institute of development studies

# The COVID-19 YPAR Project:

## Youth Participatory Action Research (YPAR) to Explore the Context of Ethnic Minority Youth Responses to COVID-19 Vaccines in the United States and United Kingdom

**Megan Schmidt-Sane, Tabitha Hrynick, Elizabeth Benninger, Janet McGrath, Santiago Ripoll and Jillian Schulte**

**October 2022**

The Institute of Development Studies (IDS) delivers world-class research, learning and teaching that transforms the knowledge, action and leadership needed for more equitable and sustainable development globally.



Youth Participatory Action Research (YPAR) to Explore the Context of Ethnic Minority Youth Responses to COVID-19 Vaccines in the United States and United Kingdom
Megan Schmidt-Sane, Tabitha Hrynick, Elizabeth Benninger, Janet McGrath, Santiago Ripoll and Jillian Schulte

October 2022

First published by the Institute of Development Studies in October 2022
DOI: **10.19088/IDS.2022.072**

Suggested citation: Schmidt-Sane, M.; Hrynick, T.; Benninger, E.; McGrath, J.; Ripoll, S. and Schulte, J. (2022) *Youth Participatory Action Research (YPAR) to Explore the Context of Ethnic Minority Youth Responses to COVID-19 Vaccines in the United States and United Kingdom*, Brighton: Institute of Development Studies, DOI: **10.19088/IDS.2022.072**

A catalogue record for this publication is available from the British Library.

The research was conducted by the Institute of Development Studies, Southall Community Alliance, Case Western Reserve University and Cleveland State University as part of the COVID-19 Recovery: building future pandemic preparedness and understanding citizen engagement in the USA and UK programme, funded by the British Academy.



Available from:
Institute of Development Studies, Library Road
Brighton, BN1 9RE, United Kingdom
+44 (0)1273 915637
**ids.ac.uk**

IDS is a charitable company limited by guarantee and registered in England
Charity Registration Number 306371
Charitable Company Number 877338

# The COVID-19 YPAR Project

# Youth Participatory Action Research (YPAR) to Explore the Context of Ethnic Minority Youth Responses to COVID-19 Vaccines in the United States and United Kingdom

October 2022

## Summary

This report shares findings from a youth participatory action research (YPAR) study of minoritized youth (ages 12-18) responses to COVID-19 vaccination. It includes two case studies, from Cleveland, Ohio in the United States, and the London Borough of Ealing in the United Kingdom. Our findings speak to the context of youth vaccine hesitancy with recommendations for adapting COVID-19 vaccination efforts to achieve greater vaccine coverage in underserved populations and develop contextually appropriate, localized ways to advance health equity.

## Keywords

COVID-19; Youth Participatory Action Research; London; vaccination.

## Authors

**Megan Schmidt-Sane** is a Research Fellow at the Institute of Development Studies.

**Tabitha Hrynick** is a Research Officer at the Institute of Development Studies.

**Elizabeth Benninger** is a Postdoctoral Researcher at Cleveland State University.

**Janet McGrath** is a Professor and Chair in the Department of Anthropology at Case Western Reserve University.

**Santiago Ripoll** is a Research Fellow at the Institute of Development Studies.

**Jillian Schulte** is a PhD student in the Department of Anthropology at Case Western Reserve University.

# Foreword

Despite progress in COVID-19 vaccination rates overall in the US and UK, vaccine inequity persists as young people from minoritised and/or deprived communities are often less likely to be vaccinated. COVID-19 'vaccine hesitancy' is not just an issue of misinformation or lack of information. 'Vaccine hesitancy' among young people is reflective of wider issues such as mistrust in the state or the medical establishment and negative experiences during the pandemic.

This report is based on case study research conducted among young people (ages 12-18) in Cleveland, Ohio, US and the London borough of Ealing, UK. Whilst public discourse may label young people as 'vaccine hesitant,' we found that there were differences based on social location and place and this labelling may portray young people as 'ignorant.' We found the greatest vaccine hesitancy among older youth (15+ years old), particularly those from minoritised and deprived communities. Unvaccinated youth were also more likely to be from families and friend groups that were unvaccinated. While some expressed distrust of the vaccines, others reported that COVID-19 prevention was not a priority in their lives, but instead concerns over food security, livelihood, and education take precedence. Minoritised youth were more likely to report negative experiences with authorities, including teachers at their schools and police in their communities.

Our findings demonstrate that COVID-19 vaccine hesitancy is embedded in a context that drives relationships of mistrust between minoritised and deprived communities and the state, with implications for COVID-19 vaccine uptake. Young people's attitudes toward vaccines are further patterned by experiences within their community, school, family, and friend groups.

# Contents

## Boxes



## Figures

## Tables

# Acknowledgements

We would like to acknowledge that this was a collaborative endeavour, involving staff at the Institute of Development Studies, Case Western Reserve University, and Cleveland State University. Our partners included Ealing Council's Public Health team, Ealing's COVID-19 Vaccine Working Group, Ealing's Youth Services, Bollo Brook Youth Centre, Acton Youth Association, Southall Community Alliance, MyCom, Tremont Montessori, and the Urban Community School. We would like to thank our Youth Advisory Boards and all youth participants and co-researchers in this project, as well as the work of Diane Mastnardo, Elizabeth Davies, Charlie Forgacz-Cooper, and Brinda Athreya.

