How populist-aligned views are reflected in people's accounts of the receipt of public health interventions: a systematic review of qualitative studies

Kaitlin Conway-Moore [a] , Alison R. McKinlay [b], Jack M. Birch [c], Fiona Graham [c], Emily J. Oliver [c], Clare Bambra [c], Michael P. Kelly [c,d], Chris Bonell [a,*]

[a] NIHR Policy Research Unit Behavioural and Social Sciences, Department of Public Health, Environments and Society, London School of Hygiene and Tropical Medicine, 15-17 Tavistock Place, London, WC1H 9SH, UK
[b] NIHR Policy Research Unit Behavioural and Social Sciences, Centre for Behaviour Change, Department of Clinical, Educational and Health Psychology, University College London, London, UK
[c] NIHR Policy Research Unit Behavioural and Social Sciences, Population Health Sciences Institute, Faculty of Medical Sciences, Newcastle University, Newcastle upon Tyne, UK
[d] Department of Public Health and Primary Care, Cambridge Public Health, University of Cambridge, Cambridge, UK

A B S T R A C T

Recent evidence suggests an increasing backlash towards government-led public health interventions in the areas of vaccination, climate change, sexual and reproductive healthcare, and non-pharmaceutical infection control measures. One potential driver of resistance may be the evidenced rise in populist politics and attitudes in many countries over the last two decades. To better understand people's views and perspectives on the relationship between these two phenomena, we present qualitative evidence from a systematic review examining how populist-style attitudes may affect the receipt and impact of public health interventions. Focusing on Organisation for Economic Co-operation and Development (OECD) countries, we thematically synthesise 52 papers to construct a conceptual framework. This outlines (i) how existing populist-type views can find a new mode of expression in and/or be amplified by public health interventions and emergencies; (ii) the processes through which populist-type views may influence others' attitudes towards the receipt of public health interventions; and (iii) how populist-informed non-adherence to public health interventions affects social unity. From a policy perspective, the findings from this review suggest the need for public health communications to be more effective in combating misinformation, and for key messengers to be more nuanced and transparent in their approaches to engaging the public, including by recognising and responding directly to people's concerns. There is also evidence of the need to involve and engage with diverse members of the population in developing public health messaging, and for politicians to lead by example, adhering to the standards they expect of others.

PROSPERO registration number CRD42024513124.

1. Introduction

Broad-based population-level acceptance of public health interventions is key to their achieving impact. However, in recent years, there is evidence of increasing backlash against government-led public health interventions in countries around the world (Shetty, 2010). Among the types of interventions that have elicited a negative reaction are vaccination campaigns, actions to mitigate the health effects of climate change, expanded access to sexual and reproductive healthcare, and the implementation of non-pharmaceutical infection control measures (Abi-Hassan, 2017; Huber, 2020; Kennedy, 2019; Ozduzen et al., 2023; Pugh, 2019). An example of the potentially negative impact of this kind of backlash on the reduced acceptability and uptake of public

health interventions came in 2019, when the World Health Organization declared vaccine hesitancy among the top ten threats to global health (de Figueiredo et al., 2020).

A potential driver of the increase in resistance to government-led public health interventions may be the rise in populist politics and attitudes that has taken place in many countries over the last two decades (Inglehart et al., 2016). Fuelled by widespread feelings of dissatisfaction with, and alienation from, government and mainstream politicians, populist politics are generally constructed in terms of appeals to 'the people' to stand in opposition to government, business, professional, media or scientific 'elites' (Ernst et al., 2017). While who is said to make up 'the people' and who constitute 'the elite' varies between different strands of populism, this matters less than the clear distinction of 'us'

versus 'them.' In left-wing populism, this distinction is largely binary, with those economically in the middle and bottom of society viewed as pushing against those at the top. In right-wing populism, the distinction is more often tripartite, with 'the people' viewed in opposition to one or more 'elite' groups, as well as various 'other' or 'out groups,' such as women, migrants, and racial, ethnic, sexual, gender, linguistic and/or religious minorities (Bambra and Lynch, 2021; Judis, 2016).

Within populist discourse, elites are often viewed as depriving the people of their collective sovereignty and/or their individual freedom, the former through modifications to legal rights, judicial review and the autonomy of experts, and the latter through government regulation and other interventions. Elites are also often viewed as pushing for unwelcome social change, usually presented as favouring elites themselves or, in right-wing populism, minorities and 'social pluralism' over the majority of the population (Mudde and Kaltwasser, 2015, 2017; Vallacher and Fennell, 2021; Wirth et al., 2016). As a result, populist movements are often linked to a push for unrestricted majoritarian sovereignty (Ernst et al., 2017).

One way of understanding populism is as a form of political practice, where the focus is on rallying the public to achieve specific social, political or economic agendas (Jansen, 2011). As such, populism is often viewed as a 'thin' ideology in that it is seen as a means for mobilising political support rather than a 'thick' ideology with a clear and consistent set of beliefs or aims (Jansen, 2011). This explains how populism can incorporate both majoritarian and libertarian strands.

Populism can also be viewed as a grassroots phenomenon. Brubaker describes such populism as a response to economic exclusion and political dissatisfaction grounded in everyday experiences and suspicions of elite technocratic expertise (Brubaker, 2017). Political sociologists have pointed to a number of recent global processes and events that have fuelled such populist sentiment, including neoliberal governance strategies, globalisation, anxiety over immigration, war, climate change and the COVID-19 pandemic.

While, to date, much of the reaction to populist movements and attitudes has focused on their impact on rising illiberalism and declining social cohesion, the potential implications for public health also require consideration. Populist politicians have been described as using health issues, both before and during the COVID-19 pandemic, as part of their overall political strategy, including by simplifying and dramatising complex health issues and imposing an 'us' versus 'them' agenda to subvert experts or scapegoat minorities, thereby potentially undermining trust in health institutions and hindering effective management (Lasco, 2020; Lasco and Curato, 2019). One example of this tactic is the credence sometimes given to conspiracy theories by populist leaders (Rutjens et al., 2021). It has been argued that a focus on the alleged wrongdoings of 'elite' groups within society that forms the basis of many conspiracy theories, and is also a hallmark of many populist movements, is particularly relevant for the negative reception given to some public health interventions. This is often the case, for example, when the scientific data being presented to support such interventions do not align with a populist worldview (Rutjens et al., 2021). By promoting conspiracy theories related to the motivations of political or scientific elites, room is created for rejecting the public health information they provide.

Recent evidence on the core drivers of scepticism concerning public health issues such as climate change, vaccination or COVID-19 restrictions suggests that different aspects of populist attitudes might be influencing different drivers of opposition to these issues (Rutjens et al., 2021). For example, while climate change scepticism tends to be rooted in opposition to government regulation, the factors that have been found to be powerful drivers of vaccine scepticism or hesitancy include lack of trust in government and scientists (Aechtner and Farr, 2022; Marti et al., 2017; Robertson et al., 2021; Rutjens et al., 2021). When it comes to COVID-19 restrictions, it has been argued that opposition to mandatory self-isolation, facemask requirements, and limitations to travel, leisure and social activities mainly came from those suspicious of government over-reach into the lives of citizens (Dryhurst et al., 2022; Kerr et al., 2021; Rutjens et al., 2021).

In light of this, in the present study, we synthesise qualitative findings from a systematic review of international evidence to answer the following research question: how are populist views implicated in how people living in Organisation for Economic Co-operation and Development (OECD) countries describe their attitudes towards and receipt of public health interventions? The overall aim of this work is to draw on a wide body of international evidence to inform public health planning in England in order to broaden the acceptability of public health interventions. However, this paper aims to report on this synthesis and its overall implications rather than focusing on implications for England alone.

2. Methods

This systematic review was conducted in alignment with Systematic Reviews without Meta-Analysis (SWiM) reporting guidelines (Appendix 1) (Campbell et al., 2020).The protocol for this review was prospectively registered with PROSPERO (registration number CRD42024513124) and published in 2024 (Conway-Moore et al., 2024).

2.1. Inclusion and exclusion criteria

The qualitative evidence presented here is part of a wider systematic review which also included quantitative evidence. As such, we report inclusion criteria for the wider review as well as specifically for qualitative evidence. In line with the aim of this research to synthesise evidence applicable to the English policy context, but in recognition of the rise of populist views as an international phenomenon, included studies were limited to those involving adult participants living in member countries of the OECD. Given the focus on populist views, we limited our review to literature published since 2008, the year of the global financial crisis, described as a key driver of the rise of populist beliefs, and from which most contemporary literature on populism dates (Rhodes-Purdy et al., 2021).

Included studies focused on at least one existing public health intervention, including but not limited to: vaccination; disease screening; non-pharmaceutical infection control; sexual/reproductive health care; increased access to health care; climate change mitigation; road safety; anti-pollution measures; water fluoridation; gun control; mental health care; promotion of healthy diet and exercise; and interventions related to gambling, tobacco, alcohol or other drug use.

Included studies also needed to focus on participant accounts of views which, although they may not have been explicitly described by study authors or participants as populist, aligned with the attitudes most commonly associated with populism in the research literature described above. This decision was informed by the notion that populism is a highly contested socio-political construct and a term which is used to analyse as well as critique those who exist outside of the political centre ground. As such, focusing our inclusion criteria on whether studies explicitly referred to participant views as 'populist' would potentially have biased our results towards studies taking a certain approach to understanding these views (Mudde and Kaltwasser, 2017). We therefore included studies where there was evidence of participants holding views that aligned with populism in the sense of being hostile towards (which we took to encompass lacking trust in) at least one of the following: 1) elites (e.g., government, business, medical and other health professionals, mainstream media, science, and the wealthy); 2) out-groups (e.g., women, migrants, minoritised ethnic/racial/religious groups or gender/sexual minorities); 3) checks on popular sovereignty (e.g., legal rights) and/or personal freedoms (e.g., government-imposed regulations); or 4) social change (which we took to involve moves towards greater social pluralism for example via promotion of equality, diversity and inclusion, state intervention, or market regulation).

Lastly, included studies needed to report how populist views were associated or linked to descriptions of the receipt (attitudes towards,

adherence to and/or uptake of) of public health interventions.

2.2. Search strategy and study selection

Searches were executed on the 19th February 2024 in thirteen bibliographic databases relevant to medical, psychological, economic and social scientific research, including: CINAHL; Dissertation Abstracts; Econlit; EMBASE; Global Health; Global Index Medicus; International Bibliography of the Social Sciences; Ovid MEDLINE; PsycINFO; Scopus; Social Policy and Practice; Sociological Research Online; and Web of Science (including Science Citation Index Expanded, Social Sciences Citation Index, Arts & Humanities Citation Index, and Emerging Sources Citation Index). Our search was not limited by language or publication type. Given the nature of our research question, these searches mainly included the use of free-text terms rather than controlled vocabularies such as medical subject headings (MeSH).

The following concepts were taken from our inclusion criteria to develop a search string: populist attitude AND public health intervention AND intervention receipt. For each concept, relevant free-text and, where applicable, controlled-vocabulary terms were linked by 'OR'. Our search terms were peer-reviewed by a librarian at the London School of Hygiene & Tropical Medicine prior to execution. Appendix 2 contains the final search strategy employed in each of our included databases.

In addition to database searches, searches were run on the following websites: Centres for Disease Control and Prevention; Community Research and Development Information Service; Drug and Alcohol Findings Effectiveness Bank; European Centre for Disease Prevention and Control; Google; Google Scholar; Intergovernmental Panel on Climate Change; International Planned Parenthood Federation; Marie Stopes International; The Campbell Library; Open Library; United Nations Environment Programme; and the World Health Organization.

Reference lists of all included studies were hand-searched for additional studies that met our inclusion criteria. Finally, we contacted subject experts for other studies meeting our inclusion criteria that had not already been retrieved in our search.

Results were downloaded into EPPI-Reviewer 6, and duplicates were removed (Centre at the Social Science Research Unit, 2024). Pilot screening of titles and abstracts began among pairs of reviewers (comprising KCM together with either FG or CBo) who screened successive batches of 50 records, meeting to discuss any disagreements and calling on a third reviewer where necessary. Once a batch-level agreement of 90% was achieved, remaining titles and abstracts were divided amongst the group and screened for potential inclusion by one reviewer. The process for screening full texts aimed to use a similar approach. However, as a 90% batch agreement was never achieved, all full texts were screened by pairs of reviewers (comprising KCM together with either AMK or CBo), who met to discuss disagreements and called on a third reviewer where necessary.

