Once they had done this, they were asked to do the same thing again for a second set of five outcomes, and then again reiteratively for five different combinations of outcomes. By repeatedly being asked to trade-off the potential benefits of each outcome, it possible to build a picture of the relative priority the public give to the different outcomes.

Overwhelmingly, better medical treatments are the highest priority outcome from research for the public, with an indexed score of 239 – nearly two and a half times as important as the average outcome (defined as equalling 100).

<table>
<thead>
<tr>
<th></th>
<th>UK public</th>
<th>Establishment Advocates</th>
<th>Idealistic Advocates</th>
<th>Pragmatic Neutrals</th>
<th>Traditionalist Sceptics</th>
<th>Disengaged and Disinterested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better medical treatments</td>
<td>239</td>
<td>220</td>
<td>259</td>
<td>281</td>
<td>242</td>
<td>187</td>
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<tr>
<td>Reducing poverty around the world</td>
<td>134</td>
<td>121</td>
<td>226</td>
<td>161</td>
<td>35</td>
<td>119</td>
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<tr>
<td>Information about future risks and how we can be resilient against them (e.g. climate change or economic recessions)</td>
<td>125</td>
<td>138</td>
<td>226</td>
<td>115</td>
<td>53</td>
<td>119</td>
</tr>
<tr>
<td>Economic benefits such as new and better paid jobs</td>
<td>101</td>
<td>80</td>
<td>56</td>
<td>127</td>
<td>143</td>
<td>103</td>
</tr>
<tr>
<td>Information about how people can improve their lives (e.g. through diet)</td>
<td>87</td>
<td>75</td>
<td>98</td>
<td>106</td>
<td>73</td>
<td>80</td>
</tr>
<tr>
<td>New discoveries expanding the scope of human knowledge</td>
<td>81</td>
<td>125</td>
<td>92</td>
<td>29</td>
<td>74</td>
<td>76</td>
</tr>
<tr>
<td>Information about how taxpayers’ money can be spent most effectively</td>
<td>68</td>
<td>37</td>
<td>18</td>
<td>72</td>
<td>122</td>
<td>111</td>
</tr>
<tr>
<td>Support for Britain’s position as world leading centre of excellence for research</td>
<td>67</td>
<td>101</td>
<td>24</td>
<td>27</td>
<td>106</td>
<td>70</td>
</tr>
<tr>
<td>New products which normal people can use</td>
<td>63</td>
<td>62</td>
<td>18</td>
<td>61</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>Information about how businesses can have greater social and economic impact</td>
<td>36</td>
<td>40</td>
<td>17</td>
<td>21</td>
<td>39</td>
<td>71</td>
</tr>
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</table>

Q: When thinking about new research and discoveries, which of the following do you think are the most and least important outcomes they deliver? Indexed results. Base UK adults (n=3000), Establishment Advocates (n=758), Idealistic Advocates (n=661), Pragmatic Neutrals (n=596), Traditionalist Sceptics (n=513), Disengaged and Disinterested (n=472).

The extremely high priority given to medical research is found across all segments and demographic groups, and was also found across the qualitative workshops, when “new cures” and “treatments” were regularly cited as one of one the main benefits of research across the segments and participants of different ages.

“It is what keeps you alive.”

Traditionalist Sceptic, Sutton Coldfield
After better medical treatments though, the next highest priorities vary by segment:

- **Idealistic Advocates** emphasise research which reflects the social causes they care about – they prioritise research which might help reduce poverty around the world (226) and provide information about future risks such as climate change (190) – as a result, all other potential outcomes emerge as below average priorities.

- **Establishment Advocates** also prioritise information about future risks such as climate change (138) and reducing poverty around the world (121), but less emphatically than their Idealistic counterparts. Alongside these outcomes, they also over-index on outcomes which reflect high quality research in and of itself, such as ranking new discoveries which expand the scope of human knowledge (125) and which support Britain’s position as a world leading centre of excellence for research (101) as more important than others.

- In contrast, **Pragmatic Neutrals** emphasise the importance of conducting research which can have tangible benefits – they are the most overwhelming in their prioritisation of better medical outcomes (281) and reducing poverty is also considered a priority (161), and so too are economic benefits like new and better paid jobs (127) and information about how to be resilient against future risks like climate change (115). They also over-index on information about how people can improve their lives through things like their diet (106), reflecting the importance of research which impacts their day–to–day lives.

- **Traditionalist Sceptics** emphasise research which can bring material benefits, in particular to UK society. They prioritise research which can bring economic benefits (143), information about how taxpayers money can be spent most effectively (122) and new products which normal people can use (114). International issues are much less important to them, overwhelming deprioritising reducing poverty around the world (35), as well as doing the same for information about future risks (53) – reflecting their more withdrawn attitude towards climate change.

- Finally, the **Disengaged and Disinterested segment is less equivocal in what it prioritises and deprioritises**, having the small ratio between its top and bottom priority of any segment (3:1 – between better medical treatments and new products). Reducing poverty around the world and information about future risks such as climate change (both 119) are both considered more important than average, whilst they also over-index on prioritising research which can provide information about how taxpayers’ money can be spent most effectively (111), perhaps reflecting their suspicion of establishment figures and those in authority.

The breakdown of outcome priorities for people with different levels of research capital broadly reflects that for the attitudinal segmentation, with better medical treatments overwhelmingly the highest priority for all UK adults regardless of their level of research capital (the spread between different groups is extremely stable, varying only between 234 for those with high levels of capital and 241 for those with low levels).

- Beyond this, those with moderate levels of research capital (having four or five out of eight dimensions apply to them) or high levels (seven or eight out of eight) then tend to **prioritise reducing poverty around the world** (both index at 141 on this) – higher than those with “low” levels of one to three dimensions of research capital (128) or those with none at all (119).
Those with high levels of research capital also are significantly more likely than all other groups to prioritise *research which can provide information about how to be resilient against future risks such as climate change* (high: 147, moderate: 128, low: 117, none: 102).

As levels of research capital *increase*, the prioritisation given to domestic financial benefits appears to *decrease*. Those with low (110) or no (109) social capital are more likely than those with moderate levels (94) to prioritise economic benefits such as new and better paid jobs, while those with moderate levels are in turn more likely to prioritise them than those with high research capital (85). The same trend is true for research which provides information about how taxpayers money can be spent most effectively, falling from 91 for people who no research capital to 77 for those with low capital and to 60 and 52 for those moderate and high research capital respectively.

Generally, this suggests that it may be most effective to emphasise economic and financial benefits, alongside better medical treatments, when communicating the impact and outcomes achieved by new research to the least engaged parts of the population.

Another reason for this is that while reducing poverty around the world (134) and information about how to be resilient against future risks (125) are the second and third highest priorities overall, they are also the outcomes which most *polarised opinion*. Reducing poverty around the world in particular stands out as a potential outcome which is given very different priorities by different people, with a standard deviation of 94, compared to 68 for better medical treatments or 67 for new discoveries which expand the scope of human knowledge. Information about future risks and how we can be resilient against them (e.g. climate change or economic recessions) also has a standard deviation of 75, giving it the potential outcome with the second widest array of perceptions about its priority. Again, this suggests that medical outcomes, supplemented by financial based outcomes, may be safer options to highlight when communicating with people less engaged in research as they may be less likely to illicit a negative reaction.