# Acronyms

| | |
|---|---|
| BIPOC | black, Indigenous, people of color |
| CCG | Ealing NHS Clinical Commissioning Group |
| CDC | The Centers for Disease Control and Prevention |
| COVID-19 | Coronavirus disease caused by the SARS-CoV-2 virus |
| FGD | Focus Group Discussion |
| GP | General Practitioner |
| NHS | The National Health Service in the United Kingdom |
| SAGE | Scientific Advisory Group for Emergencies in the United Kingdom |
| VWG | Vaccine Working Group |
| YPAR | Youth Participatory Action Research |

# 1. Introduction

Vaccination programs designed for adults will not necessarily work for youth. While older adults were generally more vulnerable to COVID-19, young people were largely more vulnerable to the psychosocial and economic impacts of COVID-19 measures, especially stay-at-home orders or “lockdowns” (The British Academy and Society, 2020). Youth have experienced particular challenges during the COVID-19 pandemic including school closures and months of online class, social isolation, mental health issues, and loss of services and support. In short, many young people experience great uncertainty about the future, rooted in this disruption of their education and career path. This uncertainty is also driven by a concern over the future and a skepticism that adult authorities, from government to the medical establishment, can fix these interlocking crises. Encouraging vaccination uptake requires trust. Building trust with young people, particularly from racialized and disadvantaged communities, will require novel strategies, shifts toward understanding trust as a community construct, rather than an individual one, and deep engagement.

As of March 2022, COVID-19 vaccination rates have slowed and questions have remained over the effectiveness of campaigns in building trust with disadvantaged groups who have experienced histories of structural disadvantage and discrimination. Despite an initial surge, vaccine rates are levelling off and are still lower amongst youth (67% of ages 12-17 and 54% of 12-15, 69% of 16-17 have received at least 1 dose in the US and UK, respectively) (CDC, 2022; Gov.uk, 2022). When disaggregated, we can see that vaccination uptake is much lower among young and minoritized groups. These phenomena are not happening in silo; the experience of COVID-19 is filtered through different and dynamic contexts, including longstanding structural inequalities and historical injustice.

This report shares findings from a youth participatory action research (YPAR) study of minoritized youth (ages 12-18) responses to COVID-19 vaccination. It includes two case studies, from Cleveland, Ohio in the United States, and the London Borough of Ealing in the United Kingdom. We use a political economy of health framework (see Section I) to understand the underpinning of health inequalities, including how systemic racism, structural inequalities, and historical injustice have ruptured relationships of trust between authorities and racialized communities. Embedded in this ecosystem are youth responses toward COVID-19 vaccines, including vaccine hesitancy. We conducted interviews and focus group discussions to understand youth perspectives, including responses toward

COVID-19 vaccination. This report includes detail from an in-depth exploration of each case (and across cases) and the triangulation of multiple methods. We then provide findings on the context of youth vaccine hesitancy with recommendations for adapting COVID-19 vaccination efforts to achieve greater vaccine coverage in underserved populations and develop contextually appropriate, localized ways to advance health equity.

Social scientists have long drawn attention to the need to understand vaccine hesitancy in context (Larson et al., 2014). In this case, research on the context(s) of ethnic minority youth attitudes and responses to COVID-19 vaccines is critical, particularly as younger groups are now eligible for vaccination. Youth are situated in differing and dynamic contexts, and social and material situations. Ethnic minorities, including black, black African and Caribbean, Asian and Latine/Latinx youth have experienced histories of systemic racism in the UK and US, and particular histories related to policing and immigration which compound experiences of injustice. For youth, childhood exposure to traumatic events stemming from racism, xenophobia, and discrimination are acknowledged major life stressors (D. L. Bernard et al., 2021). In both contexts, race intersects with gender, social class, and other identity categories to shape experiences and vaccine hesitancy.

The role of trust is a cornerstone of the relationship between communities, public health, and other government actors (The Royal Society, 2020). Trust affects the reception, interpretation, and spread of health communication on COVID-19 measures and vaccines. While loss of trust has been documented as a “key determinant” in vaccine hesitancy, trust is often conceptualized as static (e.g., trust can be built once). Understanding responses toward COVID-19 vaccines would require a more dynamic understanding of how trust is constructed, (re)negotiated, and contextualized particularly for ethnic minority youth embedded in intersecting histories of inequality, racism, oppression, and injustice.

To explore the context of ethnic minority youth responses to COVID-19 vaccines, non-traditional methodological approaches are needed as policies, programs, and research aimed at youth often focus solely on framings and conceptualizations of a problem and its solution made by adult experts. Participatory action research (PAR), instead, draws on a long history of critical research and places the population of interest at the center of research, and as an equal partner (Anyon et al., 2018). Youth Participatory Action Research (YPAR) is an emerging approach that aims to promote full youth participation in research. Our team used a YPAR methodology with youth groups in Cleveland and Ealing and our guiding research questions are as follows:

(1) How does context specific to social location (ethnic minority youth) and physical place (disadvantaged neighbourhoods), including experiences of systemic racism, structural inequalities, and historical injustice shape responses to COVID-19 vaccines?
(2) How do youth conceptualize (mis)trust and what might be the role of (mis)trust in youth responses to COVID-19 vaccines?

This report is structured as follows.

- **Section 2** covers key concepts, terms, and definitions that are at the center of this research.

- **Section 3** reviews the literature on youth in relation to vaccine hesitancy, including definitions and contemporary understandings of vaccine hesitancy and vaccine confidence, defining a political economy of health framework, systemic racism and structural inequalities, trust and mistrust in authorities, and youth experiences during the COVID-19 pandemic.

- **Section 4** describes our research methodology, including methods used in each site and our comparative case study approach rooted in a political economy of health framework.