2.3. Data extraction and quality assessment

Data extraction related to the characteristics of all included studies was carried out by one reviewer (KCM) using Microsoft Excel, with cross-checking conducted by a second reviewer (JB) (Microsoft, 2024). Given the large volume of included studies, many of which reported quantitative data from cross-sectional studies, we decided to deviate from the protocol by mapping all included studies (describing basic study details, methods, sample and outcome measures) and then synthesising only the findings from 1) all qualitative studies; 2) all longitudinal quantitative studies (most of which focused on COVID-19); and 3) all quantitativestudies on topics other than COVID-19, the first of which we report in this paper. This was done to focus synthesis on those studies providing, respectively, the strongest qualitative insights into people's lived experiences, quantitative evidence of how populist attitudes might actually be causally or temporally linked to (mainly COVID-19) intervention receipt and quantitative evidence of how

populist atttitudes affect engagement with public health interventions in areas other than COVID-19.

Data extraction related to the characteristics of qualitative studies synthesised in this paper was similarly carried out by one reviewer (KCM) using Microsoft Excel, with cross-checking conducted by a second reviewer (JB) (Microsoft, 2024). This extraction followed the review protocol by reporting: basic study details (first author, publication date, study location, and duration) and study methods (data collection, sampling and sample size, participant characteristics, populist attitudes described, intervention receipt descriptors and analytical approach).

The EPPI Centre's quality-assessment evaluation tool was used to assess the quality of qualitative studies (EPPI-Centre, 2021). Quality assessment was carried out independently by two reviewers (KCM and JB) who met to compare their assessments and discuss any disagreements before reaching an agreed appraisal of study quality. The strength of the evidence presented in our review was assessed using the GRADE-CERQual framework (Lewin et al., 2018). Initial GRADE-CERQual assessments were made by one reviewer (KCM), with cross-checking for accuracy by a second reviewer (JB).

2.4. Data analysis and synthesis

Data from the results and discussion sections of qualitative studies were analysed and synthesised, drawing on first-order constructs from verbatim participant quotes but also second-order constructs from author interpretations informed by Noblit and Hare's meta-ethnographic approach to synthesising qualitative research (Noblit G and Hare R, 1998). Coding occurred in three stages in line with guidance for thematic synthesis (Thomas and Harden, 2008). Firstly, line-by-line inductive coding of the abstract, results and discussion sections of each qualitative study was carried out independently by pairs of reviewers (KCM, JB, AMK) in EPPI-Reviewer 6 (Centre at the Social Science Research Unit, 2024). To ensure consistency across each pair of coders, five studies were first coded by all three reviewers, who then met to discuss these and resolve any discrepancies.

Following an initial process of broad-based inductive coding, codes were narrowed down to focus only on those that aligned with the research question. Informed by Noblit and Hare (1998)'s meta-ethnographic approach, axial coding was then used to identify cases of: 'reciprocal translation' (where analogous concepts were described in different papers using different terms), 'refutational synthesis' (where concepts in one paper appeared to contradict those in another), and 'line-of-argument synthesis' (where multiple findings could be put together to provide a broader understanding). In the second stage of analysis, one reviewer (KCM) worked to categorise and hierarchically organise the agreed upon individual codes into groups of descriptive themes. This second stage was only finalised once the results were agreed upon by all reviewers involved in the first stage of the coding process (KCM, JB, AMK). Finally, reviewers aimed to go beyond an initial descriptive interpretation of the overall study results and towards a broader understanding of the analytical themes emerging across the studies that could be applied to a conceptual framework related to our research question. To this end, reviewers worked together to assess and infer what they saw as the emerging influences of populist attitudes on the receipt of different public health interventions, and their wider societal consequences. Discussions continued until a set of analytical themes was developed that sufficiently captured the essence of all descriptive themes.

2.5. Patient and public involvement

As a study funded by the National Institute for Health and Care Research (NIHR) Policy Research Unit Behavioural and Social Sciences, this review had a designated patient and public involvement and engagement (PPIE) representative who was regularly engaged in different aspects of the research effort. His contributions included

critical review of the systematic review protocol and this paper, as well as the production of a lay summary of the research project to ensure that research outputs would be accessible and useful to a wide audience.

3. Results

3.1. Overview of included studies

As can be seen in Fig. 1, our search strategy identified 55,056 references from searched databases and 56 references from searched websites, for a total of 55,112 references. De-duplication resulted in 28,162 unique references, which were screened on title and abstract, resulting in the retention of 690 references, which were screened on full text. An additional six references were eligible for full-text screening but could not be retrieved. Full-text screening identified 205 references for inclusion, with an additional 33 references resulting from hand-searching the reference lists of included studies. This resulted in a total of 238 references, of which 52 are included in the present review of qualitative studies. For an overview of the study characteristics of all 238 studies included in the wider systematic review, see Appendix 3.

3.2. Study characteristics

All included qualitative studies were published between 2011 and 2024, with most published from 2021 (Table 1). Study settings ranged geographically and included the United States (n = 24), the United Kingdom (n = 12), Italy (n = 4), Australia (n = 2), Austria (n = 2), Canada (n = 2), Germany (n = 2), Mexico (n = 2), Portugal (n = 2), Denmark (n = 1), Finland (n = 1), France (n = 1), Poland (n = 1), Scotland (n = 1), Switzerland (n = 1), Sweden (n = 1) and Türkiye (n = 1). Studies utilised data collection methods including interviews (n =

32), focus groups (n = 13), ethnographic observation (n = 2) and free-text questions on surveys (n = 2). Sampling methods included purposive (n = 38), snowball (n = 15) and convenience sampling (n = 13). Sample sizes varied from as few as 10 participants to as many 1,233, and samples included a range of participant characteristics, such as members of racial/ethnic or linguistic minority groups (n = 17); professionals (n = 6); members of sexual/gender minority groups (n = 2); incarcerated adults (n = 2); adults experiencing multiple disadvantages (n = 1); injecting drug users (n = 1); pregnant women (n = 1); veterans (n = 1); individuals living in rural areas (n = 1); unvaccinated/vaccine sceptical/fully vaccinated adults (n = 7); and diverse samples of the wider population within the given study setting (n = 18).

The majority of included studies focused on public health interventions related to the COVID-19 pandemic (n = 43). This included attitudes towards/views on and adherence to/uptake of the COVID-19 vaccine (n = 35), non-pharmaceutical interventions such as stay-at-home orders, social distancing and masking (n = 8), COVID-19 testing (n = 2), and use of a mobile contact tracing application (n = 1). A smaller number of studies examined attitudes towards/views on and adherence to/uptake of non-COVID-19 vaccinations including maternal vaccinations, childhood vaccinations and the influenza vaccine (n = 9; one of which also looked at attitudes towards the COVID-19 vaccine). Finally, one study examined uptake of mental health services. All included studies reported on thematic linkages (expressed by either study authors or study participants themselves) between hostility towards/a lack of trust in 'elite' institutions and/or actors, and attitudes towards and/or acceptance of the aforementioned public health interventions.

Only two studies drew on literature about populism as a theoretical framework, with only one of these, a 2022 study by Lello et al., doing so with any degree of depth (Adekola et al., 2022; Lello et al., 2022).

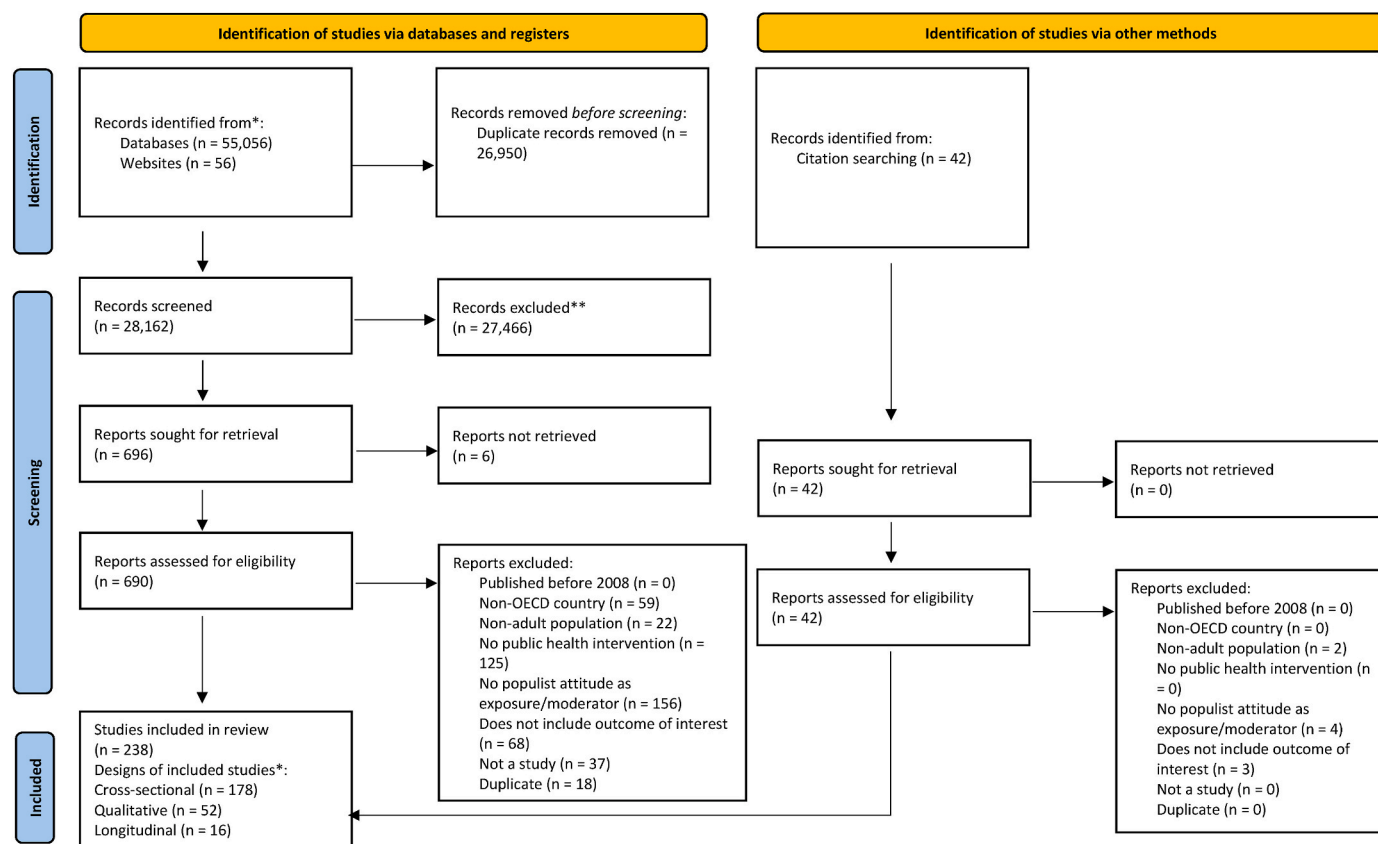
Fig. 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram (Page et al., 2021)
*The breakdown of included studies by study design totals to n = 246 rather than n = 238 as 8 studies included mixed methods.

Table 1
Included qualitative study characteristics (n = 52).