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<tr>
<th>Outcome</th>
<th>UK public</th>
<th>Std Dev</th>
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CONCLUSIONS AND IMPLICATIONS
CONCLUSIONS AND IMPLICATIONS

This research project has uncovered significant insight into how the UK public engage with and perceive research. Outlined below are some of the key conclusions and implications for RCUK, indicating opportunities to further develop engagement and tailor this to the different segments of the UK population. There are a number of different actions RCUK may wish to take to develop engagement further. As such, further message testing and public dialogue research may be required in due course to build on the findings of this project, developing and tailoring strategies for maximum impact.

DEVELOPING ENGAGEMENT

1. Television dominates the public’s engagement with research – although the public generally does not distinguish peer-reviewed academic research with other activities which they also consider “research”.

Much of the public’s engagement with research tends to be passive, with television by and large the most common medium through which people come across research. Whilst engaged segments of the public will tend to read written sources of information, television tends to have a wider reach, particularly amongst older people and amongst the less engaged. It is important to note that the public on the whole does not distinguish between research they see in the media which may be PR-focused or media-driven, and peer-reviewed academic research. Museums have a relatively wide appeal and are the most popular form of research-related activity, especially amongst parents of young children.

Implications:

• Whilst strong written communications are of course important, television should be the priority channel for engaging the public with research, with clips on the news and high quality documentaries likely to reach a much wider audience than other forms of communication.

• As museums offer the chance to engage with parents whose main reason for going to bring along their children, it should always be ensured that are exhibits and opportunities which parents can engage with too.

2. Follow-up research on the internet is widespread

Many people will at least occasionally follow up on research they see in the news with their own internet searches for more information. More engaged segments pay attention to the source of research and prefer established websites such as those of broadsheet newspapers. On the other hand, less engaged segments tend to access research through search engine results, paying less attention to the source and simply clicking on the top results from a search.
3. Social media offers mixed opportunities for further engagement

While links shared on social media are clearly an important source of information about research for many people (in particular on Facebook) there appears to be little consistency in the type of research people share. Furthermore, when asked to design a campaign to engage the public with research, workshop participants tended to focus on traditional media, such as television, film, newspaper headlines and banner advertising – few people mentioned social media. On the other hand, the one thing associated with the Research Councils in the past year to have cut through with participants across the workshops was “Boaty McBoatface”, which of course began as an internet campaign. This suggests that if an issue can catch-on via the internet, it can have significant widespread cut-through, the challenge is creating content which can do so regularly.

Implications:

- Given the importance of search engines for validating research people have seen or heard about, ensuring websites containing accurate information are positioned as highly as possible could be key to ensuring the most reliable information is consumed by large parts of the public.

- If a web-based media source is reporting a piece of research, it may be beneficial to request it links directly either to a webpage from the relevant Research Council which explains the research in more detail (or provides context to the individual piece of research), or directly to a university or research group web page which fulfils this function.

DEVELOPING TRUST

1. Academic researchers and TV presenters build trust

The UK public are most likely to trust academic researchers and TV presenters to present research findings accurately, and are least likely to trust the UK Government, politicians and celebrities. While personalities such as David Attenborough and Brian Cox have frequently engaged the public in research through television appearances, the public do trust relatively unknown academic researchers as well. This is usually due to a perception that they are experts without an agenda or vested interest in the research results.
2. Public funding of research should be highlighted

A key factor influencing the UK public's trust in research is research funding. Both quantitative and qualitative findings show that the public's understanding of private investment in research is rudimentary, with little knowledge of safeguards in place to protect against funding biases. Where funding is provided by private companies, trust is lower, due to a perception that the results could be skewed in favour of the company providing investment. In contrast, publicly funded research is more trusted and considered to be conducted for public benefit rather than profit-making.

Implications:
- Where appropriate, there is scope to promote research findings via academic researchers. These individuals may develop into the personalities of the future in due course, but even without a high media profile they will be trusted by broad cross-sections of the public.
- Indicating researchers’ credentials – such as including their qualifications after their name – when they are featured in the media is likely to further build trust that they are credible.

3. First-hand experience and visual evidence is highly trusted

The UK public highly trust their own experiences, be that personal experience with a medical condition, the experience of a friend or family member, or something they have seen with their own eyes on television or the internet. Where research findings align with their personal experience, research tends to be trusted. However, if research findings conflict with their own first-hand experience, whatever the source through which they access research, it is less likely to be trusted.

Implications:
- When research is publicly funded, RCUK should highlight the funding source and encourage the perception that this research is unbiased and robust.
- Secondly, it could be beneficial to raise the profile of safeguards which protect against funding biases, such as the peer-review process. For example, a quality assurance mark could be developed to demarcate peer-reviewed research. Further message testing with the public would be beneficial to ensure communications are clearly understood and address any misconceptions.

- When communicating about research findings that contradict widely accepted perceptions or previous research (for example, when research is published which contradicts current Government nutritional guidance), it could be beneficial to present visual evidence alongside the research findings. This might take the form of embedded videos or pictures exemplifying the research findings.
DEVELOPING ENGAGEMENT WITH PUBLICLY-FUNDED RESEARCH

1. There are generally very high levels of support for the public funding of research

The vast majority of the population support taxpayers’ money being spent on research, and when presented with current spending levels, most think it is either about right or too low. There is also a broad acceptance that the public funding of research has a positive impact on the day-to-day lives of ordinary people and their family. The only slight consideration around this is that much of this support appears to come from supporting the idea of publicly-funded research, rather than necessarily supporting particular publicly-funded research programmes (knowledge of which was extremely low).

Implications:

- The broad support for public funding represents a solid foundation on which to build future public engagement work. Positivity towards the idea of public funding could be extended to build public engagement in specific projects and pieces of research. This would likely increase public support for public funding further if the implications and impact of funding can be demonstrated.

2. There are few strong opinions about the extent to which risks should be taken with publicly-funded research

There is a slight preference across the public for publicly-funded research to focus on solving a defined social or economic outcome, although many people do support public funds being used for research which simply discovers things which were not known before (and this sentiment tends to increase the more engaged with research people are). There are few strong opinions about the extent to which publicly-funded research should take risks, with people tending to be easily persuaded with arguments for or against, as well as often seeing both sides of the story.

Implications:

- While it is important to emphasise the social and economic problems new research is trying to solve, over the long term, support for research for research’s sake may improve if engagement with research across the public increases.

- As opinions towards risk in publicly-funded research are relatively soft, there may be some scope to influence public attitudes on the issue. In particular, further research could be conducted to explore the arguments which the public find most convincing and analyse how people are likely to respond to different messages.
SEGMENT–SPECIFIC IMPLICATIONS
Throughout the quantitative and qualitative findings, notable differences emerged between segments in their engagement, interest and trust in research. Consequently, there is scope to tailor engagement strategies according to the needs and priorities of specific groups of the UK public. Further research is needed to develop strategies for each segment which increase engagement of each group from their respective starting points. This tailoring will be important to ensure that all segments are engaged at a level appropriate to their existing knowledge of and interest in research. Nevertheless, the insights derived from this research provide a useful starting point and initial implications are drawn out below.