- **Section 5** presents the study findings, first focusing on the Cleveland case study, then the Ealing case study, and finally thematic findings that cross the two case studies.
- **Section 6** details programmatic recommendations for Cleveland and Ealing public health actors, with relevance to a wider range of local and regional policymakers in the urban United States and United Kingdom

# 2. Key Concepts and Study Context

## 2.1 Key Concepts, Terms, and Definitions

**Political economy of health** considers the political, social, cultural, and economic contexts in which disease and illness arise, and examines the ways in which societal structures interact with place conditions that lead to good or ill health.

**Systemic racism** is a socially constructed scaffolding that supports and maintains racial discrimination and while racism may shift over time, the scaffolding continues to hold it in place.

**Structural inequalities** result from and intersect with various -isms and are deeply embedded in our societies. Structural inequalities include two key components; *persistence* where inequalities are reinforced and compounded over time and *intersectionality* where relationships between inequalities shape different experiences for individuals facing multiple forms of oppression.

**Trust,** specifically medical mistrust, refers to a tendency to distrust medical systems and personnel believed to represent the dominant culture in a given society. Distrust in the broader COVID-19 response, a lack of trust in political authorities, and/or distrust in broader institutions have been cited in a broad range of ethnic minority responses to COVID-19 vaccines and other measures.

**Vaccine hesitancy** refers to a delay in acceptance or total refusal of vaccines despite the availability of vaccination services.

**Vaccine confidence** is the belief that vaccination, and the providers, private sector, and political actors behind it, serve the public's best health interests.

**Vaccine equity** is fair and just access to vaccines, prioritizing historically marginalized and disadvantaged communities. The most effective way to achieve equity is by involving communities in the planning, execution, and decision-making process of COVID-19 vaccination programs and by addressing histories of racism, injustice, and oppression.

**Racialized and ethnic minorities** include groups that have been minoritized over time on the bases of ethnicity. In the United States, black, Indigenous, people of color (BIPOC) is a unifying label that also emphasizes the unique experiences of black and Indigenous communities. In the context of this report, we write separately about black (American), Latine/Latinx, and Asian (South Asian, Southeast Asian, East Asian) communities. In the United Kingdom (in the context of Ealing), we write about black African, black Caribbean, and South Asian communities. In the aggregate, we may describe these groups as racialized communities, ethnic minorities, or BIPOC.

# 3. Literature and Evidence Review

This section includes an overview of youth vaccination in each study context and a review of the extant literature on vaccine hesitancy and confidence and pairs this with a review of structural forces that shape fundamental relationships between young people, the communities in which they live, and authorities. This provides us with a better understanding of the context of social location and place in regard to youth responses to COVID-19 vaccines and embeds individual attitudes of hesitancy or confidence in the wider ecosystem of vaccine attitudes. For racialized and minoritized communities, vaccine hesitancy may be reflective of longstanding histories of broken promises, marginalization, and injustice. However, these histories are not deterministic, meaning they do not produce uniform outcomes for all groups and all ages. Hesitancy or skepticism toward COVID-19 vaccines may also be embedded in youth experiences during the COVID-19 pandemic. The following themes underpin the wider ecosystem of vaccine attitudes among youth in the United States and United Kingdom.

## 3.1 Vaccination in Cleveland and Ealing

### 3.1.1 Cleveland, Ohio, United States

While adults were able to more widely get the COVID-19 vaccine starting in March 2021, young people did not become vaccine eligible until April (ages 16-17) or May (ages 12-15). In the United States, COVID-19 vaccine eligibility needs to be approved by the national Food and Drug Administration and guidance is given by the Centers for Disease Control and Prevention, though specific rollout plans are determined by each state. While three vaccines (Pfizer-BioNTech, Moderna, and J&J/Janssen) are available for the adult population, only the Pfizer-BioNTech vaccine is available to those under 18 years of age. Young people under 18 years old can access the vaccine at local pharmacies and hospitals either through an appointment or by walking into a pharmacy. Some area schools have hosted vaccination clinics.

In Ohio, while roughly 60% of Cuyahoga County residents are fully vaccinated, just 45% of Cleveland residents are fully vaccinated (*COVID-19 Vaccination Dashboard*, 2022). Lower-income, majority black, east side neighborhoods have markedly lower vaccination rates compared to higher-income, mostly white neighborhoods. For example, this disparity is evident between the mostly white neighborhood, Goodrich-Kirtland Park (50% vaccinated), and a mostly black neighborhood, Buckeye-Woodhill (under 20% vaccinated) (*The Real Guardians of Cleveland*, n.d.).

The COVID-19 response in Greater Cleveland has mobilized public-private partnerships, including a number of area universities, hospitals, private foundations, community-based organizations, and other stakeholders. Several of these stakeholders have organized under the Greater Cleveland COVID-19 Rapid Response Fund, which includes the fund's Vaccine Communications Task Force. In November 2021, the Guardians of Cleveland initiative (**https://guardianscle.org/**) was formed to bolster communications and community engagement initiatives that address root causes of medical mistrust, including histories of systemic racism (*The Real Guardians of Cleveland*, n.d.). This initiative included commercials for television, radio and social media, local billboards and bus stop posters, and the recruitment of "guardians," or community engagement and vaccination champions, who were sent to more than 100 community events in Cleveland neighborhoods.

For example, the video above includes very clear messaging that references longstanding concerns in the black community about the Tuskegee experiment and a history of medical experimentation on minorities in the United States.

> *"Have you not had your shot yet? Really, are you serious? I know you're worried, you're thinking it's gonna be like another Tuskegee. I get it, they've been doing black people dirty for years, so why wouldn't we be worried."*
>
> – excerpt from Kevin "Chill" Heard's video as part of the Guardians of Cleveland initiative

While the Guardians of Cleveland initiative is still in the nascent stage, there are opportunities to expand on this and other good work in the Greater Cleveland area to better address youth-specific concerns and experiences during the COVID-19 pandemic.