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
Abad et al. (2023)	United States	March–April 2021	Focus groups	Purposive sampling	59 unvaccinated adult participants who were vaccine hesitant	Trust in experts	Attitudes on COVID-19 vaccine uptake	Thematic analysis	None
Adekola et al. (2022)	Scotland (Glasgow)	March–April 2021	Semi-structured interviews	Snowball and purposive sampling	8 expert (academics/public health experts) and 18 non-expert members of an ethnic minority community	Trust in government	Attitudes on COVID-19 vaccine uptake	Thematic analysis	Populism
Allen et al. (2012)	United States (Boston)	February–May 2008	Focus Groups	Convenience sample	64 White, Black, and Hispanic parents of daughters who were age eligible to receive the HPV vaccine (9–17 years)	Trust in medical professionals and pharmaceutical companies	Attitudes towards uptake of HPV vaccine (Parent's intention to have their daughter vaccinated)	Thematic analysis	None
Birmingham Voluntary Service Council Research (2021)	United Kingdom (Birmingham)	Not reported	Individual interviews and focus groups	Purposive sampling	Focus groups with staff working at organisations in contact with people with personal experience of multiple disadvantage (sample size not reported); 27 adult interview participants	Trust in government, scientists, pharmaceutical companies, and medical professionals	Views on uptake of the COVID-19 vaccine	Not reported	None
Burton et al. (2023)	United Kingdom	May–November 2020	Semi-structured interviews	Purposive sampling	116 adult participants from across the UK, with one of the following characteristics: had mental health condition(s) or long-term health condition(s), were parents of young children, or were older (aged 70+), and younger (aged 18–24) adults	Trust in government	Adherence to COVID-19 preventative measures, particularly social distancing	Reflexive thematic analysis	None
Butler et al. (2022)	United States (San Francisco)	January–February 2021	Focus groups and in-depth interviews	Purposive sampling	109 adult residents of San Francisco who identified as Black/African Americans, Latinx or Chinese Americans	Trust in government, pharmaceutical industry and health institutions	Uptake of COVID-19 vaccine	Thematic analysis using grounded theory	None
Byström et al. (2014)	Sweden (Stockholm)	February–May 2013	Semi-structured interviews	Purposive and snowball sampling	20 parents living in anthroposophic communities	Trust in healthcare system, medical professionals and experts	Attitudes towards and uptake of MMR vaccine	Content analysis	Anthroposophic communities
Cáceres et al. (2022)	United States (Los Angeles County)	February 2021	Focus groups	Convenience sampling from a database of promotoras	22 adult promotoras (Community Health Workers)	Trust in government	Views on the COVID-19 vaccine	Reflexive thematic analysis	None
Carlson et al. (2022)	Australia (Perth, Western Australia)	August–October 2021	Semi-structured interviews and focus groups	Purposive sampling	11 interview participants and 37 focus group participants, all culturally and linguistically diverse (CALD) adults	Trust in government and medical professionals	Attitudes on uptake of COVID-19 vaccine	Thematic analysis	Capability, motivation, opportunity, behaviour model

Table 1 (*continued*)

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
Cross et al. (2023)	United States (Michigan)	December 2020–June 2021	Semi-structured interviews	Purposive sampling	40 interviews with Black and Latinx adult participants who were residents of Wayne, Washtenaw, Kent, or Genesee counties, which are some of the areas hardest hit by COVID-19 in Michigan	Trust in scientists and healthcare professionals	Uptake of COVID-19 vaccine	Thematic analysis	None
Cunningham-Erves et al. (2018)	United States (Alabama)	December 2020–June 2021	Semi-structured interviews	Convenience sample recruited via community sites and community gatekeepers	237 surveys and 9 follow-up interviews with Black mothers of daughters	Trust in medical professionals and pharmaceutical companies	Uptake of HPV vaccine (mothers' intentions to have their daughter vaccinated)	Thematic analysis	Theory of reasoned action; Health belief model
Dell'Imperio et al. (2023)	United States (Michigan, Illinois, South Carolina, Louisiana, Georgia)	May–September 2021	Semi-structured interviews	Purposive sampling	15 interviews with Black adults with long COVID symptoms (physical or mental)	Trust in government	Views on the COVID-19 vaccine and vaccine uptake	Thematic analysis	None
Denford et al. (2022)	United Kingdom	September–October 2021	Semi-structured interviews	Purposive sampling	70 UK adults, 35 (ages 18–29) who were unvaccinated and 35 (ages 30–49) who had received one dose of the vaccine	Trust in government	Uptake of COVID-19 vaccine	Thematic analysis	Vaccine hesitancy framework
Dennis et al. (2021)	United Kingdom (North West England)	April 2021	Semi-structured interviews	Purposive and snowball sampling	10 adult care home employees who had been invited to have (but had not received) the COVID-19 vaccine	Trust in government and the healthcare system	Attitudes on uptake of COVID-19 vaccine	Framework analysis	None
Eraso and Hills (2021)	United Kingdom (North London: Islington, Haringey, Camden, Hackney, Barnet and Enfield)	August–September 2020	Semi-structured interviews	Purposive sampling	30 adult interview participants chosen due to relevant socio-demographic factors including age, gender, ethnicity, employment status, borough, and clinical vulnerability	Trust in government	Adherence to COVID-19 preventative measures, specifically social distancing	Framework analysis	Social ecological model; Theory of planned behaviour
Fattorini (2023)	Italy (Autonomous Province of Trento)	February–May 2018	Semi-structured interviews and participant observation	Snowball sampling	21 parents who are members of Vaccinare Informati, an organisation that advocates for freedom of choice in vaccination decisions; and 5 doctors who experience with vaccine-hesitant patients	Trust in scientists and medical professionals	Attitudes on childhood vaccine	Content analysis	Sociology of health; Science and technology studies
Fischer et al. (2016)	United States (Arkansas, Colorado, Maine, and Wisconsin)	June 2013–July 2014	Semi-structured interviews	Purposive sampling	25 rural veterans and 11 rural mental health care providers to veterans, representing 4 VA regions (Veterans Integrated Service Networks [VISNs]); all participants were adults, veterans had	Trust in government (Veterans Affairs) and medical professionals	Uptake of mental health services	Content analysis and thematic analysis	None

7

Table 1 (*continued*)

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
					to live at least 50 miles from their nearest Veterans Affairs Medical Center (VAMC)				
Geana et al. (2021)	United States (Midwest)	March 2021	Individual interviews	Convenience sampling	25 adult participants, all women recently released from jail, all participants in an NIH-funded study on health literacy among incarcerated women	Trust in government, pharmaceutical industry and the medical establishment	Attitudes towards uptake of COVID-19 vaccine	Thematic analysis	Vaccine hesitancy model
Gehlbach et al. (2022)	United States (Eastern Coachella Valley of Southern California)	August 2020–January 2021	Ethnography and focus groups	Purposive sampling	55 adult members of Latinx and Indigenous Mexican farm-working communities formed the focus groups, and ethnographic observation took place at community advisory board meetings, meetings with partners (e. g., public health, healthcare leaders), and attendance at meetings with growers	Trust in government	Attitudes towards COVID-19 testing and vaccination	Thematic analysis	Social determinants of health
Huang et al. (2022)	United States (Atlanta)	February–June 2021	In-depth interviews	Purposive sampling	29 participants among a majority Black sample of US adults, living in households that declined participation in a national COVID-19 serosurvey	Trust in government	Attitudes on COVID-19 vaccine uptake	Thematic analysis	None
Jamison et al. (2019)	United States (Maryland and Washington, D.C.)	2012–2014	Semi-structured interviews, in-depth interviews and focus groups	Purposive sampling	119 Black and White US adults	Trust in government, pharmaceutical companies and the healthcare system	Uptake of influenza vaccine	Thematic analysis using grounded theory	Trust, confidence and cooperation model
Jennings et al. (2021)	United Kingdom (National; Bristol and Oldham)	November–December 2020	Focus groups	Purposive sampling	29 participants in Bristol and Oldham, chosen to reflect a relatively affluent, diverse city in the South of England (Bristol), and former industrial town in the North of England (Oldham)	Trust in government, health experts and health institutions	Uptake of COVID-19 vaccine	Thematic analysis	None
Jimenez et al. (2021)	United States (New Jersey: Essex, Middlesex, Passaic, and Union counties)	November 2020–February 2021	Group interviews and individual interviews	Purposive sampling	111 Black and Latinx adult interview participants, including 9 individuals who worked in health care settings as ancillary or support staff. Participants were from New Jersey counties (i.e., Essex, Middlesex, Passaic, and Union), chosen due their high rates of COVID-19 infections and deaths	Trust in government	Attitudes towards COVID-19 preventative measures (specifically mask wearing) and testing	Thematic analysis	None

Table 1 (*continued*)

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
					during the initial surge in 2020, high levels of poverty, and large concentrations of Black and Latinx populations				
Koskan et al. (2023)	United States (Unnamed southwestern state)	2022	Semi-structured interviews	Purposive sampling	30 adult participants living in rural regions of one southwestern US state	Trust in government, scientists, health and medical professionals, and mass media	Attitudes towards COVID-19 vaccine	Thematic analysis	Vaccine hesitancy model
Lello et al. (2022)	Italy	December 2020–May 2022	Individual interviews and focus groups	Snowball sampling (interviews) and purposive sampling (focus groups)	67 Italian adult interview participants who expressed scepticism or rejection of the COVID-19 vaccine; 4 focus group participants, all members of Movimento 3V ('Vaccines We Want the Truth' Movement)	Trust in government and pharmaceutical companies	Attitudes towards COVID-19 vaccine	Thematic analysis	Populism
Lessard et al. (2022)	Canada (Quebec, Ontario and British Columbia)	March 2021	Semi-structured interviews	Purposive, quota-based sampling	15 incarcerated adults representing different ages (<35, 35–44, 45–54, 55–64, !65 years), ethnicities (Caucasian, Indigenous (First Nations, Inuit, and Metis), Asian, Black, Hispanic, and other), and security levels (minimum, medium, and maximum)	Trust in scientists and medical professionals	Attitudes towards COVID-19 vaccine uptake	Thematic analysis using the Theoretical Domains Framework (TDF)	Theoretical domains framework
Lupton (2023)	Australia	September–October 2021	Semi-structured interviews	Purposive sampling	40 Australian adults	Trust in scientists	Attitudes towards and uptake of COVID-19 vaccine	Thematic analysis	None
Machado et al. (2024)	Austria, Germany, Italy, Mexico and Portugal	August–December 2021	Semi-structured interviews	Snowball and convenience sampling	182 adults (Austria = 55, Germany = 40, Italy = 24, Mexico = 25, Portugal = 38); data from the wider Solidarity in Times of a Pandemic or SolPan(+) project	Trust in scientists	Uptake of COVID-19 vaccine	Constructivist grounded theory	Performativity
Magee et al. (2022)	United Kingdom (London)	May–August 2021	Semi-structured interviews	Purposive sampling	38 racial/ethnic minority patients registered at four GP practices in London	Trust in government, pharmaceutical companies and medical professionals	Attitudes towards and uptake of COVID-19 vaccine	Thematic analysis	None
Majee et al. (2023)	United States (Missouri)	April 2021	Semi-structured interviews	Purposive and snowball sampling	21 Black adult members of Live Well by Faith, a faith-based wellness program	Trust in government and pharmaceutical companies and	Attitudes towards and uptake of COVID-19 vaccine	Thematic analysis	Vaccine hesitancy determinants matrix

Table 1 (*continued*)

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
Mendenhall (2023)	United States (Northwest Iowa)	Summer 2020	Ethnography and individual interviews	Convenience sampling	86 interviews and informal conversation participants in a small tourist town in northwest Iowa, as well as observation of public forums of the school board	medical professionals Trust in government and the healthcare system	Adherence to COVID-19 preventative measures	Not reported	None
Młoźniak et al. (2023)	Poland (Mazowieckie, Małopolskie, Świętokrzyskie and Podkarpackie districts)	November 2022–March 2023	Individual interviews	Convenience and snowball sampling	50 Polish adult participants	Trust in government, scientists and pharmaceutical companies	Attitudes and uptake towards COVID-19 vaccine and preventative measures	Thematic analysis	Science denialism
Morales et al. (2022)	United States (Southwest)	Not reported	Semi-structured interviews	Purposive and snowball sampling	20 vaccine hesitant adults	Trust in government and healthcare system	Attitudes towards uptake of COVID-19 vaccine	Thematic analysis	None
Muğaloğlu et al. (2022)	Türkiye	February 2021	Open-ended survey questions	Convenience sampling	1,233 Turkish unvaccinated adults	Trust in government and scientists	Adherence to COVID-19 preventative measures	Content analysis	None
Naqvi et al. (2022)	United Kingdom	July–August 2021	Semi-structured interviews	Snowball sampling	12 UK adults who were part of an ethnic minority group and expressed concerns about the COVID-19 vaccine	Trust in government	Uptake of COVID-19 vaccine	Conventional content analysis and thematic analysis	None
Newman et al. (2024)	Canada (Greater Toronto and Hamilton Area, Ontario)	March–November 2021	Semi-structured interviews	Purposive sampling	40 adults who identify as a sexual and/or gender minority individual	Trust in government and medical professionals	Uptake of COVID-19 vaccine	Thematic analysis	None
Nurmi and Harman (2022)	Finland (southern, western and central)	2016–2019	In-depth interviews	Purposive sampling	38 Finnish parents who have refused all or several vaccines for their children	Trust in government, medical and health professionals, scientists and the pharmaceutical industry	Uptake of childhood vaccines	Content analysis	None
Osakwe et al. (2022)	United States (New York State)	February–March 2021	Semi-structured interviews	Convenience sampling	50 Black and Hispanic adults living in the New York metropolitan area	Trust in government, pharmaceutical companies, medical professionals and the healthcare system	Attitudes towards and uptake of COVID-19 vaccine	Conventional content analysis	None
Poduval et al. (2023)	United Kingdom (London and surrounding areas)	December 2021–March 2022	Focus groups and individual interviews	Convenience and snowball sampling	22 individuals (14 members of the public from ethnic minority backgrounds, 8 professionals who are working with the public to increase vaccine uptake)	Trust in government and medical professionals	Attitudes on uptake of COVID-19 vaccine	Thematic analysis	Structuration theory; Critical realist social theory

Table 1 (*continued*)

