

NHS





# Online Social Endorsement and Covid-19 Vaccine Hesitancy in the UK

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**GOOD HEALTH**  
10-PAGE SPECIAL

**Daily Mail**

The good news? Newsagents to stay open – and CAN deliver the Mail to your door...

**FREE DELIVERY FOR 6 WEEKS**

EXCLUSIVE: Queen bans Harry and Meghan from using 'Sussex Royal' brand

PM's historic stay-at-home plea to beat virus

**LOCKDOWN BRITAIN**

Astonishing restrictions on daily life ++ NO travel unless essential ++ Don't see friends or family ++ Only one exercise outing a day ++ Fines if you don't obey ++ Mass closures of shops ++ All for at least 3 weeks

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Brilliant new puzzles section with four extra pages of brainies to keep your mind active

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**THE Sun**

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- PM: Brits must stay home
- Police fines up to £1,000
- Gatherings over 2 banned
- Only shop for basics

**COVID-19 CRISIS**

**BRITAIN ON LOCKDOWN**

for six weeks  
Get the Guardian sent to your home, with no delivery charge

Salmond cleared of sexual assault

**The Guardian**

**PM: 'Stay at home, this is a national emergency'**

- Johnson drastically restricts movement to combat coronavirus
- Gatherings of more than two people in public to be prohibited
- Police given powers to disperse groups and enforce lockdown

**THE TIMES**

Alex Salmond: not Scotland's former leader cleared of sex cl

**'You must stay at home'**

- PM declares national emergency
- Meetings of more than two banned

March 24, 2020



Coronavirus

## When will a coronavirus vaccine be ready?

Human trials have begun - but even if they go well and a cure is found, there are many barriers before global immunisation is feasible

- [Coronavirus - latest updates](#)
- [Coronavirus vaccine latest: when will we have one?](#)
- [See all our coronavirus coverage](#)