Establishment Advocates
This segment is the natural audience for RCUK. Establishment Advocates have a strong base knowledge of research, many use research in their professional role, and often have knowledge and an initial grasp of the peer-review process. They are most likely to speak about research with family and friends or to actively follow up on research, making them prime contributors to the public conversation. Despite this, they have low awareness of RCUK, the research councils specifically, and raise some questions over the integrity of research funding. They are the segment most likely to support funding into research which develops the scope of human knowledge: while they are supportive of research to solve a defined problem, they also value research for research’s sake.

Implications:
- This segment is most likely to be receptive to RCUK communications, with interest and engagement across a wide range of research areas.
- Already holding a basic understanding of different types of research, this segment is most likely to engage with more sophisticated communications aimed at differentiating: academic research from non-academic research and publicly funded research from privately funded research.
- Establishment Advocates are also most likely to engage with communications about peer-review and the standards in place to promote research integrity.
- A very positive first step would be to broker direct access for this segment with academic researchers through a targeted public engagement/ dialogue programme on research, building on the insight gained in this current study.

Key channels:
- Broadsheet newspapers; TV documentaries; academic researchers.

Idealistic Advocates
A large proportion of this segment are university educated or currently studying for a degree, using research on a day-to-day basis. With a younger demographic than other segments – one in five (20%) are between the ages of 16 and 24 – this is an important group to target as they are developing their attitudes towards and engagement with academic research. They are generally a socially-conscious group with a strong interest in the future of the planet. Research about reducing poverty, climate change, and medical advances are most likely to engage this segment.
Implications:

- Promoting research which addresses social issues is likely to be well-received among this group. Given topics such as climate change are ongoing social problems with continually developing research, promoting engagement among this younger segment may encourage a long-term interest in research.
- Given that this segment are often still forming their perceptions of academic research, communicating about the peer-review process and research integrity should be prioritised to develop positive perceptions. Given many Idealistic Advocates are degree-educated, engagement through undergraduate curricula may be a prime opportunity to develop this knowledge.

Key channels:

- Online news websites; social media.
- It would also be prudent to utilise university channels to communicate key messages given the likelihood of Idealistic Advocates to be in higher education.

Pragmatic Neutrals

Pragmatic Neutrals are less likely than many segments to actively engage with research and less likely to trust it. They often have children living at home who may tell their parents about research they come across at school, or encourage engagement via trips to museums – 40% have been to a museum in the past year. Indeed, where Pragmatic Neutrals do have children, they are often concerned for future generations and are more interested in research intro nutrition, the environment or medicine which they see as providing a direct benefit to their children’s lives. Even when they do not have children, Pragmatic Neutrals are most positive towards research that has a defined purpose rather than research for research’s sake.

Implications:

- Research which is clearly targeted at solving problems or has a direct practical implication is most likely to engage this group. Drawing out these solutions and implications should be prioritised.
- With a strong interest in their children this segment is most likely to be receptive to research about health, diet and nutrition which may benefit future generations.

Key channels:

- Television, Facebook, tabloid newspapers.
- Position information about research programmes in museums could be a targeted way to communicate with this group.

Traditionalist Sceptics

With a tendency to distrust research they hear about, building trust and engagement with research is of key importance in engaging this segment. Traditionalist Sceptics are generally older than the population on average, with low social media usage, high viewership of historical documentaries and high readership of the Daily Mail. Many show great interest in medical research, prompted by their own experiences of healthcare or health problems they have experienced. Indeed, they are likely to rely on first-hand experience (whether their own, a friend’s or something they have seen on TV or the internet) to validate research they come across. Building trust among this segment is likely to rely on increasing
perceptions of lack of bias in research and ensuring academic researchers are overtly associated with their research projects.

Implications:
- This segment is most likely to engage with medical research (particularly cancer research and improved screening tests) which they feel may bring future benefits for their life.
- This segment may respond well to simple communications about research quality, highlighting when research has been publicly funded or peer reviewed.

Key channels:
- TV documentaries; TV news programmes; Radio; tabloid newspapers; academics and researchers.
- Given the high importance this segment place on first-hand experience, using visual media to...
APPENDIX 1

SURVEY QUESTIONNAIRE

Section 1: Demographics

D1. [ASK ALL] Please enter your date of birth [OPEN] [SCREEN OUT IF UNDER THE AGE OF 16]

D2. [ASK ALL] Please select your gender. [SINGLE CODE]
   1. Male
   2. Female
   3. Other, please specify [OPEN]
   4. Prefer not to say

D3. [ASK ALL] Which one of these regions do you live in? [SINGLE CODE, FIX OPTIONS]
   a) Scotland
   b) North East
   c) North West
   d) Yorkshire & Humberside
   e) West Midlands
   f) East Midlands
   g) Wales
   h) Eastern
   i) London
   j) South East
   k) South West
   l) Northern Ireland
   m) Other [SCREEN OUT]

D4. [ASK ALL] Which of the following best describes where you live? [SINGLE CODE, FIX OPTIONS]
   a) Urban – population over 10,000
   b) Town and fringe
   c) Village
   d) Hamlet or isolated dwelling

D5. [ASK ALL] Which of the following comes closest to your personal working status? [SINGLE CODE, FIX OPTIONS]
   1. Working full time (30 hours or more per week)
   2. Working part time (between 8 and 29 hours per week)
   3. Not working but seeking work and temporarily unemployed or sick
4. Not working and not seeking work/student
5. Retired on a state pension only
6. Retired with a private pension
7. House person, housewife, househusband etc.

D6. [SEG LOOKUP]

D7. [ASK ALL] To which of the following ethnic groups do you consider you belong? [SINGLE CODE]
   a) White
   b) Mixed
   c) Asian
   d) Black
   e) Chinese
   f) Other ethnic group, please specify [OPEN]
   g) Prefer not to answer

D8. [ASK ALL] Which of the following religious groups, if any, do you consider yourself to be an active member of? By active member, we mean regularly reading or listening to a religious text, praying, or participating in religious services as a worshipper (excluding special services such as weddings or funerals). [SINGLE CODE, RANDOMISE OPTIONS, FIX G–J]
   a) Christian
   b) Jewish
   c) Muslim
   d) Buddhist
   e) Hindu
   f) Sikh
   g) Other, please specify [OPEN]
   h) No religion
   i) I am religious but would not describe myself as an active member of a religious group
   j) Prefer not to say

D9. [ASK ALL] How many children under the age of 18 do you have living in your household, if any? [SINGLE CODE]
   a) 0
   b) 1
   c) 2
   d) 3
   e) 4+

D10. [ASK ALL] What is the highest educational level that you have achieved to date? [SINGLE CODE]
a) No formal education  
b) Primary  
c) Secondary school, high school, NVQ levels 1 to 3, etc.  
d) University degree or equivalent professional qualification, NVQ level 4, etc.  
e) Higher university degree, doctorate, MBA, NVQ level 5, etc.  
f) Still in full time education  
g) Don’t know  
h) Prefer not to say  

D11. [ASK ALL] Would you say you are actively involved in any clubs, organisations, or community/volunteer organisations (e.g. Parent–teacher association, church group, sports club, residents’ association, professional body, political party etc.)? [SINGLE CODE]  
a) Yes  
b) No  
c) Don’t know  