### 3.1.2 London Borough of Ealing, United Kingdom

In the United Kingdom, youth vaccination began in August 2021, when young people ages 16-17 became eligible to receive the COVID-19 vaccine, followed by youth ages 12-15 in September. While adults can receive Moderna, Oxford/AstraZeneca, or Pfizer-BioNTech, only the Pfizer vaccine is available for those under 18 years of age. As of February 2022, only people aged 16 and over are eligible for a third booster dose of the vaccine. Young people can get their COVID-19 vaccine at school, book a vaccination appoint at a vaccination center or pharmacy, or find a walk-in vaccination site without getting an appointment (*Coronavirus (COVID-19) Vaccines*, 2020).

In England, national vaccination data reveal disparities by ethnicity. Roughly 52.5% of 12-15 year olds have one vaccine dose as of January 2022, with major disparities between Indian (65%), white British (59%), and black African (27%) or black Caribbean (13%) youth (R. Adams, 2022). London has the lowest vaccination rate for 12-17 year olds overall (R. Adams, 2022).

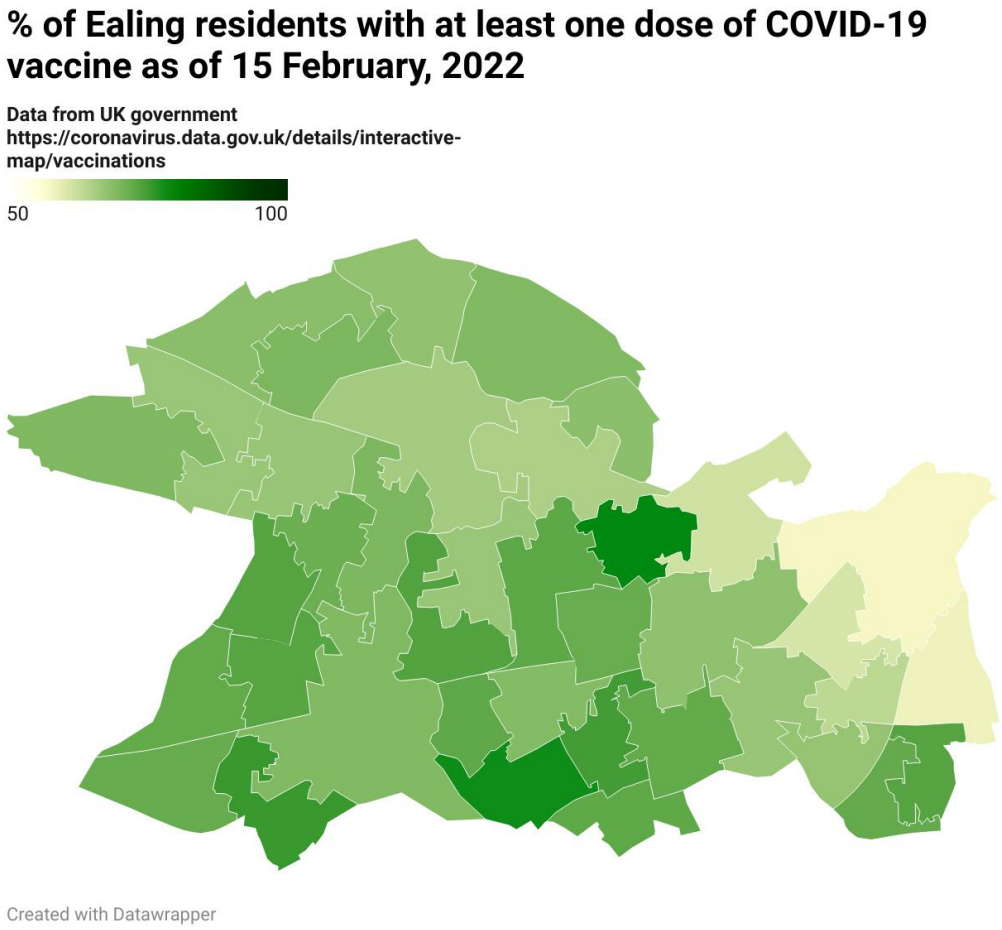


**Figure 1** . Percentage of MSOA residents who have received 1 dose of a COVID-19 vaccine, map made by the study team

In Ealing, overall roughly 76% of residents have had the first dose of the vaccine while 71% have had the second dose. First dose uptake ranges by ward, with lower rates seen in South Acton (68.6%), Acton Central (63.3%), and East Acton (59.7%). For those under 18 years old, roughly 50% have received at least one dose of a COVID-19 vaccine as of 13th February 2022. As shown in **Figure 1** vaccination varies by MSOA in Ealing.

**COVID-19 vaccination rollout in Ealing.** The statutory authority responsible for the vaccination rollout in Ealing is primarily the Ealing NHS Clinical Commissioning Group (CCG), which is itself part of the larger Northwest London Clinical Commissioning Group. The CCG works with the local Ealing Council to implement the rollout, including deciding on venues, allocating human resources, and generally adapting the program. Representatives from the council and the CCG meet together in a Vaccine Working Group (VWG), which meets regularly to review vaccination data, and discuss and decide strategy. Council representation includes team members from the public health, communications, community engagement, data, transportation, and human resources teams among others. Through representation of the EACH consortium, community-based organizations also have a seat within the VWG.