Laura Spinney

Mon 6 Apr 2020 09.55 BST



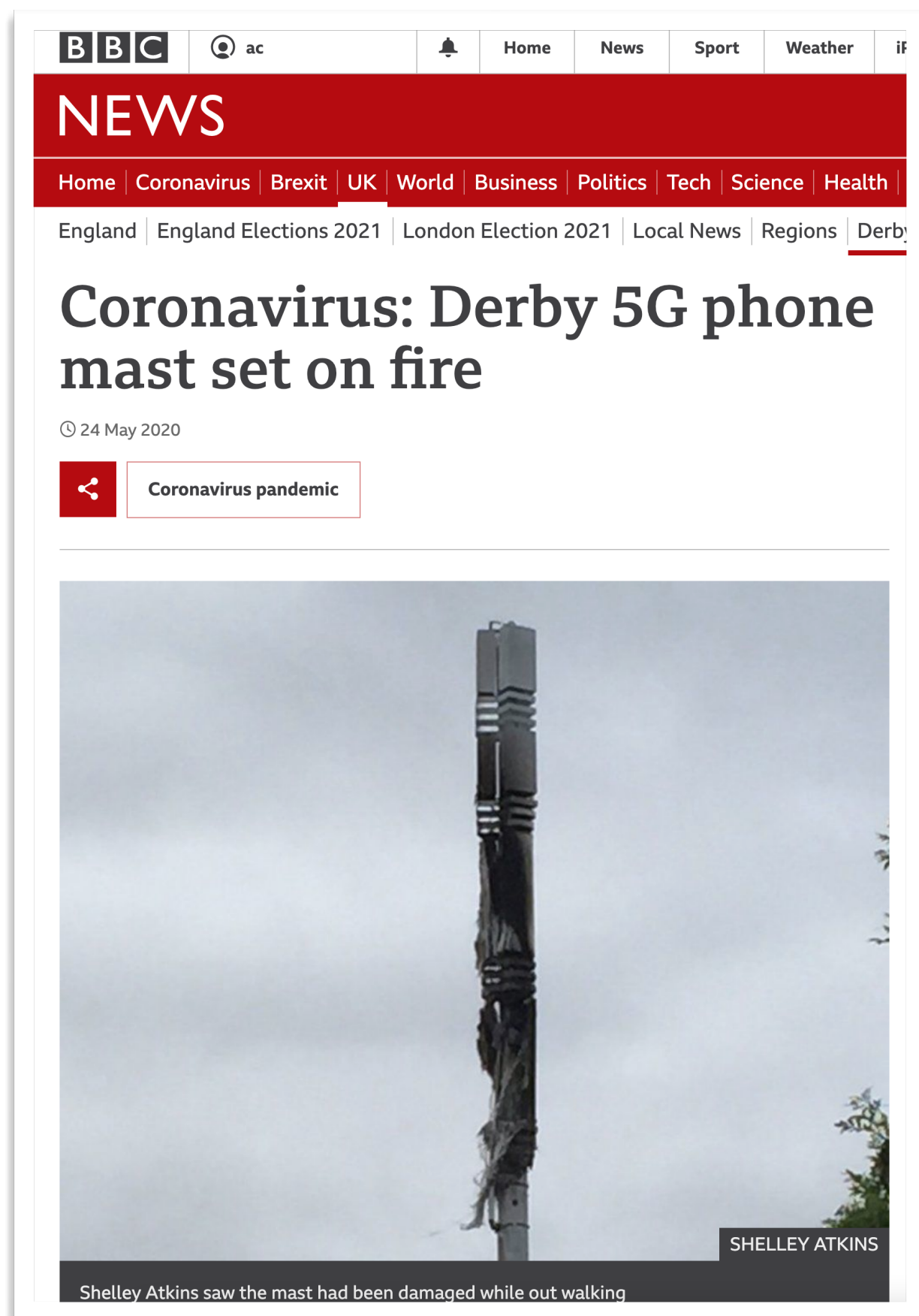
956



▲ When will a coronavirus vaccine be ready? Illustration by James Melaugh. Illustration: James Melaugh/The Observer

**T**HOUGH we can slow the spread of Covid-19, through confinement and other social distancing measures, and scientists are developing drugs to treat its symptoms, the only way to actually prevent people from catching Covid-19 is with a vaccine - and we don't yet have one of those.





Misinformation — about the origins of Coronavirus





**Fergus Walsh** ✓  
@BBCFergusWalsh



Fake news has been circulating on social media that the first volunteer in the Oxford vaccine trial has died. This is not true! I spent several minutes this morning chatting with Elisa Granato via Skype. She is very much alive and told me she is feeling "absolutely fine"



11:27 AM · Apr 26, 2020



21.2K



748



Copy link to Tweet

Misinformation—about the potential vaccines



# Oxford Coronavirus Explanations, Attitudes, and Narratives (OCEANS) Project

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Samantha Vanderslott



Stephan Lewandowsky



Michael Larkin



Stefania Innocenti



Ariane Petit



Lucy Jenner



Emily Bold



Andrew R N Ross



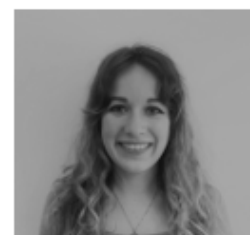
Sophie Mulhall



Anna East



Ashley Teale



Chiara Causier



Lydia Carr



Jessica Bird



Alberto Giubilini





Special thanks to Daniel Freeman



# Vaccine Conspiracy Beliefs Among the UK Public in May, 2020 (N=2,500)

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
“Vaccine safety data is often fabricated (made-up).”	19%	22%	15%	27%	9%	5%	3%
“Vaccine effectiveness data is often fabricated (made-up).”	23%	20%	14%	22%	11%	6%	3%
“The government is trying to cover up the link between vaccines and autism.”	21%	21%	13%	21%	14%	7%	4%

Source: Previously unpublished findings from OCEANS I, May 2020. (See Freeman, Waite, Rosebrock, Petit, Causier, et al. (2020). Coronavirus Conspiracy Beliefs, Mistrust, and Compliance with Government Guidelines in England. *Psychological Medicine*. May.)



# Covid-19 Vaccine Hesitancy Among the UK Public in October, 2020 ( $N=5,114$ ).

If the vaccine was available at my GP surgery I would:

<b>Get it as soon as possible</b>	<b>50%</b>
<b>Get it when I have time</b>	<b>23%</b>
<b>Delay getting it</b>	<b>8%</b>
<b>Avoid getting it for as long as possible</b>	<b>7%</b>
<b>Never get it</b>	<b>7%</b>
<b>Don't know</b>	<b>5%</b>

The OCEANS Covid-19 Vaccine Hesitancy Scale comprises seven items from a pool of fifteen item variations assessing hesitancy.

*Source:* Freeman, Loe, Chadwick, Vaccari, Lambe et al. (2020). COVID-19 Vaccine Hesitancy in the UK: the Oxford Coronavirus Explanations, Attitudes, and Narratives Survey (OCEANS) II. *Psychological Medicine*. December.