D12. [ASK ALL] Which of the following newspapers, if any, do you read regularly, either in print or digital format? By regularly, we mean at least three times a week. Please select all that apply [MULTICODE, RANDOMISE A–P]  
a) Daily Express / Scottish Daily Express / Sunday Express  
b) Daily Mail / Scottish Daily Mail / Mail on Sunday  
c) Daily Mirror / Scottish Daily Mirror / Sunday Mirror  
d) Daily Record  
e) Daily Star / Daily Star Sunday  
f) Financial Times / FT Weekend  
g) The Guardian / The Observer  
h) The Independent / The Independent on Sunday  
i) The People  
j) The Sun / The Sun on Sunday  
k) Daily Telegraph / Sunday Telegraph  
l) The Times / The Sunday Times  
m) Paid for local paper  
n) Metro  
o) Huffington Post  
p) Buzzfeed  
q) Other free local paper  
r) None of these [SINGLE]  

D13. [ASK ALL] Which of the following social media sites or apps, if any, do you use regularly? By regularly, we mean at least three times a week. Please select all that apply. [MULTICODE, RANDOMISE A–P]
D14. [ASK ALL] Which of the following, if any, have you done in the last six months? [MULTI CODE, RANDOMISE A–G]

a) Participated in an event (e.g. a sponsored sporting event) to raise money for charity
b) Sponsored a friend/family member taking part in an event (e.g. a sponsored sporting event) for charity
c) Donated money to a charity
d) Volunteered for a charity
e) Signed a petition (e.g. through change.org, 38 Degrees etc.)
f) Been on a protest (e.g. a march, picket etc.)
g) Been a vegetarian or vegan or pescetarian
h) Boycotted a company/organisation
i) None of the above [EXCLUSIVE, FIX]

D15. [ASK ALL] Which of the following, if any, would you say apply to you? Please select all that apply. [MULTI CODE, RANDOMISE A–F]

a) I feel I have an understanding of the way science works
b) If I were to study for a new scientific qualification, it would help lead to jobs in non-scientific fields
c) I have been to a museum in the past six months
d) Members of my immediate family (parents, siblings, children) have been to university
e) I have friends or family who are academics at a university
f) I talk about research or new discoveries with friends or family at least once a week
g) None of these [EXCLUSIVE, FIX]
h) Don’t know [EXCLUSIVE, FIX]

Section 2: Engagement with research
0. **[ASK ALL]** What three words do you first think of when you see or hear the term “research”?

[THREE OPEN-ENDED TEXT BOXES]

1. **[ASK ALL]** Which of the following, if any, would you say you do at least once a month? **[MULTI RESPONSE, RANDOMISE OPTIONS]**

   a) Read newspaper articles about science or technology
   b) Read non-fiction books (e.g., about politics, science, history)
   c) Read newspaper articles about politics or economics
   d) Read science magazines (e.g., National Geographic, New Scientist)
   e) Watch science or nature documentaries
   f) Watch historical documentaries
   g) Watch science fiction films
   h) Watch historical costume dramas
   i) Read historical fiction
   j) Read book or theatre reviews
   k) I don’t do any of these things regularly [EXCLUSIVE, FIX]
   l) Don’t know [EXCLUSIVE, FIX]

2. **[ASK ALL]** Have you actively seen, read or heard about research in any of the following areas in the last month? By actively seeing, reading or hearing we mean reading an article or book, watching or listening to a TV or radio programme, or visiting a museum, gallery or conservation centre. **[GRID, RANDOMISE OPTIONS]**

   i. Yes
   ii. No
   iii. Don’t know

   a) Arts and humanities (e.g., research into British culture and identity, English literature, or family history)
   b) Bioscience (e.g., research into farming, diets and nutrition, or animal life)
   c) Engineering and physical sciences (e.g., research into robotics, manufacturing or new materials for construction)
   d) Economics and society (e.g., research into poverty, education, terrorism, financial systems or housing)
   e) Medicine (e.g., research into depression, malaria or drugs to treat Parkinson’s Disease)
   f) Natural environment (e.g., research into climate change, pollution or natural disasters)
   g) Particle physics and astronomy (e.g., research into the origins of the Universe, galaxies and stars, life on other planets)
3. [ASK ALL] How interested, if at all, would you say you are about research in each of the following areas? [RANDOMISE OPTIONS. REVERSE SCALES]

i. Very interested
ii. Fairly interested
iii. Not very interested
iv. Not at all interested
v. Don’t know

a) Arts and humanities (e.g. research into British culture and identity, English literature, or family history)
b) Bioscience (e.g. research into farming, diets and nutrition, or bees)
c) Engineering and physical sciences (e.g. research into renewable energy, robotics or buildings)
d) Economics and society (e.g. research into poverty, education, terrorism, financial systems or housing)
e) Medicine (e.g. research into depression, malaria or drugs to treat Parkinson’s Disease)
f) Natural environment (e.g. research into climate change, pollution or natural disasters)
g) Particle physics and astronomy (e.g. research into the origins of the Universe, galaxies and stars, life on other planets)

4. [ASK ALL] How important, if at all, do you think it is that the UK Government funds research in each of the following areas? [RANDOMISE OPTIONS. REVERSE SCALES]

i. Very important
ii. Fairly important
iii. Not very important
iv. Not at all important
v. Don’t know

a) Arts and humanities (e.g. research into British culture and identity, English literature, or family history)
b) Bioscience (e.g. research into farming, diets and nutrition, or bees)
c) Engineering and physical sciences (e.g. research into renewable energy, robotics or buildings)
d) Economics and society (e.g. research into poverty, education, terrorism, financial systems or housing)
e) Medicine (e.g. research into depression, malaria or drugs to treat Parkinson’s Disease)
f) Natural environment (e.g. research into climate change, pollution or natural disasters)
g) Particle physics and astronomy (e.g. research into the origins of the Universe, galaxies and stars, life on other planets)
5. [ASK ALL] Which, if any, of the following have you done in the last year? Please select all that apply. [GRID, RANDOMISE OPTIONS]

   i. Yes
   ii. No
   iii. Don’t know

   a) Gone to a zoo / aquarium / nature reserve
   b) Gone to a museum or planetarium
   c) Gone to a literary or science fair or festival
   d) Gone to a public lecture given by an academic
   e) Visited a laboratory
   f) Discussed new research or discoveries with friends/family
   g) Googled a new piece of research or discovery which you had heard about to learn more about it
   h) Helped a child with homework [ASK ALL WITH CHILDREN]

6. [ASK ALL] To what extent, if at all, would you like to do each of the following in the next year? [GRID, RANDOMISE OPTIONS, REVERSE SCALES]

   i. Yes – I would definitely like to do this
   ii. Yes – I would probably like to do this
   iii. No – I would probably not like to do this
   iv. No – I would definitely not like to do this
   v. Don’t know

   a) Go to a science fair
   b) Go to a public lecture given by an academic
   c) Visit a museum
   d) Visit a science laboratory
   e) Go to a presentation or panel discussion regarding the implications of publicly-funded research