Initially, the vaccination rollout began with two central sites selected by the CCG, including one located in the town of Southall, which had, along with other western areas of Ealing borough, been disproportionally affected by COVID-19 infections, serious illness and death. Several GP (general practitioner) surgeries also offered COVID-19 vaccination, but these services were short-lived due to the need of these health workers to return to providing routine services. This meant that vaccination was highly centralized for some time, with residents needing to travel to one of the two mass vaccination sites. Over time, including due to advocacy by council-based responders, the rollout became more agile, with the deployment of temporary pop-up clinics in various locations across the borough including in faith centers, schools, super-market parking longs and elsewhere. Community engagement activities, including public webinars with Q&A, visits and communication by community engagement leads with local residents and organizations have also been conducted. The council has recently been granted with funding by the UK Government to launch a “Community Champions” program to better engage with local residents, through a more bottom-up and community led process.

**Stakeholders.** Key statutory stakeholders in the vaccine rollout at the local level include the Ealing Council, and especially its Vaccine Working Group, the Ealing NHS Clinical Commissioning group, itself part of the Northwest London Health and Care Partnership which is ultimately responsible for the vaccine rollout locally. Members of the CCG also sit within the council’s Vaccine Working Group, which is a critical structure in that it provides a platform for sharing and collaboration between people from the different institutions, as well as across sectors and teams within the council. For instance, council workers from the communications team, data team, community engagement, public health, human resources, youth engagement and other areas are part of the VWG. Civil society is also represented on the VWG through the EACH Consortium. More recently, the VWG has brought on youth representatives with funding from the UK government’s Kickstarter

program. The VWG meets regularly, and more frequently during more intensive periods of transmission and when vaccination efforts are meant to intensify, such as the booster drive prior to the Christmas and New Year holiday period in 2021.

Community organizations have also played important roles in pandemic response. The Southall Community Alliance has for instance, coordinated or connected a number of community groups to provide critical support including food support for local families affected by poverty and job loss. Faith leaders have also engaged in vaccination related activities. Overall, however, the role of community organizations and actors in vaccination related activities is more unclear and not as apparent.

## 3.2 Vaccine Hesitancy and Vaccine Confidence

**Vaccine hesitancy.** The World Health Organization defines vaccine hesitancy as a "delay in acceptance or refusal of vaccines despite the availability of vaccination services" (Burki, 2019). It is not a dichotomy of being "hesitant or not," but rather a continuum ranging from complete acceptance to complete refusal (Bhopal & Nielsen, 2020; Dubé et al., 2014, 2015). A Working Group on Vaccine Hesitancy in the UK Scientific Advisory Group for Emergencies (SAGE) further defines it as:

> A behavior, influenced by a number of factors including issues of confidence [do not trust vaccine or provider], complacency [do not perceive a need for a vaccine, do not value the vaccine], and convenience [access] (Dubé et al., 2014).

The working group delineated determinants of vaccine hesitancy along three domains

**Table 1** Determinants of vaccine hesitancy (SAGE Working Group)

| | |
|---|---|
| Individual and group influences | Personal perceptions of the vaccines or influences of the social environment |
| Contextual influences | Historic, socio-cultural, environmental, health system/institutional, economic or political factors |
| Vaccine and vaccination | Issues related to the characteristics of the vaccine, vaccine development, or the vaccination process |

Additional behavioral factors may shape vaccine uptake, including complacency (perception of risk, severity of disease), sources of information (Edelman, 2020), socio-demographic characteristics (The Royal Society & The British Academy, 2020), people's level of commitment to risk culture and their level of confidence in health authorities and mainstream medicine (Peretti-Watel et al., 2015).

As social scientists have noted (E. Brunson et al., 2021; Larson, 2020; Leach & Fairhead, 2007), the term “vaccine hesitancy” obscures a wide spectrum of responses and attitudes toward COVID-19 vaccines. Beyond individual attitudes, “vaccine hesitancy” among racial and ethnically minoritized communities is also a product of historical neglect and oppression that contributes to a ruptured relationship between communities and the state, and communities and the medical establishment (E. Brunson et al., 2021). The same social and political-economic forces that contribute to COVID-19 disparities may also have created persistent barriers to accessing vaccines. Lastly, few studies have examined vaccine hesitancy among youth from the perspective of youth.

**Vaccine confidence.** Conversely, vaccine confidence is the belief that vaccination, and the providers, private sector, and political actors behind it, serve the public’s best health interests (*The Vaccine Confidence Project*, n.d.). Like “hesitancy,” it is highly variable and rooted in political-economic context (Larson et al., 2011, 2015). Provision of consistent and scientifically accurate information can mediate some vaccine hesitancy, but vaccine confidence may not improve unless efforts are made to increase public trust in vaccine effectiveness and safety, in public health response, and in health systems and government more broadly (Larson et al., 2011, 2015).

**Vaccine attitudes among communities of color.** In nearly half of U.S. states, black and Hispanic vaccination rates lag by 10% or more (Dottle & Tartar, 2021). In Ohio, for example, just 45.1% of black and 48.8% of Hispanic residents have been vaccinated, compared to 57.4% of white residents (Dottle & Tartar, 2021). A 2021 review of studies on COVID-19 vaccine hesitancy among black and Hispanic Americans found that being young was one predictor of vaccine hesitancy, though other patterns related to gender, income, and medical mistrust exist (Khubchandani & Macias, 2021).

A review of COVID-19 vaccine distribution plans across 50 states and Washington, D.C. found that vaccine equity was only considered by 20 states, of which only 8 health equity committees had a minority group representative. States without a health equity committee used partnerships to ensure diversity and equitable vaccine allocation. However, these partnerships also lacked racial/ethnic minority representation, with only 51% of states collaborating with organizations serving minority populations (Dottle & Tartar, 2021).