# Covid-19 Vaccine Hesitancy's Attitudinal Origins

Increased vaccine hesitancy



## **Mistrust and complacency**

- Conspiracy beliefs
- “Need for chaos” attitudes
- Negative views of doctors, vaccine developers
- Low perceptions of personal risk and seriousness of Covid-19
- Negative NHS experiences
- Suspicion of speed of vaccine development
- Concerns about side effects

## **Trust and confidence**

- Perception of collective benefit
- Positive views of doctors & medicine
- Positive NHS & GP experiences
- Perception of personal benefit of vaccines and seriousness of Covid-19

Decreased vaccine hesitancy



# Covid-19 Vaccine Hesitancy's Attitudinal Origins

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Decreased vaccine hesitancy





# Vaccine Hesitancy and Public Communication: A Role for Online Social Endorsement?

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- What people *do with* media, not only what media *do to* people.
- Traditional top-down communication remains crucial, but does not have the traction it once had:
  - BBC was most used source during early pandemic, but use declined throughout 2020 (OFCOM).
  - Throughout 2020, half (49%) of UK public used social media for getting news and information about Covid-19 (OFCOM).
- People expect to see family, friends, and acquaintances are keen to get vaccinated. We respond to others' experiences, to “social proof” cues, and to “availability cascades.”
- People need to feel confident about encouraging others.

# Dilemmas

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- Online social endorsement shapes attitudes and behaviour.
  - But vaccine misinformation circulates widely online.
- Media and information diets provide people with the content they share with others online.
  - But media and information diets vary considerably and play an important role in the circulation of misinformation (Chadwick, Vaccari & O'Loughlin, 2018).
- News avoiders are difficult to reach through formal campaigns.



# Rationales

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- Specific media and information settings will expose the vaccine-hesitant to attitudes, beliefs, information, and social signals that will shape the decision to accept or avoid vaccination.
- Public health campaigns that target specific media and information settings could provide vaccine endorsers with good material to share online. This may also help counteract vaccine misinformation online.

# What We Did

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- Survey, nationally representative sample ( $N=5,114$  adults), October 2020.
- Assessed attitudes and media diets for Covid-19 news and information.
- Cluster analysis to identify *actual* media diets.
- Multivariate statistical models isolating the attitudes and media diets that link to use of social media and personal messaging to encourage or discourage vaccination.
- Media diet as a *moderator* (i.e. amplifier or attenuator) of any link between attitudes and intention to encourage or discourage vaccination.



# Full List of Variables in Our Analysis

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## Outcome

- Position on online vaccination encouragement-discouragement scale

## Explanatory

- OCEANS Vaccine Hesitancy Scale (Freeman, Loe, Chadwick, Vaccari, Lambe et al, 2020).
- The “news finds me” attitude (Gil de Zúñiga, Weeks & Ardèvol-Abreu et al, 2017).
- Conspiracy mentality (Bruder, Haffke, Neave, Nouripanah & Imhoff, 2013).

## Moderators

- Main media and information sources for Covid-19 (12 from 29 sources)
- Media diet (cluster analysis).

## Controls

- Age
- Sex
- Income
- Educational attainment
- Ethnicity
- Religiosity
- Political ideology
- “Need for chaos” (Petersen et al, 2020)

# Online Social Endorsement of Covid-19 Vaccination

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- How likely is it that you will use social media (for example, Facebook, Instagram, Twitter, YouTube, or TikTok) or text messages/personal messaging apps (for example, WhatsApp, Snapchat, or Facebook Messenger) to encourage other people to get vaccinated?
  - I am likely to encourage others to get vaccinated, without a doubt
  - I am likely to encourage others to seriously consider getting vaccinated
  - I am not likely to encourage others either way
  - I am likely to encourage others to be cautious about getting vaccinated
  - I am likely to discourage others from getting vaccinated
  - Don't know



# The “News Finds Me” Attitude

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- Giving low priority to monitoring news and relying more on one’s online and social media networks of friends for information.
- Not previously examined in misinformation, but we hypothesized reduced vigilance and purposive information seeking.