7. [ASK ALL] To what extent, if at all, would you say that you trust each of the following types of organisation or people to provide accurate and truthful information about research findings or discoveries which affect you? [MULTI CODE, RANDOMISE STATEMENTS]

   i. A great deal
   ii. A fair amount
   iii. Not very much
   iv. Not at all
   v. Don’t know
a) University academics and researchers  
b) Experts (e.g. economists, scientists, medical experts) working for private companies  
c) Broadcast media (e.g. BBC News, Sky News, ITV News, radio)  
d) Print or digital media (e.g. newspapers, news websites)  
e) UK Government  
f) Charities or not-for-profit organisations  
g) Politicians  
h) Prominent television presenters (e.g. David Attenborough, Brian Cox, Mary Beard)  
i) Celebrities  
j) Campaigning organisations (e.g. change.org, 38 Degrees)  

8. [ASK ALL] To what extent, if at all, do you trust researchers to provide accurate and truthful information when they are talking about each of the following? By “researchers” we mean people like university academics, scientists, economists, historians etc.  

   i. A great deal  
   ii. A fair amount  
   iii. Not very much  
   iv. Not at all  
   v. Don’t know  

a) Their research  
b) The implications of their research on the world  
c) Research in general  
d) Politicised issues such as Brexit or climate change  
e) Your health / diet  
f) The economy  
g) The history of Britain  
h) Politics  
i) New research methodologies (e.g. stem cell research, mitochondrial transfer etc.)
9. [ASK ALL] As you may know, a significant portion of research conducted in the UK is funded by the Government from the taxes the public pay. This research explores a range of issues from diseases and engineering to the environment and the economy. To what extent do you broadly support or oppose public money being used to fund research? [SINGLE CODE, REVERSE SCALES]

a) Strongly support
b) Tend to support
c) Tend to oppose
d) Strongly oppose
e) Don’t know

10. [ASK ALL] To what extent do you agree or disagree that public funding of research benefits you or your family and friends? [SINGLE CODE, REVERSE SCALES]

a) Strongly agree
b) Tend to agree
c) Tend to disagree
d) Strongly disagree
e) Don’t know

11. [ALL CODING OPTIONS C OR D @ Q10] Why would you say that public funding of research does not benefit yourself, or your friends and family? Please select all that apply. [MULTI CODE, RANDOMISE STATEMENTS]

a) It has no relation to my life
b) Research just tends to create new problems that weren’t there in the first place
c) The money would be better spent on other things
d) I don’t know enough about it
e) New discoveries are mostly for the benefit other people
f) Other [PLEASE SPECIFY]
g) Don’t know [EXCLUSIVE, FIX]

12. [ASK ALL] The UK Government allocates money to a number of different organisations which they then use to invest in and conduct research. When thinking about the public funding of research, which of the following statements comes closer to your opinion?

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conducting research just to discover new things that we did not know before is a good use of public money</td>
<td>Public money should only be spent on research trying to solve a defined social or economic problem</td>
</tr>
<tr>
<td></td>
<td>Research organisations using public money should sometimes work with private companies on projects as they can add significant value</td>
<td>Publicly-funded research organisations should not work with private companies on projects as this will always impact on the independence of research</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>It is possible to put safeguards in place to ensure that research funded by private companies is impartial and objective</td>
<td>It is not possible to put safeguards and checks in place to ensure that research funded by private companies is impartial and objective</td>
</tr>
<tr>
<td>4</td>
<td>Public funding should focus on research which could deliver major social or economic benefits, but might have a low chance of success</td>
<td>Public funding should focus on research that has a high chance of success, even if the potential social or economic benefits are not as large</td>
</tr>
</tbody>
</table>

13. [ASK ALL] The UK Government spend around £160 per person per year on research and development, around 1.5% of its total spending. By research and development, we mean spending aimed at understanding and addressing the challenges facing humanity. In your opinion, is this too much, too little, or about the right amount?

   a) Far too little  
   b) Slightly too little  
   c) About the right amount  
   d) Slightly too much  
   e) Far too much  
   f) Don’t know

14. [ASK ALL] Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair. [GRID, RANDOMISE OPTIONS]

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Change and new ideas are usually a good thing for society</td>
<td>I often feel like the world is changing too quickly</td>
<td>Don’t know</td>
</tr>
<tr>
<td>2</td>
<td>New ideas and products developed by governments and corporations tend to bring benefits to the lives of normal people</td>
<td>New ideas and products developed by governments and corporations tend to make life worse or more complicated for normal people</td>
<td>Don’t know</td>
</tr>
<tr>
<td>3</td>
<td>I enjoy learning new things even if that knowledge doesn’t necessarily have a use</td>
<td>I tend to find learning things for the sake of it and without a purpose is pointless</td>
<td>Don’t know</td>
</tr>
<tr>
<td>4</td>
<td>Research conducted by academics tends to have a meaningful impact on the lives of normal people</td>
<td>Research conducted by academics tends not to have a meaningful impact on the lives of normal people</td>
<td>Don’t know</td>
</tr>
</tbody>
</table>
In life, it is generally better to get on with it, sticking to what you believe in and not spend too much time overthinking things.

In life, it is generally better to take time to consider things properly and review all your options before taking important decisions.

Generally, it is better to be sceptical of new research and discoveries until you have seen the evidence yourself.

Generally, it is better to trust expert opinion on new research and discoveries, even if you haven’t seen the evidence yourself.

15. [ASK ALL] As far as you are aware, does each of the following apply or not apply to academic research in the UK? [GRID, RANDOMISE OPTIONS]

i. Applies
ii. Does not apply
iii. Don’t know

a) Before it is published, all publicly-funded research is evaluated by other researchers in a similar field to ensure that it is of high quality
b) Researchers sometimes just publish new discoveries without it being reviewed by a peer (e.g. another researcher or academic)
c) If they fund a piece of academic research, private companies always have the option of determining what the findings are
d) Research is used by journalists in the media

16. [ASK ALL] When thinking about new research and discoveries, which of the following do you think are the most and least important outcomes they deliver?

MOST IMPORTANT / LEAST IMPORTANT

a) New products which normal people can use
b) New discoveries expanding the scope of human knowledge
c) Support for Britain’s position as world leading centre of excellence for research
d) Economic benefits such as new and better paid jobs
e) Information about how people can improve their lives (e.g. through diet)
f) Information about how taxpayers’ money can be spent most effectively
g) Better medical treatments
h) Reducing poverty around the world
i) Information about future risks and how we can be resilient against them (e.g. climate change or economic recessions)
j) Information about how businesses can have greater social and economic impact
The final section of the questionnaire is going to focus on one particular area of research in a bit more detail – environmental research.