In the US, the CommuniVax Coalition brought together an alliance of social scientists, public health experts, and community advocates to improve community involvement in an equitable vaccination rollout. Their July 2021 report on “Carrying Equity in COVID-19 Vaccination Forward” highlights how a focus on vaccine hesitancy can obscure a more complex set of realities that include concerns over COVID-19 and health authorities (E. Brunson et al., 2021). Rather than labeling BIPOC communities as “hesitant” or “noncompliant,” it is essential to recognize vaccine decision making as ongoing, dynamic, contextual, and interpersonal.

The UK SAGE ethnicity sub-group review in December 2020 highlighted what factors influenced COVID-19 vaccine uptake among minoritized groups (SAGE, 2021). black African and black Caribbean groups are less likely to receive the COVID-19 vaccine (50%) compared to white groups (70%). The most likely groups to be COVID-19 vaccine hesitant, by ethnicity, are black ethnic groups followed by Pakistani/Bangladeshi populations. SAGE identified four key factors in hesitancy, including:

- Lower trust and confidence in vaccine efficacy and safety
- Lower perception of risk
- Inconvenience and access barriers, including costs
- Context and socio-demographic variation, including levels of education.

The report flags that vaccination uptake has been lower in areas with higher proportions of minoritized people, however, it still frames vaccine uptake as an individual-level construct rather than understanding how decision making is embedded in a wider context. While this review highlights proximal factors shaping vaccination uptake by minoritized communities, it does not contextualize these factors with the broader political economy, including histories of systemic racism and injustice (E. Brunson et al., 2021).

**Vaccine information.** Despite an abundance of scientific data on the safety and effectiveness of existing vaccines, alternative narratives have continued to emerge in the 21st century, driving vaccine hesitancy (Geoghegan et al., 2020). These are often driven by certain types of negative information used to discuss vaccine issues. Broadly these can be categorized as:

- **Misinformation:** false or inaccurate information, including rumors, whether intended to deceive or not (Larson, 2020);
- **Disinformation**: intentionally false information, spread for political, economic or social gain, and

- **Conspiracy theories**: alternative explanations for events (Wilson & Wiysonge, 2020).

These types of information typically thrive during times of uncertainty (such as during epidemics), have been linked to lower likelihood of adopting public health behaviors, including vaccination and often spread fast, particularly via social media (Bhopal & Nielsen, 2020; Dubé et al., 2013; Larson, 2020; Wilson & Wiysonge, 2020). People sometimes use misinformation to attempt to collectively solve problems in the absence of good information, including when information from authorities is contradictory or incoherent (Larson, 2020)

## 3.3 Youth COVID-19 Vaccine Hesitancy: Current

**Box 1 Youth vaccine hesitancy**

Vaccine attitudes amongst youth differ from adults in several important ways. First, in some contexts, young people cannot make the decision to get vaccinated on their own, they may require parent permission. Second, young people are embedded in school contexts where historically they have received other kinds of health information such as on sexual health. Third, young people may be subject to specific vaccine mandates related to participation in school sports or other related activities. Lastly, young people may face higher levels of social and peer pressure to get vaccinated, or not (Leach & Fairhead, 2007; Sobo, 2015; Sobo et al., 2016).

In the UK, if you are under the age of 16, parental consent will be sought for COVID-19 vaccinations (Daly et al., 2021; Gov.uk, 2022a). However, children can consent themselves, without parents, if they are deemed competent or what is called “Gillick-competent.” Medical professionals have received training about how to ascertain whether someone has the competence to consent. In practice, some medical professionals are hesitant to apply the Gillick-competent standard for COVID-19 vaccinations.

In the US, each state has its own consent laws, ranging from required parental consent for COVID-19 vaccination to children as young as 11 years old allowed to get vaccinated without parental consent (KFF, 2021). In Ohio, parental consent is required for anyone under the age of 18.

## 3.4 Frameworks and Models

In both the US and UK, narratives of COVID-19 vaccine hesitancy are intertwined with discussions of racism and injustice, poverty and deprivation, and being in a younger age group (Fazel et al., 2021; Siddique & Elgot, 2021). Some of these narratives gloss over differences and some link vaccine hesitancy to "less scientific knowledge," which could, for example, perpetuate harmful tropes about minoritized communities (Sturgis et al., 2021).

There is an emerging, largely quantitative, body of literature on COVID-19 vaccine hesitancy among youth. This literature looks at mistrust (Abramovich et al., 2022), youth willingness to get vaccinated in light of peer and parental views (Euser et al., 2022), and social media (Middleman et al., 2022). Emerging literature on predictors of medical mistrust found that medical mistrust was associated with loneliness, financial insecurity, socioeconomic status, and level of social support (Ash et al., 2021). **Table 2** reviews these factors and highlights the key literature on youth vaccine hesitancy. Existing studies focus on youth COVID-19 vaccine hesitancy as an individual phenomenon. Few studies have looked explicitly at systemic racism and even fewer at how youth experiences throughout the life course, including during the pandemic, might shape their responses to the COVID-19 vaccine. There is value in research that links young people's perceptions and responses to vaccines to the social conditions in which they live.