# Conspiracy Mentality

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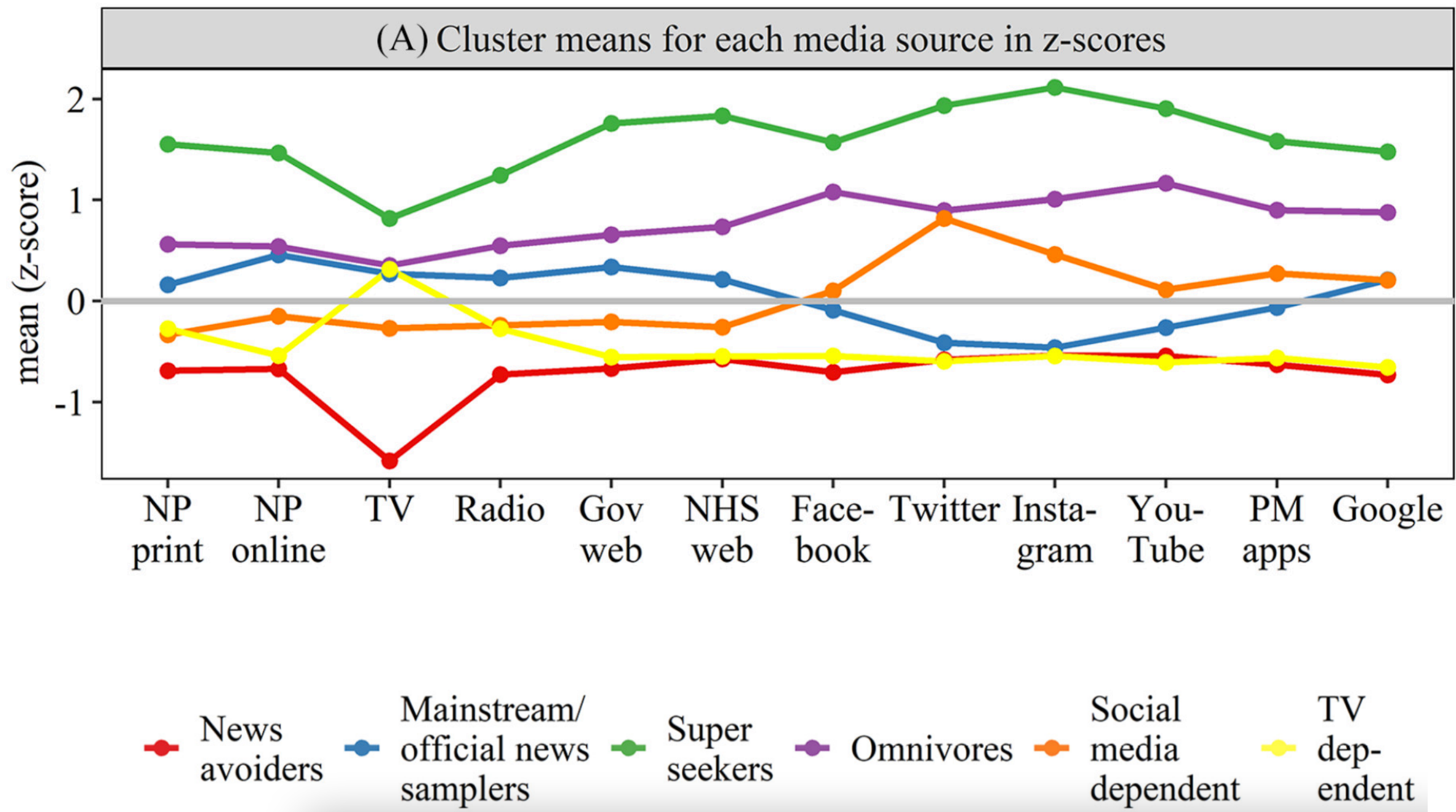
- Associated with:
  - Perceived low status, threat to status, lack of control over social and political events, but not over personal life or interpersonal relationships
  - Hostility to public authority and unusual government action during a crisis
  - Not examined before in online endorsement, but we hypothesized need for control over interpersonal communication environment while also fulfilling a public, political purpose.



# Key Findings

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# Six Main Media Diets for News and Information About Covid-19 (12 main sources, cluster analysis)



# Key Findings

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- A third (33%) of the UK adult population said they intend to use social media and personal messaging apps to encourage people to get vaccinated.
- A tenth said they will use social media and personal messaging apps to discourage others.
- Most (57%) were undecided either way.
- Clear link between vaccine hesitancy and intention to discourage others online.