17. [ASK ALL] Have you actively seen, read or heard about research into any of the following areas in the last month? By actively seeing reading or hearing we mean reading an article or book, watching or listening to a TV or radio programme, or visiting a museum, gallery or conservation centre. Please select all that apply. [RANDOMISE OPTIONS, MULTICODE]

a) Fracking / shale gas
b) Air / water quality
c) Climate change
d) Energy (alternative / renewable / nuclear)
e) Endangered species
f) Pesticides (e.g. effect on bees)
g) Natural hazards (flooding, volcanoes, earthquakes etc.)
h) Food security / fishing
i) Antimicrobial resistance (e.g. antibiotic-resistant bacteria)
j) Green spaces and wellbeing
k) None of these

18. [ALL CODING A–J AT Q17] And where did you see, read or hear about each of the following? Please select all that apply. [PIPE IN ANSWERS SELECTED AT PREVIOUS QUESTION. RANDOMISE OPTIONS. MULTICODE]

a) Saw it on TV
b) Read about it in an article or book
c) Saw it as part of a museum or exhibit
d) Saw it on social media
e) Saw someone who was campaigning about it
f) Other, please specify [OPEN]
g) Don’t know [EXCLUSIVE, FIX]

19. [ASK ALL] How interested, if at all, would you be in hearing more about research into each of the following areas? [GRID, RANDOMISE OPTIONS]

i. Very interested
ii. Fairly interested
iii. Not very interested
iv. Not at all interested
v. Don’t know
20. [ASK ALL] If you were to hear a researcher or scientist, who you did not know anything about, talking about each of the following issues on the news, to what extent, if at all, would you believe what they were saying? [GRID, RANDOMISE OPTIONS]

i. A great deal
ii. A fair amount
iii. Not very much
iv. Not at all
v. Don’t know

a) Fracking / shale gas
b) Air / water quality
c) Climate change
d) Energy (alternative / renewable / nuclear)
e) Endangered species
f) Pesticides (e.g. effect on bees)
g) Natural hazards (flooding, volcanoes, earthquakes etc.)
h) Food security / fishing
i) Antimicrobial resistance (e.g. antibiotic–resistant bacteria)
j) Green spaces and wellbeing

21. [ASK ALL] To what extent, if at all, would you say that you trust each of the following to provide accurate information about the issue of shale gas and “fracking”? [GRID, RANDOMISE OPTIONS]

i. A great deal
ii. A fair amount
iii. Not very much
iv. Not at all
v. Don’t know
a) Campaigning organisations (e.g. Oxfam, 38 Degrees)
b) Scientists working for private companies
c) Scientists working in universities
d) Businesses
e) The Government
f) The BBC
g) Newspapers

22. [ASK ALL] For the following pairs of statements, which would you say that you agree with most? [SINGLE CODE. RANDOMISE]

| It is better to change some of my lifestyle choices now if it means future generations are impacted less by the effects of climate change | I would rather not change some of my lifestyle choices now even if it means future generations are impacted by the effects of climate change | Don’t know |
| We should deal with environmental issues once they affect us rather than trying to predict and prevent potential future issues | We should seek to predict and prevent potential future environmental issues rather than dealing with issues once they affect us | Don’t know |
| I think it is very important that the UK Government continues to fund natural and environmental research as it is a very important issue | I do not think it is very important that the UK Government continues to fund natural and environmental research, as there are bigger problems to address | Don’t know |
| I understand how changes I make to my lifestyle could limit the impact climate change has on future generations | I do not understand how changes I make to my lifestyle could limit the impact climate change has on future generations | Don’t know |
| The public should be involved in decision-making around science | We should trust experts to do the decision-making around science | Don’t know |
## INTRODUCTIONS, OBJECTIVES AND WARM UP

<table>
<thead>
<tr>
<th>Warm up</th>
<th>Section time</th>
<th>Total time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon arrival participants will be welcomed informally, offered refreshments, and directed to their tables depending on the segment they are in. The moderator will spend up to ten minutes talking to participants, making them feel at ease, building group cohesion and assessing the group dynamic.</td>
<td>5 mins</td>
<td>5 mins</td>
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</tbody>
</table>

## INTRODUCTION

Welcome, and thank you very much for coming this evening. My name is [NAME] and I am here from ComRes, an independent research agency, along with my colleagues [INSERT NAMES]. We work with lots of different organisations to find out what people think, and this evening we want to hear your views.

We're going to be talking about something that you might not have strong views about, or might not have thought much about before – we still want to hear what you think; there are no “right” or “wrong” answers to anything we’re talking about today, so please don’t be afraid to say the first thing that comes into your head. If you agree with someone please do say so, and if you disagree please say so as well, politely if possible! We want to hear as much as possible from you over the next three hours.

My colleague [NAME] will be discussing the ideas with this table, alongside my colleague [NAME] who will be taking notes. I will be discussing ideas with this table, with my colleague [NAME] who will be taking notes. [WHERE RELEVANT] I also have another colleague/other colleagues who are keen to hear your thoughts.

Everything you say will remain anonymous, and your name won’t be linked to this research at all. We are interested in what you say, not who said what.

There are some refreshments set up for you, please help yourself throughout the next few hours, and we will have a 15 minute break about halfway through for sandwiches. You can find the toilets [DIRECTIONS]. There are no fire alarms planned, so if you hear one it is not a drill, and please exit via [DIRECTIONS]. We will be recording the sessions using the audio recorders on the tables, for our notetaking purposes. Some of you will be asked to stay behind for 10–15 minutes at the end to record a couple of your thoughts on video. Not everyone will be asked because it would take all night, so please don’t be offended if you aren’t asked to do so. Lastly, we would appreciate it if mobile phones could stay switched off in your bags or pockets, as we have a lot to get through!
### Objectives (for moderator reference, not to read out)

- How general public audiences segment in terms of their engagement with and sentiment towards research; its process, results and implications – including an indication of the relative size of each segment;
- How, when and where the segments access information about research;
- The degree to which the segments either passively consume or actively engage with research;
- Any significant differences in people’s engagement with or sentiment towards different areas of research.

### TOPIC 1: Understanding of research

This section of the discussion guide aims to understand what segments associate with ‘research’. A pre-task, asking respondents to bring in an example of research that they have recently seen or heard about. If radio/television, they will be asked to come prepared to speak about it. This will enable us to get an initial understanding of what people have recently seen, including the type of research and the channel, and will frame our initial discussion.

Main moderator: When we invited you here today, we asked you to bring in, or come prepared to talk about some research that you have seen or heard about recently that caught your attention. In your tables, we would like to find out what this is. A little bit later on we will come back to discuss your thoughts all together.

Table moderator: Welcome. Firstly, please introduce yourself, giving your name, and tell me what you’d usually be doing on a [DAY] evening?

Going round the table, tell me what you saw/heard about, and why did it catch your attention?

Note to moderator: The aim is to use some of the examples given in this section to stimulate discussion throughout. Try to choose diverse examples so that they do not bias the conversation in a particular direction.

- Probe channels of information;
- Probe type of research found.

Thanks so much for sharing these examples – you’ve brought a wide variety in with you today. I want to take a step back and ask you when I say the word ‘research’ to you, what words and phrases spring to mind? Please could you spend about a minute using the post-it-notes in front of you to write down your thoughts.

- Moderator to collate post-it notes and hold a free-form discussion based on the findings for 2–3 minutes
- Which, if any, of the things you've mentioned would you say are positive? Why?
- Where do you hear about the positive aspects/impact of research?
  (Moderator to tailor probe as appropriate based on discussion)
- And which, if any, of the things you’ve mentioned would you say are negative? Why?
- Where do you hear about the negative aspects/impact of research?
  (Moderator to tailor probe as appropriate based on discussion)

What, if anything, are the good things about research? And what, if anything, are the bad things about research? In pairs, please use the sheet in front of you, and put your ideas in the ‘good’ category, the ‘bad’ category and the ‘neutral’ category.