**Table 2** Review of the literature on youth COVID-19 vaccine hesitancy

| Author | Year | Topic | Vaccine Type | Location | Age range | Main factors influencing youth vaccination or vaccine hesitancy |
|---|---|---|---|---|---|---|
| **Abramovich et al.** | 2022 | COVID-19, 2SLGBTQ+ youth, homeless, | COVID-19 | Greater Toronto, Canada | 14-29 yrs | Mistrust in the healthcare system, lack of targeted vaccine-related public health information, |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | concerns about safety and side effects, and accessibility issues. |
| **Adams et al.** | 2021 | COVID-19, young adult, vaccine intention (encompasses hesitancy and acceptance) | COVID-19 | National (online), USA | 18-25 yrs | Among the unvaccinated: (1) wait and see if it is safe, (2) concern about potential side effects, (3) other people need it more than I do right now. (4) lack of belief that they need the vaccine (related to not being in a high risk group or not believing COVID to be a serious illness). |
| **Afifi et al.** | 2021 | COVID-19, wellbeing, reasons and factors influencing vaccine hesitancy/willingness | COVID-19 | Winnipeg, Manitoba, Canada | 16-21 yrs* (Wave 3 of longitudinal study) | Willingness did not differ by age, sex, or mental health conditions, but did differ for other sociodemographic characteristics, physical health conditions, COVID-19 knowledge, practicing social/physical distancing, and adversity history. The most common reasons for not wanting a vaccine were related to safety, knowledge, and effectiveness. |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Allington et al.** | 2021 | COVID-19, Vaccine hesitancy, demographics, social media, conspiracy theories | COVID-19 | UK | 18-75 yrs | Coronavirus vaccine hesitancy is associated with youth, female gender, low income, low education, high informational reliance on social media, low informational reliance on print and broadcast media, membership of other than white ethnic groups, low perceived risk from COVID-19 and low trust in scientists and medics, as well as (to a much lesser extent) low trust in government. |
| **Cristea et al.** | 2021 | COVID-19, social norms and social relations, vaccine decision as social | COVID-19 | Romania | 18+ yrs | This study was not focused on youth, but the overall message was that the choice to get vaccinated is a social one, intermixed with social norms and relationships (ex: those that were for vaccination tended to believe that their acquaintances had a similar perspective). |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Euser et al.** | 2022 | Vaccine willingness among youth, social expectations, personal beliefs | COVID-19 | Netherlands | 12-18 yrs | Vaccination willingness was strongly related to age, perceived personal (protect own health) and societal benefits (to get rid of restrictive policies), and their peers' and parents' vaccination uptake. Youth more willing to get vaccinated more often thought their friends would get a vaccine and that their parents would expect them to get a vaccine. Concerns raised were perceived side-effects and potential unknown long-term consequences. |
| **Fazel et al.** | 2021 | Youth, vaccine hesitancy, sociodemographic impacts | COVID-19 | England | 9-18 yrs | A lower percentage of younger students reported that they would opt-in to vaccination, for example, 35.7% of 9-year-olds and 51.3% of 13-year-olds compared to 77.8% of 17-year-olds would opt-in to take a vaccination. Students who were 'opt-out' or 'undecided' (a combined 'vaccine hesitant' group) were more likely to come from deprived socioeconomic contexts with higher rates of |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | home rental versus home ownership and their school locations were more likely to be in areas of greater deprivation. They were more likely to spend longer on social media, feel that they did not belong in their school community but had lower levels of anxiety and depression. |
| **Leos-Toro et al.** | 2021 | Vaccine confidence/hesitancy, demographics, perception of government response | COVID-19 | Zurich, Switzerland | 22 yrs | Females more likely to oppose vaccination than males. In multivariate models, Sri Lankan maternal background and higher socioeconomic status were associated with a greater likelihood of getting vaccinated against COVID-19 ($p < 0.05$). Respondents were more likely to report a willingness to get vaccinated against COVID-19 when they perceived 1) an effective government response ($p < 0.05$) and 2) their information sources to be objective. |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Mant et al.** | 2021 | Health belief model, vaccine uptake timeline, university students, demographics, severity | COVID-19, but some questions regarding the flu vaccine | Canada | 17-25 yrs (most students, university sample) | Increasing perception of the severity of COVID-19 predicted the likelihood that a respondent was willing to get the COVID-19 vaccine in both surveys. In the latter survey, students who indicated they would be encouraged to get the COVID-19 vaccine if their doctor/pharmacist recommended it were 76 times more likely to be willing to get the vaccine than those who would not be encouraged by medical advice. Interviews revealed concerns about the speed of the vaccine roll out, safety, and efficacy. |
| **Middleman et al.** | 2022 | Assessing vaccine attitudes in 3 waves: (1) before any COVID-19 vaccine was available, (2) after the COVID-19 vaccine was available to adults, and (3) after the COVID-19 vaccine | General and COVID-19 | National (online) USA | 13-18 yrs | Social media had a negative influence on parents' and adolescents' opinions about vaccine safety. Demographic variables were associated with vaccination rates reported in Wave 3, consistent with known inequities related to vaccine access. |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | was available to adolescents | | | | |
| **Sinclair & Agerstrom** | 2021 | descriptive and injunctive norms, COVID-19, social identity theory and social categorization theory | COVID-19 | UK | 18-30 yrs | Norms did not produce significantly different effects compared to standard vaccine information from the authorities. Moreover, no support was found for the hypothesis that young people are more strongly influenced by norms when the norm reference group consists of other young individuals rather than people in general. These findings suggest that the practical usefulness of signaling descriptive norms is rather limited. |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Willis et al.** | 2021 | COVID-19 hesitancy, demographics, screen hours a day | COVID-19 | USA | 12-15 yrs | There were no statistically significant differences across age, gender, race/ethnicity, parental education, self-reported grades, or hours playing video games during school days. There was a statistically significant relationship between COVID-19 vaccine hesitancy and hours of TV watched during school days. |

## 3.5 A Political Economy of Health Approach to Youth Vaccine Hesitancy

A growing number of studies have focused on the historical, social, cultural, and political drivers of vaccine hesitancy (E. Brunson et al., 2021; Dubé et al., 2015; Leach & Fairhead, 2007; Sobo, 2015), though there are gaps in the evidence with regard to minoritized youth vaccine hesitancy. This study uses political economy of health to frame the experiences of young people in the US and UK and to understand how minoritized youth experiences, rooted in historical and political-economic context can drive vaccine hesitancy today.