## Key Findings (Multivariate)

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- The combination of avoiding news and a news-finds-me attitude are associated with the online discouragement of vaccination
- *Super seeker* and *omnivorous* media diets are most likely to be associated with online encouragement of vaccination
- The combination of a *social media dependent* media diet and higher levels of conspiracy mentality is most likely to be associated with online discouragement of vaccination

# Implications and Recommendations

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# Implications: Optimistic

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- Online discouragement of vaccination is a minority pursuit.
- Media diet matters:
  - *Super seekers* and *omnivores* are more likely to gather evidence and are more likely to positively encourage vaccination in their online networks



# Implications: Pessimistic

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- Avoiding news = less exposure to authoritative sources + fewer opportunities to learn about the vaccines
- News finds me = not prioritising information-seeking and vigilance
  - Yet people with these attitudes and behaviours are most likely to discourage others online.
- Conspiracy mentality + social media use = online discouragement that will undermine the UK vaccination programme, to some extent.

# Key Recommendations to Help Make Online Social Endorsement Work

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- **Direct contact:**

- Post, workplace, local community structures, and through phone counselling via local health services, to reach the *news avoiders*.

- **TV public information advertisements:**

- To point people away from TV and encourage visits to NHS and other public health websites, which should feature clear, simple ways for people to share material among their online social networks.

- **Social media campaigns:**

- To provide Covid news *super seekers* with good resources to share.
- Also to encourage social media users to browse away from social media platforms and visit reliable online sources.

- **Social media companies:**

- To intensify their removal of vaccine misinformation and “anti-vax” accounts.

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# Covid: Vaccine-hesitant patients in Leicester get GP phone calls

2 March



Coronavirus pandemic

**Direct contact**



Press release

## New campaign launches urging the public to get COVID-19 vaccine

Real-world data shows hospitalisations and deaths from COVID-19 are falling significantly due to the vaccine roll-out.

From: [Department of Health and Social Care](#)  
Published: 26 April 2021



- Government launches new national campaign to urge under-50s to get the jab
- [TV adverts](#) to begin from Monday 26 April, showcasing the collective effort of the largest vaccination programme in UK history
- Real-world data shows hospitalisations and deaths from COVID-19 are falling significantly due to the vaccine roll-out
- Royal Mail will apply a special postmark to stamped mail in support of the campaign

The new TV advert embodies the collective effort of everyone who has played a part in the largest vaccination programme in UK history – from the scientists and clinical trial participants, to NHS and care sector staff and volunteer stewards at vaccination sites – who have all worked tirelessly to protect those most at risk.

[www.nhs.uk](https://www.nhs.uk)

It features a poignant soundtrack recorded by songwriter and artist Shells, who was longlisted in Glastonbury's Emerging Talent competition to perform at the postponed 2021 Glastonbury festival. The track, a cover of Dinah Washington's 'What a Difference a Day Makes', will be released to the public in the coming weeks.

The campaign will also urge the public to get their facts about vaccines from trusted sources like NHS.UK and their GP so they can make informed and evidence-based decisions.

A number of organisations across a wide range of sectors such as hospitality, media, retail, manufacturing and construction will be supporting the campaign.

Royal Mail will apply a special postmark to stamped mail, which will run from 5 to 7 May. Google and YouTube will feature vaccine messaging on their channels, and LinkedIn will be providing free advertising space on its platform to help cascade a vaccine message to UK businesses.

Workplaces

Post

Clear cues to  
browse away



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BBC Trending

# The volunteers using 'honeypot' groups to fight anti-vax propaganda

By BBC Trending

In-depth reporting on social media

🕒 8 hours ago



Coronavirus pandemic

## 'Vaccine discouragement'

Richard blames social media sites - particularly Facebook - for failing to protect users like Brian.

"It needs to be policed a lot better," he says. "And until they do, conspiracies are going to keep growing."

In an interview, Facebook's vice president for Northern Europe Steve Hatch acknowledged that the company has "a big responsibility to ensure people are seeing accurate information."

Mr Hatch told the BBC that the company is now removing groups, pages and accounts that deliberately discourage people from taking vaccines, regardless of whether the information can be verified as false or not.

It's a shift in policy. Previously Facebook would only delete groups - and accounts on Instagram, which it owns - filled with outright false vaccine information. Some of the groups that fall under the new policy may include material that's true, or unverifiable, but are not outright falsehoods.

Tech

FOLLOW MASHABLE

## Facebook says it removed the internet's 12 most prominent anti-vaxxers. 10 are still on the social network.



Removal of overt vaccine misinformation has now been extended to removal of 'vaccine discouragement.'



# OCEANS—Published Studies to Date

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<http://bit.ly/covid-vax-endorsement>