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
Power et al. (2023)	Denmark	April–July 2020	Semi-structured interviews	Purposive sampling	21 adult interviewees; data from the Danish Corona Diary Study	Trust in government	Adherence to COVID-19 preventative measures	Thematic analysis	Trust, confidence and cooperation model; Social identity model of risk
Purvis et al. (2022)	United States	September–October 2021	Semi-structured interviews	Purposive sampling	49 US adults who met the following inclusion criteria: had some level of vaccine hesitancy, had received the COVID-19 vaccine, and agreed to be contacted for an interview	Trust in government and medical professionals	Uptake of COVID-19 vaccine	Content analysis and thematic analysis	Determinants of vaccine hesitancy matrix
Randall et al. (2023)	United States (New York State)	October 2020–June 2021	Open-ended survey questions	Purposive sampling	533 adults living in the state of New York	Trust in government and health professionals	Uptake of a COVID-19 contact tracing application	Content analysis	None
Schwartz et al. (2023)	United States (Baltimore and Howard County, Maryland; New Orleans, Louisiana; Fairfax County, Virginia; Harris County, Texas; Glenwood Springs/Garfield County, Colorado; Howard County, Maryland; and Great Plains and the Northern Plains)	December 2020–February 2021	Group interviews	Convenience and snowball sampling	Wave 1: 232 US adults, Wave 2: 206 US adults; participants were limited to Black, Hispanic and Native Americans	Trust in government, pharmaceutical industry and healthcare system	Attitudes towards uptake of COVID-19 vaccine	Thematic analysis	None
Sekimitsu et al. (2022)	United States (Boston)	March–April 2021	Individual interviews	Convenience sampling	18 Black adults attending the Bethel AME Church in Boston	Trust in government, pharmaceutical industry and medical professionals	Attitudes towards uptake of COVID-19 vaccine	Thematic analysis	None
Simas et al. (2021)	Mexico (Mexico City and Toluca)	Not reported	In-depth interviews and focus groups	Purposive sampling	54 pregnant women with both negative and positive views on maternal vaccination	Trust in government and the healthcare system	Uptake of maternal vaccinations	Thematic analysis	None
Valasek et al. (2022)	United States (San Diego County)	September–November 2021	Individual interviews	Purposive sampling	28 US adults who reported injection drug use	Trust in government and pharmaceutical companies	Uptake of COVID-19 vaccine	Thematic analysis	None
Weinstein et al. (2023)	United States (Greater Miami Area)	December 2020–July 2021	Open-ended survey questions	Purposive sampling	n = 187 adult Latino sexual minority men (LSMM) in the Greater Miami Area	Trust in government, science, and public health experts	Attitudes towards uptake of COVID-19 vaccine	Thematic analysis	None
Williams (2021)	United Kingdom	March–July 2020	Focus groups and individual interviews	Purposive and snowball sampling	21 UK adults	Trust in science and health experts	Attitudes towards uptake of COVID-19 vaccine booster and influenza vaccine	Framework analysis	None

Table 1 (*continued*)

Author (Year)	Study Country (City or Region)	Duration	Data Collection Method	Sampling Method	Sample Size and Participant Characteristics	Populist Attitude Described	Intervention-related Outcome	Analysis	Theoretical Framework
Williams and Dienes (2021)	United Kingdom	March–April 2021	Focus groups	Purposive and snowball sampling	29 UK adults	Trust in science and government	Attitudes towards uptake of COVID-19 vaccine	Framework analysis	Continuum of vaccine hesitancy model
Williams et al. (2021)	United Kingdom	September–November 2020	Focus groups	Purposive sampling	51 UK adults, recruited based on diversity in gender, age and race and ethnicity and geography	Trust in government	Adherence to COVID-19 preventative measures	Thematic analysis	Theory of human error
Wilson et al. (2020)	France (Provence-Alpes-Côte d'Azur and Occitanie)	November 2016–April 2017	In-depth interviews	Purposive sampling	19 general practitioners from Provence-Alpes-Côte d'Azur and Occitanie	Trust in government	Attitudes towards vaccines	Thematic analysis	None
Zimmermann et al. (2023)	Austria, Germany, Italy, Portugal, and Switzerland	April 2020–November 2021	Individual interviews	Convenience and snowball sampling	214 European adults: Austria (n = 61), Germany (n = 48), Italy (n = 48), Portugal (n = 38), Switzerland (n = 27)	Trust in government and health authorities	Uptake of COVID-19 vaccine	Content analysis	None

Specifically, this study by Lello et al. examined whether vaccine hesitancy/refusal should be considered as a form of populism. All other studies either used no theoretical framework, various health behaviour models or specific frameworks related to vaccine hesitancy (Table 1).

3.3. Quality of included studies and certainty of evidence

Based on the EPPI-Centre quality-assessment evaluation tool, the overall quality of the 52 included studies was relatively high (EPPI-Centre, 2021). Eighteen studies were assessed as high quality, while 20 were assessed as medium quality, and 14 were assessed as low quality. In terms of relevance to our research question, a total of 11 studies were considered to have high relevance, 24 had medium relevance, and 17 had low relevance. Of those studies with high relevance to our research question, all but three were found to be of high or medium quality. A full breakdown of the quality assessment for each study can be found in in Appendix 4. Based on the GRADE CERQual framework for certainty of evidence, the confidence in the findings of this review can be considered largely robust (Lewin et al., 2018). Of our four key findings (aligned with our four overarching themes outlined below), three were assessed to be supported with moderate confidence and one with high confidence. A full breakdown of the certainty of evidence for each of our key findings can be found in Appendix 5.

3.4. Thematic synthesis findings

Fig. 2 provides a conceptual framework outlining the influence of what we are defining as 'populist'-type views on the receipt of various public health interventions and the societal consequences of this, based on the findings from this review of qualitative evidence. Within this conceptual framework, bolded headers represent overarching analytical themes and bulleted text represent supporting descriptive themes. Reciprocal translation was key to identifying the emerging analytical and descriptive themes that are featured in this conceptual framework, as they each represent the summation of recurring concepts and ideas that appeared across several of the included studies. The organisation of the framework is also reflective of our line of argument synthesis, and in particular how certain themes were seen to influence others. Our synthesis identified no cases of refutational synthesis.

In each of the following sections, we provide evidence from first-order (included study participants' own words) and second-order (study author interpretations) data to support our conceptual framework and outline the ways in which populist-type beliefs, and especially those related to a lack of trust in/hostility towards elite actors and institutions, are either newly applied to influence people's views on public health information and interventions, or can be amplified in response to people's exposure to such information and interventions, particularly in the context of a public health emergency. We then outline the processes via which populist-type views may affect wider attitudes towards public health interventions, and finally how populist-informed non-adherence to public health interventions might impact social unity.

3.4.1. Existing 'populist'-type views found new expression in people's responses to public health information and interventions

3.4.1.1. Preceding lack of political unity. A key theme evident across several included studies was the ways in which existing political views which can be seen to align with analytical definitions of populism found new modes of expression when applied to public health information and interventions, especially within the context of the COVID-19 pandemic. In particular, it was apparent that a lack of political unity preceding the pandemic could contribute to a lack of unity in attitudes towards the public health response to the pandemic. This is typified by a quote from a participant in a high-quality study of views on the COVID-19 vaccine among Black Americans with long COVID by Dell'Imperio et al. (2023):
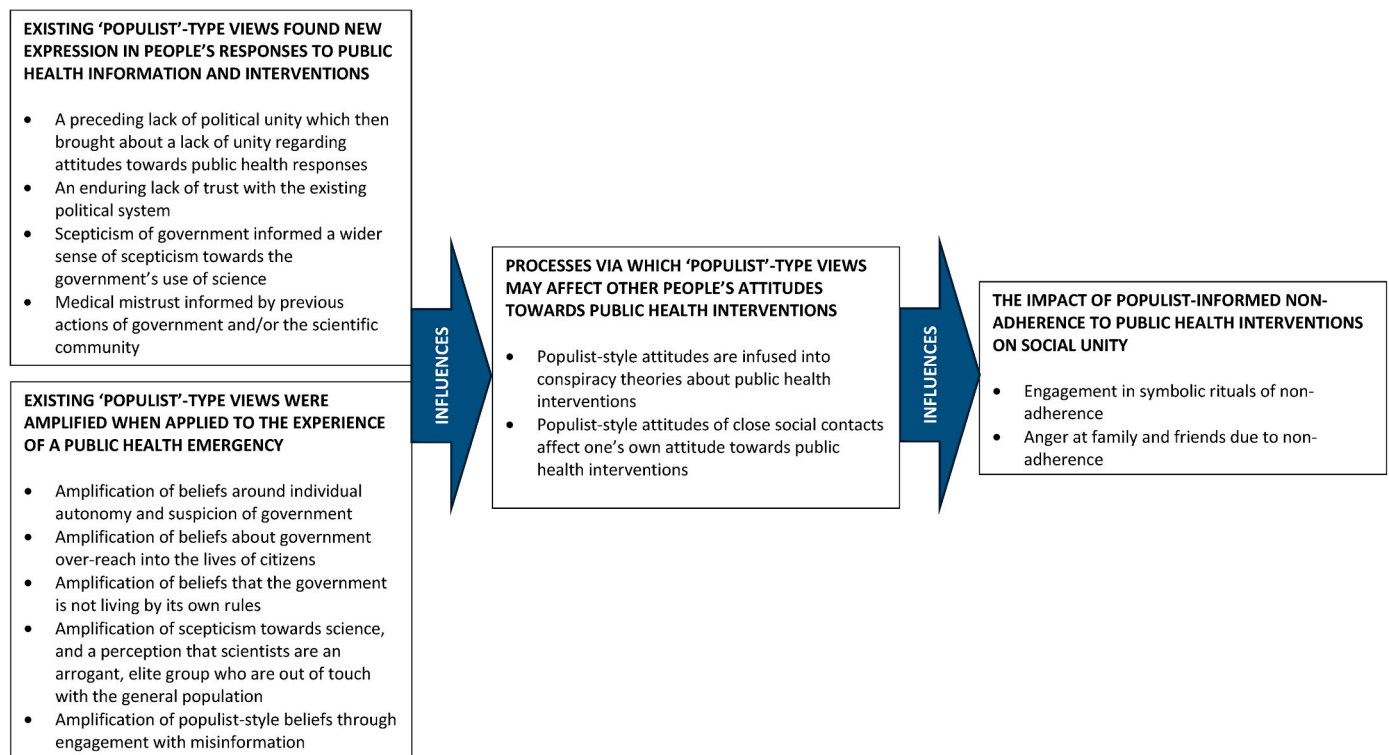
EXISTING 'POPULIST'-TYPE VIEWS FOUND NEW EXPRESSION IN PEOPLE'S RESPONSES TO PUBLIC HEALTH INFORMATION AND INTERVENTIONS

- A preceding lack of political unity which then brought about a lack of unity regarding attitudes towards public health responses
- An enduring lack of trust with the existing political system
- Scepticism of government informed a wider sense of scepticism towards the government's use of science
- Medical mistrust informed by previous actions of government and/or the scientific community

INFLUENCES

PROCESSES VIA WHICH 'POPULIST'-TYPE VIEWS MAY AFFECT OTHER PEOPLE'S ATTITUDES TOWARDS PUBLIC HEALTH INTERVENTIONS

- Populist-style attitudes are infused into conspiracy theories about public health interventions
- Populist-style attitudes of close social contacts affect one's own attitude towards public health interventions

INFLUENCES

THE IMPACT OF POPULIST-INFORMED NON-ADHERENCE TO PUBLIC HEALTH INTERVENTIONS ON SOCIAL UNITY

- Engagement in symbolic rituals of non-adherence
- Anger at family and friends due to non-adherence

EXISTING 'POPULIST'-TYPE VIEWS WERE AMPLIFIED WHEN APPLIED TO THE EXPERIENCE OF A PUBLIC HEALTH EMERGENCY

- Amplification of beliefs around individual autonomy and suspicion of government
- Amplification of beliefs about government over-reach into the lives of citizens
- Amplification of beliefs that the government is not living by its own rules
- Amplification of scepticism towards science, and a perception that scientists are an arrogant, elite group who are out of touch with the general population
- Amplification of populist-style beliefs through engagement with misinformation

Fig. 2. Conceptual framework resulting from thematic synthesis.

"I think that people are so political about [the vaccine]. Now that we're not fighting over what president we support, a new thing we want to fight over is whether we're vaccinated or not … And I really don't get it because those that oppose [the vaccine] for their political reasons, all those politicians that they're supporting, they're vaccinated" (p.860).