What types or topics of research do you think of when I say ‘research’ to you? Please feel free to say the first words and phrases that spring to mind.

- Moderator to record front of mind responses on a flip chart.
- If needed, refer back to the examples brought in/spoken about in the pre-task

**Main moderator:** I want to bring the room back together now so that we can share some of the things you’ve been talking about. What types and topics do you think about when I say ‘research’?

One member of the group on each table to summarise the discussion for the main room. Main moderator to comment on agreement/disagreement between the tables. After this, main moderator to hand back over to table moderators.

**TOPIC 2: Past engagement with research & journey of engagement**

This section focuses on engagement with research up to this point, how people have come across research, what their engagement with research has been, and trusted sources they have encountered.

Thinking about the topics we discussed earlier, tell me what types of research you generally see or hear about in your day-to-day life?

- How have you come into contact with these?
- To what extent, if at all, has your life been impacted by the research you’ve mentioned?
- What categories, if any, do you see or hear about more?
- And which, if any, do you see or hear about less?
- Why do you think this is?
- Where do you tend to see or hear about research? **Probe:** newspapers/news sources online, social media, academic papers, television/radio, visiting a museum etc.
Who, if anyone, have you heard talking about/ commenting on research? *Probe: specific ‘famous’ people vs. academics more broadly, private companies, etc.*

What types of research, if any, are you most interested in? Why is this?
- How did you first hear about this type of research?
- What, if anything, have you seen or heard about it since then?
- What, if anything, would you like to see or hear more about on this topic?

Taking the piece of research that caught your eye, in pairs, I would like you to describe that journey to your pair. I would like you to write down each stage of you finding out about it on a separate post-it note. Specifically, please focus on...

- Where you first heard about that topic;
- Why were you drawn to that research?
- To what extent, if at all, did you trust that source?
- What impact it had (what did you do next?)?
- Did you hear about that topic again?
- If so, from where, and to what extent, if at all, did you trust that source?
- What happened next?

Please stick your post-it notes in order on the paper provided to show your journey.

*Moderator note, if this is the first time that one of the group has heard about a topic, encourage them to choose another topic they have heard about.*

Going round the table, can you tell me about your journey from when you first heard about the topic, up until now?
- What in life gets you thinking?
- What sparks your curiosity?
- When do you feel the need to find out more about something and when you do how would you find out more?

You’ve mentioned that you have heard about research via a range of sources. Who do you trust most to hear about research from? What makes a source trusted?

*Main moderator: I want to bring the room back together now so that we can share some of the things you’ve been talking about. What topics of research are your tables most interested in and why? How do you want to hear about it? And who do you trust most?*
One member of the group on each table to summarise the discussion for the main room. Main moderator to comment on agreement/disagreement between the tables

<table>
<thead>
<tr>
<th>TOPIC 3: Future thinking – what topics and types of research they would like to engage with</th>
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</thead>
</table>

This section of the discussion guide looks at the variety of areas the research councils cover, understanding what is of interest to segments, what specific topics they associate with the research areas, desired channels to hear about them, and any voices/organisations associated with them.

I've got a range of research areas in front of me. In pairs, I’d like you to discuss the research areas I give you – please rank them in the order you’d most like to hear about to the least you’d like to hear about.

**Moderator note:** Distribute illustrated cards to the group. It’s likely we’ll have to prioritise the areas tested based on the interests of each segment, and for time, to ensure that we spend sufficient time on each area of the discussion guide.

- Arts and humanities (e.g. research into British culture and identity, English literature, or family history)
- Bioscience (e.g. research into farming, diets and nutrition, or animal life)
- Engineering and physical sciences (e.g. research into robotics, manufacturing or new materials for construction)
- Economics and society (e.g. research into poverty, education, terrorism, financial systems or housing)
- Medicine (e.g. research into depression, malaria or drugs to treat Parkinson’s Disease)
- Natural environment (e.g. research into climate change, pollution or natural disasters)
- Particle physics and astronomy (e.g. research into the origins of the Universe, galaxies and stars, life on other planets)

Going round the table, in what order have you placed your research areas in, and why? Why do you want to hear most about the topic you’ve put at the top of your list?

Forgetting about the rankings for the time being, how would you like to hear about each of these areas? Here is a sheet with engagement channels on it in front of you. How would you like to hear about the top few research areas that you mentioned you’re most interested in?

- Moderator to show card with the following engagement channels:
m) University academics and researchers
n) Experts (e.g. economists, scientists, medical experts) working for private companies
o) Broadcast media (e.g. BBC News, Sky News, ITV News, radio)
p) Print or digital media (e.g. newspapers, news websites)
q) UK Government
r) Charities or not-for-profit organisations
s) Politicians
t) Prominent television presenters (e.g. David Attenborough, Brian Cox, Mary Beard)
u) Celebrities
v) Campaigning organisations (e.g. change.org, 38 Degrees)

- Probe: reasons behind decisions
- Probe: same channels of engagement for all areas, vs. different channels for different research areas

Now, in the same pairs you were in before, I’d like you to rank your research areas using the same cards as before from the topic you most trust research on, to the topic you least trust research on.

Going round the table, in what order have you placed your research areas in, and why?

- Probe: is this the same as interest area, or different, whether there is any link between their own research knowledge/engagement and those they trust, or not
- What impacts how trustworthy research is for you?
- Probe: channels, voices, evidence available, etc.

Main moderator: I want to bring the room back together now so that we can share some of the things you’ve been talking about. What impacts how trustworthy research is for your table?

One person on each table to summarise the discussion for the main room. Main moderator to comment on agreement/disagreement between the tables. After this main moderator to show social science clip.

Main moderator: I now want to show you a short video. Please pay attention, as you will be asked some questions about it on your table when it has finished.

Main moderator to play ‘What is Social Science? An animated overview.’
https://www.youtube.com/watch?v=BiLj35g_cAU
Main moderator: Now please discuss the clip in your groups.

What did you think of the video? What, if anything, did you like about it? What are the main messages within it for you, if anything could be improved to make it clearer/ more interesting/ more relevant to you?

Moderator to probe responses, aim for free-form discussion about the video for c.5–10 minutes.

<table>
<thead>
<tr>
<th>TOPIC 4: NERC materials testing and co-creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>This section aims to test different NERC public engagement and coverage, and uses co-creation to gain respondent-led recommendations for public engagement.</td>
</tr>
</tbody>
</table>

Main moderator: We've got a selection of different materials here on research into the natural environment. I'm going to show you the first, which is a video about bees, then you will look at the other materials and discuss with your table. There is a lot to get through, so please give each of the written materials a skim read.

Note: the former is credited to a scientist, and explains this, whereas the latter is not. Probe perceptions of trust and importance of authorship.

- “Boaty McBoatface?” Research vessel currently docked in Liverpool causes confusion [link]
- Tweets:

  ![Tweets](image)

In your pairs, I'd like you to look at these and discuss your thoughts. How effective are they? What, if anything, interests you about them? What, if anything, doesn’t work so well at capturing your interest?

- Moderator to hand out a range of NERC materials to the group, allowing time for them to discuss in pairs
Going round the table, can you tell me what your thoughts are – what did you like? What could be improved?

- How much information do you want to see about research?