3.4.1.2. Enduring lack of trust with the political system. There was also evidence of an enduring, populist-style lack of trust with the existing political system which appeared to be implicated in scepticism about the COVID-19 vaccine. As can be seen in the author and participant quotation below from a low-quality study of members of an Italian vaccine-questioning movement (*Movimento 3V* or 'Vaccines We Want the Truth' Movement) by Lello et al. (2022), a long-standing lack of trust in government was seen as fostering resistance to proposed interventions against COVID-19, not because these interventions were perceived as ineffective per se, but because of who was promoting them:

"Doubts and scepticism showed to be specifically linked to the pandemic health measures, but it could well be argued that the vaccine issue highlighted an already existing dissatisfaction with politics …: 'This whole no-vax movement is simply expressing a lack of trust, and this is a discourse that we have been carrying around for years, and sooner or later we will have to face it, without pretending that it does not exist … It's not that I don't trust the vaccine's effectiveness; I don't trust the political system that has chosen this strategy … and this naturally leads me to distrust this solution also, which seems to me just a quick solution dictated by political needs'" (p.677).

3.4.1.3. Scepticism towards the government's use of science. For others, however, a preceding populist-aligned scepticism of government did seem to inform a scepticism specifically about the government's use of science in support of the proposed interventions to combat COVID-19. An example of this can be seen in a participant quote from a medium-

quality study of attitudes towards the COVID-19 vaccine among rural-dwelling American adults by Koskan et al. (2023). Here, the very need for a COVID-19 vaccine was called into question based on the perception that the severity of the virus was being manipulated and misrepresented by a distrusted government and its scientists:

"I feel like they are playing games with us. I feel like these people probably had symptoms of some other illness that look identical to COVID. And they (the government) just took advantage of the situation and told us they died of COVID" (p.6).

3.4.1.4. Medical mistrust informed by previous actions of government and/ or the scientific community. Within our synthesis, we included several studies in which racial/ethnic minoritised participants described how previous violations of trust committed by government and members of the scientific community in the name of public health had fostered a sense of suspicion and/or apprehension about the COVID-19 information and interventions they were receiving. While arguably not as rooted as the above quotations were in populist-aligned politics, the frequency of this finding across studies that explored how trust in elite institutions informed people's receipt of public health interventions warrants its inclusion here. For example, in one study of unvaccinated American adults by Abad et al. (2023), when it came to confidence in the COVID-19 vaccine, a Black participant was quoted as saying:

"We're extremely suspicious of the government because the government tends to repeatedly lie to the Black people about what is in a vaccine. They will come and say, 'Hey, this is going to cure you of this, or this is going to vaccinate you against this.' Meanwhile, they're conducting a study on you. So there is a huge suspicion on the government, and that is why a lot of Black people do not want to take this vaccine as well" (p. 5).

Similar sentiments related to the negative impact of prior experiences with, and historic practices by, government officials and pharmaceutical companies in particular were expressed in a study of COVID-

19 vaccine acceptance among racially minoritised communities in Scotland conducted by Adekola et al. (2022):

> "The government has done a lot, but the inequality that has existed previously in healthcare delivery in the country breeds distrust in the black community hence the hesitance to embracing the COVID-19 strategies" (p. 897).

3.4.2. Existing 'populist'-type views were amplified as they were applied to the experience of a public health emergency

3.4.2.1. Beliefs about individual autonomy and suspicion of government. Another theme evident across included studies was the ways in which pre-existing populist-style beliefs were amplified within the context of experiencing an unprecedented public health emergency. This was especially seen in the ways in which populist-style beliefs about individual autonomy and suspicion of government were triggered when the government introduced mandatory preventative measures in public spaces. For example, in a low-quality ethnographic study by Mendenhall (2023), set in a popular vacation town in northwest Iowa during the height of the pandemic, a public health official was quoted as saying:

> "There are people who will go out, they'll probably put one on [a mask] if they have to. But by God if the government tells me I have to wear a mask, I'm not going to do it because they can't tell me what to do" (p.8).

3.4.2.2. Perceptions of government overreach. Beliefs about government over-reach also appeared to be amplified as a result of mandates around COVID-19 vaccination. For example, in a medium-quality study of adults living in Austria, Germany, Portugal and Switzerland by Zimmerman et al. (2023), the authors summarised their findings thus:

> "Even people who were supportive of vaccination against COVID-19 were less likely to get vaccinated when faced with a general mandate. This newly emerging hesitation did not originate in their perceptions about vaccination as such. Instead, it originated in participants' perceptions of an adequate remit and limit of state power" (p.2090).

These findings were echoed in a medium-quality study conducted by Dennis et al. (2021) among care-home employees in the UK who were recruited for participation in the study based on their delayed uptake of the vaccine:

> "All participants felt it was important to have the freedom to decide whether to have the vaccine or not: "It's the wording of, it's the way that it's been pushed upon people which I disagree" (Participant 1). The narrative of mandatory vaccines negatively influenced participants' attitudes towards the vaccine: "now that the government want to try and make us have it that's made me feel really like I don't want to have … you can't force people to do what they don't want to do" (Participant 5)" (p.16).

Such populist-aligned perceptions of government over-reach were similarly stoked by the proposed introduction of a vaccine passport as a requirement to access community spaces during the pandemic in some of the included study locations. For example, in their high-quality study of vaccine-hesitant adults in the US, Abad et al. (2023) provide evidence of how this was seen as a threat to the fundamental principles of democracy, and something that would not be tolerated:

> "None of the participants spoke in favor of a vaccine passport. Several participants worried that vaccine passports would become a reality and saw them as the gravest risk posed to personal liberty and hailed various institutions, including the Constitution, as offering protection from mandated vaccination. One participant said that the potential requirement of vaccine passports was tyrannical: ' … I don't

like that threat of 'Oh, well. We not going to- businesses ain't going to let you in unless you show your ID card. 'We're not going to let- I don't like any type of tyranny like that'" (p.8).

3.4.2.3. Distrust of government and politicians arising from their rule-breaking. Opposition to government public health mandates were also magnified by perceptions of the government's own actions, and the feeling that politicians were not following the rules they set out for the wider public, which further fuelled an overall lack of trust in government as a whole. In a high-quality study of participants from across the UK by Williams et al. (2021), the authors summarised this as follows:

> "One key reason for the loss of trust was the well-publicised instances in which politicians were seen to be subjectively interpreting the rules to their own benefit. Participants argued that if those in positions of authority were unable or unwilling to follow rules, why should the public be expected to do so?" (p.8).

In another high-quality study conducted with participants from across the UK by Burton et al. (2023), the authors similarly noted the role of government rule violations in the amplification of perceptions that the government could not be trusted:

> "Participants mostly described their response to the behaviour of the chief advisor to the UK government (Dominic Cummings) breaking lockdown rules in the early stages of the pandemic. 'We decided that, no, sod it, we are going to the pub and meet, that we are going to see our children and grandchildren. If it's all right for one of the chief advisors of the government then it must be okay'"(p.38).

3.4.2.4. Negative perceptions of scientists. Along with negative perceptions of government actions, populist-type scepticism about the science behind public health interventions was also amplified when scientists were perceived as an arrogant, elite group who were out of touch with the general population. This was seen, for example, in a low-quality study by Fattorini (2023) involving Italian parents who were promoting freedom of choice in childhood vaccination decisions via an organisation called 'Vaccinare Informati', with one participant stating:

> "So, in the last two years, I've noticed a difference in the approach [of scientific experts] with people: 'you haven't studied, stop, you don't know anything, enough, I'm in charge". From my point of view, this is called dictatorship, it's not called science.'" (p.91-92).

This populist-style scepticism about scientific elites was further reinforced when the scientific picture presented by government was perceived as insufficiently nuanced. For example, in a low-quality study by Nurmi and Harman (2022) involving the views of Finnish parents who refused either all or most vaccines for their children, the authors reported:

> "Some participants accused health officials of fear mongering and pressuring people to vaccinate. The health officials had communicated that the vaccine was safe and H1N1 influenza was dangerous. When it turned out that the vaccine increased the risk of narcolepsy and the H1N1 influenza was less lethal than originally feared, these participants felt betrayed" (p.493).

3.4.2.5. Accessing misinformation. Across several studies, there was also evidence that scepticism was enhanced by people having poor access to scientific information and better access to unscientific misinformation. For example, in the previously cited study of rural Americans by Koskan et al. (2023), some participants expressed distrust about the government's provision of all possible interventions against COVID-19, fuelled at least in part by engagement with the outputs of public figures widely linked to the spread of misinformation:

"Participants who became more distrustful of COVID-19 vaccines over time believed the government promoted COVID-19 vaccination while withholding effective medications (specifically, the unproven treatments of ivermectin, an anti-parasite medication for animals, and hydroxychloroquine, a drug used to treat malaria that has been disproven to prevent or treat COVID-19). All who voiced these concerns also reported reading the same book written by Robert F. Kennedy, Jr., an anti-vaccine advocate" (p.11).

3.4.3. Processes via which 'populist'-type views may influence other people's attitudes towards public health interventions

3.4.3.1. Infusion of populist-style attitudes into conspiracy theories about public health interventions.
Alongside themes related to the application of existing populist-aligned beliefs in the face of emerging public health information and interventions, as well as the amplification of such beliefs as a response to the experience of public health emergencies, several included studies highlighted the processes whereby populist-style views may affect wider attitudes to public health interventions. One such process was where such views were seen to influence wider views on public health through their infusion into prominent conspiracy theories about vaccines. This was seen, for example, in a medium-quality study of attitudes towards the COVID-19 vaccine among adults across the UK by Williams and Dienes (2021), who wrote:

"A number of participants referred to conspiracy theories and misinformation, with [vaccine] refusers and delayers more likely to discuss them uncritically (that is they did not acknowledge them as conspiracy theories or misinformation as such). Conspiracy theories were also discussed in relation to the previous theme of a distrust in government: 'I mean distrust in government … the things that don't seem to add up. I mean we have got the pharmaceutical companies, several of them creating a vaccine [in] some kind of race … and it's just a win-win for them, if just everyone gets a vaccine and people can't think for themselves … it['s] a big agenda' (Participant 7, Male, 40s)" (p.21).

3.4.3.2. The effect of the populist-type attitudes of close social contacts.
The populist-aligned views of close social contacts could also negatively affect a person's own attitude to public health interventions. This finding was particularly well summarised in a medium-quality study of vaccine hesitant adults in the southwestern United States by Morales et al. (2022) who wrote:

"In analyzing the [participant] responses, an overarching theme that emerged is the important role that social groups play in fostering, reinforcing, as well as in breaking vaccine hesitancy. When asked for their reasons for being hesitant, most respondents referred to not fully trusting the government as well as having doubts on the safety and efficacy of the vaccines. Such lack of trust stems from, or was reinforced, by conversations they have with family and friends" (p.4-5).

Evidence of the potentially negative impact of social networks on attitudes towards the COVID-19 vaccine was also seen in a high-quality study of racial and/or ethnic minoritised patients registered at four primary care practices in London conducted by Magee et al. (2022):

"Whilst, not all social media messages received from friends and family were believed, many participants demonstrated a high level of exposure to misinformation via this means. All participants gave examples of exposure to negative or concerning messages about vaccination. Several participants specifically addressed the idea of misinformation and had theories as to why inaccurate information was reaching them. 'A lot of it [information about coronavirus] comes from WhatsApp, through the different groups that I'm part of.

I do believe some of it is scaremongering, I'm not sure about the 5G ….' P7, Black Caribbean, 52 years, Male" (p.8).

3.4.4. Populist-informed non-adherence to public health interventions and its impact on social unity

3.4.4.1. Symbolic rituals of non-adherence.
A final theme that emerged across the included studies was the ways in which non-adherence to public health interventions linked to populist-type views could further undermine a pre-existing lack of social unity within communities, particularly during a public health emergency such as the COVID-19 pandemic. In particular, it was noted in several studies that people seeking to reassert a sense of control over their lives in the face of increasing government mandates and restrictions began enacting a form of resistance or rebellion against the government via engagement with symbolic rituals of non-adherence. An example of this can be seen from an author summary of participant views from a previously mentioned UK study by Williams et al. (2021):

"Many participants discussed examples of ways in which people were engaging in small, creative and subtle forms of rebellion to government rules. These forms of rule violation included engaging in social rituals now perceived as deviant (e.g. handshaking, not wearing masks when required to), or mis-appropriating new rituals (e.g. improperly wearing masks) as more subtle violations (through passive resistance to rules)" (p.11).

3.4.4.2. Tensions between family and friends due to non-adherence.
The non-adherence of close social contacts, often tied to engagement with misinformation and conspiracy theories as well as a distrust of government and scientists in producing the vaccine, could be a particular source of anger among those who had lost family or friends to COVID-19, as can be seen in the words of one participant in a high-quality study of COVID-19 vaccine uptake among racial and ethnic minority residents of San Francisco by Butler et al. (2022):

"Immigrant participants recounted experiences arguing with family members and friends about COVID-19 misinformation circulating in their countries of origin: 'In my [home] country, multiple people in my family have died. My grandma, my aunt, my uncle, and there are some people that don't believe in this disease and say: "no [COVID-19] is a lie; it doesn't exist." I say to my friends, "use hand sanitizer; go out with a mask." "No, [COVID-19] doesn't exist; it's a lie," they say. "It does exist because people in my family have died," I tell them.'" (p.7).

4. Discussion

4.1. Summary of key findings

To the best of our knowledge, this is the first systematic review to synthesise evidence on how views aligning with commonly described elements of populist thinking are reflected in people's accounts of the receipt of public health interventions, while also providing a preliminary conceptual framework towards understanding this phenomenon. Based on the qualitative evidence gathered from participant accounts and author reports in the included studies, there is support for the role that populist-aligned attitudes play in increased resistance to government-led public health interventions, which is both in keeping with and an extension of existing research in this area. In particular, the findings are well aligned with previous research on the drivers of populist political views, including the negative impact that dissatisfaction with and/or alienation from existing government structures has on people's feelings about interventions that are seen to deprive them of their sovereignty or that result in significant social change, as was the

case with several COVID-19 pandemic preventative measures explored in the included studies (Dryhurst et al., 2022; Kerr et al., 2021; Rutjens et al., 2021). However, through the identification of a set of key themes, we expand this understanding to outline some of the specific ways through which populist-type attitudes and the receipt of public health interventions interact, affecting both those who hold these attitudes, as well as the wider public.

Among these key themes is the idea that existing populist-type views find a new outlet when applied to public health information and interventions. This was seen in the ways in which a prior lack of political unity brought about a lack of unity in attitudes towards public health responses; how an enduring, populist-style lack of trust in government led to scepticism about new interventions; how populist-style distrust in government extended to a lack of trust in the government's use of science in promoting public health interventions; and how mistrust of government, medical professionals and the pharmaceutical industry among racialised communities was informed by previous actions taken by the government and scientists. Several of these findings are supported by a large-scale panel survey of eleven democratic countries by Altiparmakis et al. (2021), which sought to understand the public's attitudes towards government measures during the COVID-19 pandemic. Echoing the sentiments of many participants in our included studies, the authors found that support for government measures was strongly linked to factors such as the pre-existing degree of polarisation within a country and the level of trust in government among its citizens.

Another key finding from across our included studies is the ways in which existing populist-aligned beliefs may be amplified when individuals who hold these beliefs are faced with a public health emergency. Evidence of this was presented in several ways, including the increasing prominence of: populist-style beliefs concerning individual autonomy and suspicion of government; perceptions of government over-reach into the lives of citizens; anger at governments and politicians who are not living by the rules they set out for the wider public; and scepticism towards science, and particularly the perception that scientists are part of an arrogant elite out of step with the average person, the latter of which can be fuelled where there is a lack of nuance in government messaging and widespread misinformation. This amplification of populist-aligned beliefs in the face of a public health emergency is supported by a recently published study that examined motivations for participation in protests against COVID-19 preventative measures by Australians, conducted by Cubitt et al. (2024). Interviews with protestors as part of this study showed that personal grievances were strengthened when combined with conspiratorial beliefs, the need to uphold individual sovereignty and perceptions of a lack of government accountability in the face of mandates to prevent the spread of the virus.

Our study also provides evidence for several processes whereby populist-style views, and particularly a lack of trust in elite institutions and actors, affect wider attitudes towards public health interventions among some citizens. These findings are supported by a series of studies conducted among residents of the UK by Allington et al. (2021), who found negative relationships between engagement with COVID-19 conspiracy beliefs and health protective behaviours, as well as between reliance on either social media or family/friends as a source of information and health protective behaviours, with the former tied explicitly to increased exposure to misinformation.

Finally, our study outlines support for the impact of populist-type non-adherence to public health interventions on reductions in social unity, as was seen in many studies conducted within the context of the COVID-19 pandemic. In particular, this was evident in the engagement of those with populist-style views in symbolic rituals of non-adherence to government mandates and prevention guidance, which in some cases resulted in anger at family and friends for non-adherence in the face of personal loss. The potential impact on social unity due to non-adherence to public health interventions during the COVID-19 pandemic is supported in a study that examined the role of anger or

confronting others in relation to a lack of adherence to prevention measures conducted by Smith et al. (2021). Based on a survey of 2,237 participants from across the UK, the authors found that most people reported having had arguments, feeling angry or falling out with others, with anger and confrontations associated with younger age, greater likelihood of having experienced significant financial hardship due to the pandemic, greater perception of risk from COVID-19 and obtaining information from social media. From these findings, the authors stress the need for increased support to reduce social inequalities resulting from the pandemic, clearer messaging around government strategies and efforts to combat misinformation (Smith et al., 2021).

4.2. Limitations

The findings of this study should be viewed within the context of several important limitations. First, while our review aimed to develop clear inclusion criteria and search terms which aligned with key aspects of populism, this did not require study authors or participants to use specific terms such as 'populism' or 'populist'. As outlined within our methods, we focused not on how views were labelled but whether they aligned with descriptions of the views that are commonly said in the literature to comprise populism. This decision was made because 'populism' is a highly contested socio-political construct, the use of which often implies particular (often critical and pejorative) perspectives on those holding such views (Mudde and Kaltwasser, 2017). Above all, we wished our review to use clear inclusion criteria that could be systematically applied to studies and avoid being biased towards the inclusion of research embodying certain perspectives on populist views. This was in order to better examine the actual set of views that are commonly labelled as populist, and to understand how these views might be implicated in people's accounts of engagement with public health interventions.

In utilising this approach, we found that there did indeed exist a significant and recurring theme of distrust, hostility and anxiety across different populations and sub-populations of several OECD countries that affects how people engage with public health interventions. Using populism as a framework within our review to define which views to examine was useful in that it enabled us to bring together accounts of lack of trust in mainstream politicians, science and scientists, healthcare institutions and professionals, as well as engagement with conspiracy theories and concerns about government over-reach. Our review suggests a common thread of feeling across these differing areas which does appear to resonate strongly with populist thinking as it was described in our introduction. However, it is possible that not all of the views expressed by study participants or interpreted by study authors can truly be construed as rooted in populist ideology. For example, it is questionable whether our findings relating to distrust of the medical profession, government and pharmaceutical among racialised communities, which is rooted in histories of exploitation, is best understood in terms of political populism.

Our inclusion criteria would have been improved by explicitly referring to distrust of, rather than hostility towards, elites. In practice, we interpreted hostility as encompassing distrust and we are confident that we took a consistent approach to including studies that reported on such views. We would also have liked to differentiate in our synthesis between left- and right-wing strands of populist views. However, the data did not allow this, because authors provided insufficient context to explore participants' broader political views.

Another limitation of this study is that although it provides an indication of individuals' perceptions and motivations, synthesis of qualitative research cannot draw conclusions about the causal association between holding populist views and the acceptability or uptake of public health interventions. However, this is a component of our wider systematic review that will be examined in subsequent papers that synthesise quantitative evidence.

Finally, there are also important limitations in the range of available

evidence synthesised, and notably the fact that the majority of studies focused on public health interventions related to COVID-19, with fewer relevant qualitative studies focused on the impact of populist-style attitudes on other areas of health, such as non-communicable disease prevention and care. This may have occurred because the COVID-19 pandemic was the point at which most researchers first began to widely study how populist-type views might affect receipt of public health interventions, something that has not been widely applied yet to other areas of health. Despite this, however, we believe that our findings in relation to COVID-19, and the wider conceptual framework that they underpin, may offer insights into how populist ideas could affect the receipt of public health interventions in other areas. Specifically, these findings, with their focus on the interplay between individual attitudes and beliefs and wider social/contextual factors, such as the rapid spread of misinformation and conspiracy theories via social and alternative media, may be applicable to other public health interventions that require a degree of trust in government, public health authorities and scientific bodies for widespread uptake. This might be case, for example, when introducing novel or more innovative approaches to improving public health in the face of emerging challenges, such as the impact of climate change. These findings may also be considered relevant to interventions that require significant social or lifestyle changes for success, including interventions aiming to bring about alterations in diet, exercise, and other health promoting behaviours.

4.3. Implications for research and policy

As stated, the findings of this study indicate that there is a need for qualitative research on how populist ideas might influence the receipt of public health interventions in health domains beyond COVID-19. Along with the kinds of vaccination campaigns seen during the pandemic, evidence from media reports and a limited amount of existing research outline the negative impact of widespread opposition to public health interventions concerned with efforts to mitigate the health effects of climate change, expanded access to sexual and reproductive healthcare, and the implementation of non-pharmaceutical infection control measures, among other areas (Abi-Hassan, 2017; Huber, 2020; Kennedy, 2019; Ozduzen et al., 2023; Pugh, 2019). Despite this, however, there is currently a limited understanding of how individual attitudes which could be seen to broadly align with populism might be driving opposition to such interventions. Furthermore, while our evidence synthesis has explored some of the ways that populist views develop as a result of people's experiences with public health emergencies, it has not examined other influences on the development of populist beliefs about health, including those that are cultivated through more everyday circumstances and experiences. Building on the findings of this systematic review, we plan to explore this latter question via new qualitative research on how populist-type views are implicated in engagement with other public health interventions as the part of the next phase of our work.

In terms of implications for policy, the findings of the qualitative evidence presented here suggest the need for public health information to be more effective in combating misinformation, and for the key messengers of this information to be more nuanced and transparent about uncertainty in their communicated approaches. Public health communications should recognise and respond to people's concerns rather than dismissing them as ill-informed or irrational. There may be value, for example, in borrowing techniques from motivational interviewing in which resistance to behaviour change is acknowledged and gradually reoriented rather than immediately discounted (Miller and Rollnick, 2002). There is also evidence of a need for public health messaging to involve engagement with diverse members of the population, including trusted representatives from disadvantaged and minoritised groups (Bonell et al., 2020). Lastly, there is a continuing need for politicians to act with probity, adhering to the standards which they expect of others in order to foster a sense of trust, reduce feelings of

hostility and/or anxiety and, crucially, build social unity and cohesion. Taking the important lessons learned from the public during the COVID-19 pandemic and applying them to new areas of health, such as behaviours linked to climate change, will be critical to ensuring the wide uptake and acceptance of future government-led public health interventions.

CRediT authorship contribution statement

Kaitlin Conway-Moore: Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Investigation, Formal analysis, Conceptualization. **Alison R. McKinlay:** Writing – review & editing, Methodology, Formal analysis. **Jack M. Birch:** Writing – review & editing, Methodology, Formal analysis. **Fiona Graham:** Writing – review & editing, Formal analysis. **Emily J. Oliver:** Writing – review & editing, Funding acquisition. **Clare Bambra:** Writing – review & editing, Supervision, Methodology. **Michael P. Kelly:** Writing – review & editing, Supervision, Methodology. **Chris Bonell:** Writing – review & editing, Writing – original draft, Validation, Supervision, Project administration, Methodology, Formal analysis, Conceptualization.

Ethical approval statement

The research involves no human participants and draws solely on evidence available in the public domain, so ethical approval is not required for this project.

Declaration of competing interest

None declared.

Acknowledgements

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.socscimed.2025.118312.

Data availability

Data will be made available on request.

References

Abad, N., Messinger, S.D., Huang, Q., Hendrich, M.A., Johanson, N., Fisun, H., Lewis, Z., Wilhelm, E., Baack, B., Bonner, K.E., Kobau, R., Brewer, N.T., 2023. A qualitative study of behavioral and social drivers of COVID-19 vaccine confidence and uptake among unvaccinated Americans in the US April-May 2021. PLoS One 18. https://doi.org/10.1371/journal.pone.0281497.

Abi-Hassan, S., 2017. Populism and gender. In: Kaltwasser, C.R., Taggart, P., Espejo, P. O., Ostiguy, P. (Eds.), The Oxford Handbook of Populism. Oxford University Press, pp. 426–444. https://doi.org/10.1093/oxfordhb/9780198803560.001.0001.

Adekola, J., Fischbacher-Smith, D., Okey-Adibe, T., Audu, J., 2022. Strategies to build trust and COVID-19 vaccine confidence and engagement among minority groups in Scotland. International Journal of Disaster Risk Science 13, 890–902. https://doi.org/10.1007/s13753-022-00458-7.

Aechtner, T., Farr, J., 2022. Religion, trust, and vaccine hesitancy in Australia: an examination of two surveys. J. Acad. Stud. Relig. 35, 218–244. https://doi.org/10.1558/jasr.22476.

Allen, J.D., De Jesus, M., Mars, D., Tom, L., Cloutier, L., Shelton, R.C., 2012. Decision-making about the HPV vaccine among ethnically diverse parents: implications for health communications. J. Oncol. https://doi.org/10.1155/2012/401979.