Now I’ve got some different research topics on the natural environment, including climate change, bees, and air pollution. I’d like you to use the pens and paper provided to come up with your own ideas for how you’d engage with the public on this topic. What channels would you use? How would you communicate this topic? Please write down your ideas – you can draw pictures if you want and be creative as you like!

Going round the table, can you tell me what ideas you’ve had?

- Moderator to sum up ideas by drawing conclusions about the variety/similarities between them.

**TOPIC 5: Values and outcomes**

This section aims to understand the value of research, attitudes towards public funding of research, and attitudes towards risk taking.

Your thoughts and ideas this evening have been really great, and before I let you go we have one final area to discuss. When we talked about the good things and the bad things associated with research at the beginning of the workshop this evening, you did/didn’t [DELETE AS APPROPRIATE] mention research funding. What are your thoughts about the funding for research?

- How, if at all, does the source of funding impact your interest in research?
- How, if at all, does the source of funding impact your trust in research?
- How important, or otherwise, is it that research is funded? *Probe: how this varies depending on research areas*
- Who should be responsible for funding research? *Probe: how this varies depending on research areas*

To what extent, if at all, is it important that research takes risks?

- Why is this?
- *Probe: impact of risks not paying off vs. forging new ground in research, how this varies depending on research areas*
Before we come back together as a room, I’d like you to use the paper in front of you to write down one area or topic of research you’d really like to hear about over the next year, and how you want to hear about it.

Main moderator: Finally, to end our discussion, I would like to hear from each of you in the room – what one area of research do you really want to hear about over the next year, and how do you want to hear about it?

Each person to summarise the discussion for the main room. Main moderator to comment on agreement/disagreement between the tables. After this, main moderator to hand back over to table moderators.

Thank participants, feedback forms and distribute incentives.
APPENDIX 3

RECOMMENDED METRICS FOR TRACKING AND FURTHER RESEARCH

In terms of tracking attitudes and engagement in future research, the following questions all either had particularly strong distinguishing features, split the public into clear groups, would provide strong indications of changing sentiments and forms of engagement over time.

Engagement:

Q. [ASK ALL] Which of the following, if any, would you say you do at least once a month? [MULTI RESPONSE, RANDOMISE OPTIONS]

w) Read newspaper articles about science or technology
x) Read non-fiction books (e.g. about politics, science, history)
y) Read newspaper articles about politics or economics
z) Read science magazines (e.g. National Geographic, New Scientist)
   aa) Watch science or nature documentaries
   bb) Watch historical documentaries
   cc) Watch science fiction films
   dd) Watch historical costume dramas
   ee) Read historical fiction
   ff) Read book or theatre reviews
   gg) I don’t do any of these things regularly [EXCLUSIVE, FIX]
   hh) Don’t know [EXCLUSIVE, FIX]

Research Capital

Q. [ASK ALL] Which of the following, if any, would you say apply to you? Please select all that apply. [MULTI CODE, RANDOMISE A–F]

i) I feel I have an understanding of the way science works
j) If I were to study for a new scientific qualification, it would help lead to jobs in non-scientific fields
k) I have been to a museum in the past six months
l) Members of my immediate family (parents, siblings, children) have been to university
m) I have friends or family who are academics at a university
n) I talk about research or new discoveries with friends or family at least once a week
o) None of these
p) Don’t know

Q. Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair.
<table>
<thead>
<tr>
<th></th>
<th>Research conducted by academics tends to have a meaningful impact on the lives of normal people</th>
<th>Research conducted by academics tends not to have a meaningful impact on the lives of normal people</th>
<th>Don’t know</th>
</tr>
</thead>
</table>

Trust:

**Q. [ASK ALL] To what extent, if at all, would you say that you trust each of the following types of organisation or people to provide accurate and truthful information about research findings or discoveries which affect you? [MULTI CODE, RANDOMISE STATEMENTS]**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>vi.</td>
<td>A great deal</td>
</tr>
<tr>
<td>vii.</td>
<td>A fair amount</td>
</tr>
<tr>
<td>viii.</td>
<td>Not very much</td>
</tr>
<tr>
<td>ix.</td>
<td>Not at all</td>
</tr>
<tr>
<td>x.</td>
<td>Don’t know</td>
</tr>
</tbody>
</table>

k) University academics and researchers  
l) Experts (e.g. economists, scientists, medical experts) working for private companies  
m) Broadcast media (e.g. BBC News, Sky News, ITV News, radio)  
n) Print or digital media (e.g. newspapers, news websites)  
o) UK Government  
p) Charities or not–for–profit organisations  
q) Politicians  
r) Prominent television presenters (e.g. David Attenborough, Brian Cox, Mary Beard)  
s) Celebrities  
t) Campaigning organisations (e.g. change.org, 38 Degrees)

**Q. [ASK ALL] Thinking about new research and discoveries, which of the following statements comes closer to your opinion? Please pick between the statements in each pair.**

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New ideas and products developed by governments and corporations tend to bring benefits to the lives of normal people</td>
<td>New ideas and products developed by governments and corporations tend to make life worse or more complicated for normal people</td>
<td>Don’t know</td>
</tr>
<tr>
<td>2</td>
<td>Generally, it is better to be sceptical of new research and discoveries until you have seen the evidence yourself</td>
<td>Generally, it is better to trust expert opinion on new research and discoveries, even if you haven’t seen the evidence yourself</td>
<td>Don’t know</td>
</tr>
</tbody>
</table>

Public funding:
Q. [ASK ALL] As you may know, a significant portion of research conducted in the UK is funded by the Government from the taxes the public pay. This research explores a range of issues from diseases and engineering to the environment and the economy. To what extent do you broadly support or oppose public money being used to fund research? [SINGLE CODE ONLY. REVERSE SCALES]

f) Strongly support
g) Tend to support
h) Tend to oppose
i) Strongly oppose
j) Don’t know

Q. [ASK ALL] The UK Government spend around £160 per person per year on research and development, around 1.5% of its total spending. By research and development, we mean spending aimed at understanding and addressing the challenges facing humanity. In your opinion, is this too much, too little, or about the right amount?

a) Far too little
b) Slightly too little
c) About the right amount
d) Slightly too much
e) Far too much
f) Don’t know

Risk and defined outcomes in publicly funded research

R. [ASK ALL] The UK Government allocates money to a number of different organisations which they then use to invest in and conduct research. When thinking about the public funding of research, which of the following statements comes closer to your opinion?

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conducting research just to discover new things that we did not know before is a good use of public money</td>
<td>Public money should only be spent on research trying to solve a defined social or economic problem</td>
<td>Don’t know</td>
</tr>
<tr>
<td>2</td>
<td>Research organisations using public money should sometimes work with private companies on projects as they can add significant value</td>
<td>Publicly-funded research organisations should not work with private companies on projects as this will always impact on the independence of research</td>
<td>Don’t know</td>
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</tbody>
</table>
**FURTHER INFORMATION:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rob Melvill</td>
<td>Research Director</td>
<td><a href="mailto:Rob.Melvill@comresglobal.com">Rob.Melvill@comresglobal.com</a></td>
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<td>Henrietta Hopkins</td>
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<td><a href="mailto:henrietta@hopkinsvanmil.co.uk">henrietta@hopkinsvanmil.co.uk</a></td>
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<td>020 7871 8639</td>
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