Allington, D., Duffy, B., Wessely, S., Dhavan, N., Rubin, J., 2021. Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. Psychol. Med. 51, 1770. https://doi.org/10.1017/S0033291721000593.

Altiparmakis, A., Bojar, A., Brouard, S., Foucault, M., Kriesi, H., Nadeau, R., 2021. Pandemic politics: policy evaluations of government responses to COVID-19. West Eur. Polit. 44, 1159–1179. https://doi.org/10.1080/01402382.2021.1930754.

Bambra, C., Lynch, J., 2021. Welfare chauvinism, populist radical right parties and health inequalities comment on "a scoping review of populist radical right parties' influence on welfare policy and its implications for population health in europe". Int. J. Health Pol. Manag. https://doi.org/10.34172/ijhpm.2020.149.

Birmingham Voluntary Service Council Research, Revolving Doors, Institute for Community Research and Development (ICRD), 2021. Vaccine Uptake Amongst People with Personal Experience of Multiple Disadvantage in Birmingham: Research Findings. U. of W.

Bonell, C., Michie, S., Reicher, S., West, R., Bear, L., Yardley, L., Curtis, V., Amlôt, R., Rubin, G.J., 2020. Harnessing behavioural science in public health campaigns to maintain "social distancing" in response to the COVID-19 pandemic: key principles. J. Epidemiol. Community Health. https://doi.org/10.1136/jech-2020-214290, 1978.

Brubaker, R., 2017. Why populism? Theor. Soc. 46, 357–385.

Burton, A., McKinlay, A., Dawes, J., Roberts, A., Fynn, W., May, T., Fancourt, D., 2023. Understanding barriers and facilitators to compliance with UK social distancing guidelines during the COVID-19 pandemic: a qualitative interview study. Behav. Change 40, 30–50. https://doi.org/10.1017/bec.2021.27.

Butler, J.Z., Carson, M., Rios-Fetchko, F., Vargas, R., Cabrera, A., Gallegos-Castillo, A., LeSarre, M., Liao, M., Woo, K., Ellis, R., Liu, K., Burra, A., Ramirez, M., Doyle, B., Leung, L., Fernandez, A., Grumbach, K., 2022. COVID-19 vaccination readiness among multiple racial and ethnic groups in the San Francisco Bay Area: a qualitative analysis. PLoS One 17. https://doi.org/10.1371/journal.pone.0266397.

Byström, E., Lindstrand, A., Likhite, N., Butler, R., Emmelin, M., 2014. Parental attitudes and decision-making regarding MMR vaccination in an anthroposophic community in Sweden - a qualitative study. Vaccine 32, 6752–6757. https://doi.org/10.1016/j.vaccine.2014.10.011.

Cáceres, N.A., Shirazipour, C.H., Herrera, E., Figueiredo, J.C., Salvy, S.J., 2022. Exploring Latino Promotores/a de Salud (Community Health Workers) knowledge, attitudes, and perceptions of COVID-19 vaccines. SSM - Qualitative Research in Health 2. https://doi.org/10.1016/j.ssmqr.2021.100033.

Campbell, M., McKenzie, J.E., Sowden, A., Katikireddi, S.V., Brennan, S.E., Ellis, S., Hartmann-Boyce, J., Ryan, R., Shepperd, S., Thomas, J., Welch, V., Thomson, H., 2020. Synthesis without meta-analysis (SWiM) in systematic reviews: reporting guideline. The BMJ 368. https://doi.org/10.1136/bmj.l6890.

Carlson, S.J., Edwards, G., Blyth, C.C., Nattabi, B., Attwell, K., 2022. 'Corona is coming': COVID-19 vaccination perspectives and experiences amongst Culturally and Linguistically Diverse West Australians. Health Expect. 25, 3062–3072. https://doi.org/10.1111/hex.13613.

Centre at the Social Science Research Unit, I. of E.U. of L, 2024. EPPI-Reviewer [WWW Document]. URL. https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2914, 8.24.23. Reference withheld as per double-blind peer review

Conway-Moore, K., Graham, F., McKinlay, A.R., Birch, J., Oliver, E., Bambra, C., Kelly, M.P., Bonell, C., 2024. Exploring how to widen the acceptability of public health interventions: a systematic review protocol. BMJ Open 14, e088418. https://doi.org/10.1136/bmjopen-2024-088418.

Cross, F.L., Wileden, L., Buyuktur, A.G., Platt, J., Morenoff, J.D., Aramburu, J., Militzer, M., Esqueda, A.P., Movva, P., Zhao, Z., Sawant, K., Valbuena, F., Bailey, S., Israel, B., Marsh, E.E., Woolford, S.J., 2023. MICEAL black and latinx perspectives on COVID-19 vaccination: a mixed-methods examination. J. Racial Ethn. Health Dispar. https://doi.org/10.1007/s40615-023-01815-y.

Cubitt, T., Morgan, A., Voce, I., 2024. Trends & Issues in Crime and Criminal Justice: Grievances and Conspiracy Theories as Motivators of Anti-authority Protests. No. No. 693.

Cunningham-Erves, J., Forbes, L., Ivankova, N., Mayo-Gamble, T., Kelly-Taylor, K., Deakings, J., 2018. Black mother's intention to vaccinate daughters against HPV: a mixed methods approach to identify opportunities for targeted communication. Gynecol. Oncol. 149, 506–512. https://doi.org/10.1016/j.ygyno.2018.03.047.

de Figueiredo, A., Simas, C., Karafillakis, E., Paterson, P., Larson, H.J., 2020. Mapping global trends in vaccine confidence and investigating barriers to vaccine uptake: a large-scale retrospective temporal modelling study. The Lancet 396, 898–908. https://doi.org/10.1016/S0140-6736(20)31558-0.

Dell'Imperio, S.G., Aboul-Hassan, D., Batchelor, R., Chambers-Peeple, K., Clauw, D.J., DeJonckheere, M., Bergmans, R.S., 2023. Vaccine perceptions among Black adults with long COVID. Ethn. Health 28, 853–873. https://doi.org/10.1080/13557858.2023.2191914.

Denford, S., Mowbray, F., Towler, L., Wehling, H., Lasseter, G., Amlôt, R., Oliver, I., Yardley, L., Hickman, M., 2022. Exploration of attitudes regarding uptake of COVID-19 vaccines among vaccine hesitant adults in the UK: a qualitative analysis. BMC Infect. Dis. 22. https://doi.org/10.1186/s12879-022-07380-9.

Dennis, A., Robin, C., Jones, L., Carter, H., 2021. Exploring vaccine hesitancy in care home employees in north west England: a qualitative study. https://doi.org/10.1101/2021.08.20.21262101.

Dryhurst, S., Schneider, C.R., Kerr, J., Freeman, A.L.J., Recchia, G., Van Der Bles, A.M., Spiegelhalter, D., Van Der Linden, S., 2022. Risk perceptions of COVID-19 around the world. In: Wardman, J.K., Löfstedt, R. (Eds.), COVID-19: Confronting a New World Risk. Routledge, pp. 162–174.

EPPI-Centre, 2021. Tools [WWW Document]. Social Science Research Unit, UCL Institute of Education. URL. https://eppi.ioe.ac.uk/cms/Resources/Tools/tabid/184/Default.aspx, 1.5.24.

Eraso, Y., Hills, S., 2021. Intentional and unintentional non-adherence to social distancing measures during COVID-19: a mixed-methods analysis. PLoS One 16. https://doi.org/10.1371/journal.pone.0256495.

Ernst, N., Engesser, S., Büchel, F., Blassnig, S., Esser, F., 2017. Extreme parties and populism: an analysis of Facebook and Twitter across six countries. Inf. Commun. Soc. 20, 1347–1364. https://doi.org/10.1080/1369118X.2017.1329333.

Fattorini, E., 2023. Rediscussing the primacy of scientific expertise: a case study on vaccine hesitant parents in trentino. Tecnoscienza 14, 77–103. https://doi.org/10.6092/issn.2038-3460/17606.

Fischer, E.P., McSweeney, J.C., Wright, P., Cheney, A., Curran, G.M., Henderson, K., Fortney, J.C., 2016. Overcoming barriers to sustained engagement in mental health care: perspectives of rural veterans and providers. J. Rural Health 32, 429–438. https://doi.org/10.1111/jrh.12203.

Geana, M.V., Anderson, S., Ramaswamy, M., 2021. COVID-19 vaccine hesitancy among women leaving jails: a qualitative study. Public Health Nurs. 38, 892–896. https://doi.org/10.1111/phn.12922.

Gehlbach, D., Vázquez, E., Ortiz, G., Li, E., Sánchez, C.B., Rodríguez, S., Pozar, M., Cheney, A.M., 2022. Perceptions of the coronavirus and COVID-19 testing and vaccination in latinx and indigenous Mexican immigrant communities in the eastern coachella valley. BMC Public Health 22. https://doi.org/10.1186/s12889-022-13375-7.

Huang, W., Shealey, J., Sanchez, K., Benson, L., Seymore, D.D., Sullivan, P.S., Bradley, H. M., Siegle, A.J., 2022. COVID-19 vaccine attitudes among a majority black sample in the southern US: public health implications from a qualitative study. https://doi.org/10.21203/rs.3.rs-1918432/v1.

Huber, R.A., 2020. The role of populist attitudes in explaining climate change skepticism and support for environmental protection. Environ. Polit. 29, 959–982. https://doi.org/10.1080/09644016.2019.1708186.

Inglehart, R.F., Norris, P., School, H.K., 2016. Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash. Cambridge, MA.

Jamison, A.M., Quinn, S.C., Freimuth, V.S., 2019. "You don't trust a government vaccine": narratives of institutional trust and influenza vaccination among African American and white adults. Soc. Sci. Med. 221, 87–94. https://doi.org/10.1016/j.socscimed.2018.12.020.

Jansen, R.S., 2011. Populist mobilization: a new theoretical approach to populism. Sociol. Theor. 29, 75–96.

Jennings, W., Stoker, G., Bunting, H., Valgarðsson, V.O., Gaskell, J., Devine, D., McKay, L., Mills, M.C., 2021. Lack of trust, conspiracy beliefs, and social media use predict COVID-19 vaccine hesitancy. Vaccines (Basel) 9. https://doi.org/10.3390/vaccines9060593.

Jimenez, M.E., Rivera-Núñez, Z., Crabtree, B.F., Hill, D., Pellerano, M.B., Devance, D., Macenat, M., Lima, D., Martinez Alcaraz, E., Ferrante, J.M., Barrett, E.S., Blaser, M. J., Panettieri, R.A., Hudson, S.V., 2021. Black and latinx community perspectives on COVID-19 mitigation behaviors, testing, and vaccines. JAMA Netw. Open 4. https://doi.org/10.1001/jamanetworkopen.2021.17074.

Judis, J.B., 2016. Us V Them: the Birth of Populism. The Guardian.

Kennedy, J., 2019. Populist politics and vaccine hesitancy in Western Europe: an analysis of national-level data. Eur. J. Publ. Health 29, 512–516. https://doi.org/10.1093/eurpub/ckz004.

Kerr, J., Panagopoulos, C., van der Linden, S., 2021. Political polarization on COVID-19 pandemic response in the United States. Pers. Indiv. Differ. 179. https://doi.org/10.1016/j.paid.2021.110892.

Koskan, A.M., LoCoco, I.E., Daniel, C.L., Teeter, B.S., 2023. Rural Americans' COVID-19 vaccine perceptions and willingness to vaccinate against COVID-19 with their community pharmacists: an exploratory study. Vaccines (Basel) 11. https://doi.org/10.3390/vaccines11010171.

Lasco, G., 2020. Medical populism and the COVID-19 pandemic. Glob. Public Health 15, 1417–1429. https://doi.org/10.1080/17441692.2020.1807581.

Lasco, G., Curato, N., 2019. Medical populism. Soc. Sci. Med. 221, 1–8. https://doi.org/10.1016/j.socscimed.2018.12.006.

Lello, E., Bertuzzi, N., Pedroni, M., Raffini, L., 2022. Vaccine hesitancy and refusal during the Covid-19 pandemic in Italy: individualistic claims or repoliticisation? Partecipazione e Conflitto 15, 672–696. https://doi.org/10.1285/i20356609v15i3p672.

Lessard, D., Ortiz-Paredes, D., Park, H., Varsaneux, O., Worthington, J., Basta, N.E., MacDonald, S.E., Lebouché, B., Cox, J., Ismail, S.J., Kronfli, N., 2022. Barriers and facilitators to COVID-19 vaccine acceptability among people incarcerated in Canadian federal prisons: a qualitative study. Vaccine X 10. https://doi.org/10.1016/j.jvacx.2022.100150.

Lewin, S., Booth, A., Glenton, C., Munthe-Kaas, H., Rashidian, A., Wainwright, M., Bohren, M.A., Tunçalp, Ö., Colvin, C.J., Garside, R., Carlsen, B., Langlois, E.V., Noyes, J., 2018. Applying GRADE-CERQual to qualitative evidence synthesis

findings: introduction to the series. Implement. Sci. 13. https://doi.org/10.1186/s13012-017-0688-3.

Lupton, D., 2023. Attitudes to COVID-19 vaccines among Australians during the delta variant wave: a qualitative interview study. Health Promot. Int. 38. https://doi.org/10.1093/heapro/daac192.

Machado, H., de Freitas, C., Fiske, A., Radhuber, I., Silva, S., Grimaldo-Rodríguez, C.O., Botrugno, C., Kinner, R., Marelli, L., 2024. Performing publics of science in the COVID-19 pandemic: a qualitative study in Austria, Bolivia, Germany, Italy, Mexico, and Portugal. Publ. Underst. Sci. 33, 466–482. https://doi.org/10.1177/09636625231220219.

Magee, L., Knights, F., McKechnie, D.G.J., Al-Bedaery, R., Razai, M.S., 2022. Facilitators and barriers to COVID-19 vaccination uptake among ethnic minorities: a qualitative study in primary care. PLoS One 17. https://doi.org/10.1371/journal.pone.0270504.

Majee, W., Anakwe, A., Onyeaka, K., Harvey, I.S., 2023. The past is so present: understanding COVID-19 vaccine hesitancy among african American adults using qualitative data. J. Racial Ethn. Health Dispar. 10, 462–474. https://doi.org/10.1007/s40615-022-01236-3.

Marti, M., De Cola, M., MacDonald, N.E., Dumolard, L., Duclos, P., 2017. Assessments of global drivers of vaccine hesitancy in 2014 - looking beyond safety concerns. PLoS One 12. https://doi.org/10.1371/journal.pone.0172310.

Mendenhall, E., 2023. Trust, individualism, and the logics of care in middle America during the first year of the COVID-19 pandemic. Transcult. Psychiatry. https://doi.org/10.1177/13634615231213839.

Microsoft, 2024. Micrsof Excel [WWW Document]. URL. https://www.microsoft.com/en-gb/microsoft-365/excel, 2.8.24.

Miller, W., Rollnick, S., 2002. Motivational Interviewing: Preparing People to Change. Guilford Press, New York, New York.

Młoźniak, I., Zwierczyk, U., Rzepecka, E., Kobryn, M., Wilk, M., Duplaga, M., 2023. Manifestation of health denialism in attitudes toward COVID-19 vaccination: a qualitative study. Vaccines (Basel) 11. https://doi.org/10.3390/vaccines11121822.

Morales, G.I., Lee, S., Bradford, A., De Camp, A., Tandoc, E.C., 2022. Exploring vaccine hesitancy determinants during the COVID-19 pandemic: an in-depth interview study. SSM - Qualitative Research in Health 2. https://doi.org/10.1016/j.ssmqr.2022.100045.

Mudde, C., Kaltwasser, C.R., 2017. Populism: A Very Short Introduction. Oxford University Press, New York.

Mudde, C., Kaltwasser, C.R., 2015. Vox populi or vox masculini? Populism and gender in Northern Europe and South America. Patterns Prejudice 49, 16–36.

Muğaloğlu, E.Z., Kaymaz, Z., Mısır, M.E., Laçin-Şimşek, C., 2022. Exploring the role of trust in scientists to explain health-related behaviors in response to the COVID-19 pandemic. Sci. Educ. (Dordr.) 31, 1281–1309. https://doi.org/10.1007/s11191-022-00323-5.

Naqvi, M., Li, L., Woodrow, M., Yadav, P., Kostkova, P., 2022. Understanding COVID-19 vaccine hesitancy in ethnic minorities groups in the UK. Front. Public Health 10. https://doi.org/10.3389/fpubh.2022.917242.

Newman, P.A., Dinh, D.A., Massaquoi, N., Williams, C.C., Lacombe-Duncan, A., Tepjan, S., Nyoni, T., 2024. "Going vaccine hunting": multilevel influences on COVID-19 vaccination among racialized sexual and gender minority adults—a qualitative study. Hum. Vaccines Immunother. 20. https://doi.org/10.1080/21645515.2023.2301189.

Noblit, G., Hare, R., 1998. Meta-Ethnography: Synthesizing Qualitative Studies. Sage, London.

Nurmi, J., Harman, B., 2022. Why do parents refuse childhood vaccination? Reasons reported in Finland. Scand. J. Publ. Health 50, 490–496. https://doi.org/10.1177/14034948211004323.

Osakwe, Z.T., Osborne, J.C., Osakwe, N., Stefancic, A., 2022. Facilitators of COVID-19 vaccine acceptance among Black and Hispanic individuals in New York: A qualitative study. Am. J. Infect. Control 50, 268–272. https://doi.org/10.1016/j.ajic.2021.11.004.

Ozduzen, O., Aslan Ozgul, B., Ianosev, B., 2023. 'Institutions of governance are all corrupted': anti-political collective identity of anti-lockdown protesters in digital and physical spaces. Soc. Mov. Stud. https://doi.org/10.1080/14742837.2023.2246920.

Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E., Chou, R., Glanville, J., Grimshaw, J.M., Hróbjartsson, A., Lalu, M.M., Li, T., Loder, E.W., Mayo-Wilson, E., McDonald, S., McGuinness, L.A., Stewart, L.A., Thomas, J., Tricco, A.C., Welch, V.A., Whiting, P., Moher, D., 2021. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. The BMJ. https://doi.org/10.1136/bmj.n71.

Poduval, S., Kamal, A., Martin, S., Islam, A., Kaviraj, C., Gill, P., 2023. Beyond information provision: analysis of the roles of structure and agency in COVID-19 vaccine confidence in ethnic minority communities. Int. J. Environ. Res. Publ. Health 20. https://doi.org/10.3390/ijerph20217008.

Power, S.A., Schaeffer, M., Heisig, J.P., Udsen, R., Morton, T., 2023. Why trust? A mixed-method investigation of the origins and meaning of trust during the COVID-19 lockdown in Denmark. Br. J. Soc. Psychol. 62, 1376–1394. https://doi.org/10.1111/bjso.12637.

Pugh, S., 2019. Politics, power, and sexual and reproductive health and rights: impacts and opportunities. Sex Reprod Health Matters. https://doi.org/10.1080/26410397.2019.1662616.

Purvis, R.S., Moore, R., Willis, D.E., Hallgren, E., McElfish, P.A., 2022. Factors influencing COVID-19 vaccine decision-making among hesitant adopters in the United States. Hum. Vaccines Immunother. 18. https://doi.org/10.1080/21645515.2022.2114701.

Randall, J.G., Dalal, D.K., Dowden, A., 2023. Factors associated with contact tracing compliance among communities of color in the first year of the COVID-19 pandemic. Soc. Sci. Med. 322. https://doi.org/10.1016/j.socscimed.2023.115814.

Rhodes-Purdy, M., Navarre, R., Utych, S.M., 2021. Populist psychology: economics, culture, and emotions. J. Polit. 83, 1559–1572.

Robertson, E., Reeve, K.S., Niedzwiedz, C.L., Moore, J., Blake, M., Green, M., Katikireddi, S.V., Benzeval, M.J., 2021. Predictors of COVID-19 vaccine hesitancy in the UK household longitudinal study. Brain Behav. Immun. 94, 41–50. https://doi.org/10.1016/j.bbi.2021.03.008.

Rutjens, B.T., van der Linden, S., van der Lee, R., 2021. Science skepticism in times of COVID-19. Group Process. Intergr. Relat. 24, 276–283. https://doi.org/10.1177/1368430220981415.

Schwartz, B., Brewer, J., Budigan, H., Bernier, R., Dudley, M.Z., Kan, L., Proveaux, T.M., Roberts, R., Tafoya, N., Hamlin, M.D., Moore, L., Hughes, M., Turner, B., Al-Dahir, S., Velasco, E., Privor-Dumm, L., Veloz, W., White, J.A., Dubois, S., Ooton, J., Kipp, B.J., Show, T.J., Salu, K., Chavez, B., Montes, M.D.P., Najera, R., King, T., Salmon, D.A., 2023. Factors affecting SARS-CoV-2 vaccination intent and decision making among African American, native American, and hispanic participants in a qualitative study. Publ. Health Rep. 138, 422–427. https://doi.org/10.1177/00333549231160871.

Sekimitsu, S., Simon, J., Lindsley, M.M., Jones, M., Jalloh, U., Mabogunje, T., Kerr, J., Willingham, M., Ndousse-Fetter, S.B., White-Hammond, G., Altman, W., 2022. Exploring COVID-19 vaccine hesitancy amongst black Americans: contributing factors and motivators. Am. J. Health Promot. 36, 1304–1315. https://doi.org/10.1177/08901171221099270.

Shetty, P., 2010. Experts concerned about vaccination backlash. Lancet 375, 970–971. https://doi.org/10.1016/S0140-6736(10)60421-7.

Simas, C., Larson, H.J., Paterson, P., 2021. "Saint Google, now we have information!": a qualitative study on narratives of trust and attitudes towards maternal vaccination in Mexico City and Toluca. BMC Public Health 21. https://doi.org/10.1186/s12889-021-11184-y.

Smith, L.E., Duffy, B., Moxham-Hall, V., Strang, L., Wessely, S., Rubin, G.J., 2021. Anger and confrontation during the COVID-19 pandemic: a national cross-sectional survey in the UK. J. R. Soc. Med. 114, 77–90. https://doi.org/10.1177/0141076820962068.

Thomas, J., Harden, A., 2008. Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Med. Res. Methodol. 8. https://doi.org/10.1186/1471-2288-8-45.

Valasek, C.J., Streuli, S.A., Pines, H.A., Mittal, M.L., Strathdee, S.A., Vera, C.F., Harvey-Vera, A., Bazzi, A.R., 2022. COVID-19 vaccination acceptability and experiences among people who inject drugs in San Diego County. Prev Med Rep 30. https://doi.org/10.1016/j.pmedr.2022.101989.

Vallacher, R.R., Fennell, E., 2021. Rapid social change and the emergence of populism. In: Forgas, J.P., Crano, W.D., Fiedler, K. (Eds.), The Psychology of Populism: the Tribal Challenge to Liberal Democracy. Routledge.

Weinstein, E.R., Balise, R., Metheny, N., Jose Baeza Robba, M., Mayo, D., Michel, C., Chan, B., Safren, S.A., Harkness, A., 2023. Factors associated with latino sexual minority men's likelihood and motivation for obtaining a COVID-19 vaccine: a mixed-methods study. J. Behav. Med. 46, 116–128. https://doi.org/10.1007/s10865-022-00315-4.

Williams, S.N., 2021. Public Attitudes to COVID-19 'booster Vaccinations and Influenza Vaccines: A Qualitative Focus Group Study.

Williams, S.N., Armitage, C.J., Tampe, T., Dienes, K.A., 2021. Public perceptions of non-adherence to pandemic protection measures by self and others: a study of COVID-19 in the United Kingdom. PLoS One 16. https://doi.org/10.1371/journal.pone.0258781.

Williams, S.N., Dienes, K., 2021. Public attitudes to COVID-19 vaccines: a qualitative study. https://doi.org/10.1101/2021.05.17.21257092.

Wilson, R.J.I., Vergélys, C., Ward, J., Peretti-Watel, P., Verger, P., 2020. Vaccine hesitancy among general practitioners in Southern France and their reluctant trust in the health authorities. Int. J. Qual. Stud. Health Well-Being 15. https://doi.org/10.1080/17482631.2020.1757336.

Wirth, W., Esser, F., Wettstein, M., Engesser, S., Wirz, D., Schulz, A., Ernst, N., Büchel, F., Caramani, D., Manucci, L., Steenbergen, M., Bernhard, L., Weber, E., Hänggli, R., Dalmus, C., Schemer, C., 2016. The Appeal of Populist Ideas, Strategies and Styles: A Theoretical Model and Research Design for Analyzing Populist Political Communication (No. 88). Zurich.

Zimmermann, B.M., Paul, K.T., Araújo, E.R., Buyx, A., Ferstl, S., Fiske, A., Kraus, D., Marelli, L., McLennan, S., Porta, V., Prainsack, B., Radhuber, I.M., Saxinger, G., 2023. The social and socio-political embeddedness of COVID-19 vaccination decision-making: a five-country qualitative interview study from Europe. Vaccine 41, 2084–2092. https://doi.org/10.1016/j.vaccine.2023.02.012.