A political economy approach examines the structural determinants of health, which are fundamentally the "causes of the causes" (Gamlin et al., 2021) and our framework explicitly includes systemic racism as a key driver of inequalities. Political economy of health considers the political, social, cultural, and economic contexts in which disease and illness arise, and examines the ways in which societal structures interact with place conditions that lead to good or ill health (Doyal, 1979; Harvey, 2021; Packard, 1989). The political economy of health approach used in this report derives from critical medical anthropology (Harvey, 2021), meaning that it is critical and attentive to structures of power as well as histories that underpin current health disparities. A political economy of health approach to youth vaccine hesitancy will keep the structural determinants of health (e.g., economic stability, neighborhood environment, social and community context) and social justice at the center of our understanding (Gamlin et al., 2021). For minoritized youth, exploring the structural determinants of vaccine hesitancy will enable the design of engagement approaches that address "root causes" rather than symptoms of vaccine hesitancy.

Political economy of health demonstrates how health equity is bound up in broader structural inequalities that shape community and individuals' opportunities throughout the life course. A large and established body of literature demonstrates linkages between inequalities and health (Marmot, 2005; Marmot et al., 2008). A social gradient in health can be observed, whereby increasing quantities of social resources correlate with increasing "levels" of health in a dose-response relationship (Marmot et al., 1991).

Worsening inequalities in the United Kingdom and United States are likely to contribute to greater health inequity. A political economy framework scaffolds the structures and ideologies that have worsened inequalities in the United Kingdom and United States. In the US, Reagan's institution of "trickle-down" economic theory and subsequent

dismantling of the welfare state produced lasting impacts today (Ganti, 2014). These economic policies and waning social support systems have, in part, contributed to a period of youth in which economic opportunities are fewer and educational barriers for high-paying jobs are higher (Côté, 2014). Increasing experiences of marginality are paired with disciplinary responses both in the education (Wickline, 2019) and criminal justice systems (Sellers & Arrigo, 2018), particularly for low-income and minoritized youth. In the UK, Thatcher's policies produced similar effects, namely, a reduction in funding of the National Health Service (Ganti, 2014).

A political economy approach to vaccine hesitancy widens our understanding of this phenomenon beyond focusing on individual behavior and motivations. It also recognizes the fluidity between context and individual agency, where individual agency still plays a role and structures are not overly deterministic. It focuses our attention on how historical and unequal economic arrangements and high burdens of chronic diseases intersect as power differentials within the provision of healthcare (Gamlin et al., 2021), enabling a more comprehensive assessment of the context of COVID-19 vaccination and youth responses to vaccines. For example, reduced investments in public health and prevention shapes who has access to primary health care in the United States and United Kingdom, meaning that disadvantaged communities have a higher burden of chronic disease and are more vulnerable to COVID-19 (Donà, 2021; Doyal, 1979; Estes, 1991). It also brings attention to the erosion of social and public support for youth opportunities, as young people are increasingly marginalized while being framed as "trouble" or in need of disciplining. Finally, a political economy of health framework brings together these phenomena, to explain the role that systemic racism and structural inequalities play in structuring minoritized community experiences, shaping relationships between minoritized communities and authorities, and how relationships of trust drive (or hinder) youth uptake of COVID-19 vaccination.

## 3.6 Systemic Racism and Structural Inequalities Underpin Vaccine Attitudes

Longstanding systemic racism and structural inequalities on both sides of the Atlantic play a fundamental role in the differential impact of COVID-19, attitudes toward vaccines, and the interpretation of and trustworthiness of vaccine messages and messengers (Feagin & Bennefield, 2014; Washington, 2008). Systemic institutional racism is a socially-constructed scaffolding that supports and maintains racial discrimination and while racism may shift over time, the scaffolding continues to hold it in place (Tourse et al., 2018). This

scaffolding is supported by intersecting -isms: colonialism, sexism, xenophobia, nativism, capitalism, and class structures which have historically assisted in the development of the UK and the US. There are also differences between the UK and US contexts, including different health systems (centralized/decentralized) and community contexts, which shape the impact of structural disadvantage and experiences of the COVID-19 pandemic.

Structural inequalities result from and intersect with various -isms and are deeply embedded in our societies. Structural inequalities include two key components; *persistence* where inequalities are reinforced and compounded over time and *intersectionality* where relationships between inequalities shape different experiences for individuals facing multiple forms of oppression (Crenshaw, 1991). Crenshaw's intersectionality theory is key to understanding how race, class, gender, immigration status, and other identities intersect to shape an individual's life experience based on their multiple identities and social positions.

Despite these persistent forces of oppression, life experiences of systemic racism and structural inequality are often left out, acontextualized, or assumed to have homogenous effects on minoritized communities' perceptions of COVID-19 vaccines (E. Brunson et al., 2021). As an extension of understanding patterns amongst minoritized youth, more must be done to untangle the pathways between experiences of injustice, experiences of social location, and responses to COVID-19 vaccines amongst youth. Public health discourse around ethnic minorities often focuses on discrete impactful events in the historical record rather than the everyday experiences of racism and inequalities which in turn shape relationships of mistrust between ethnic minorities and authorities. A political economy of health approach focuses on broader systems that are reflected in, or shape, everyday experiences of minoritized youth.

## 3.7 Trust and Mistrust in Authorities

Experiences of injustice are widely viewed to affect COVID-19 vaccine responses and the role of (mis)trust features prominently in the literature on vaccine confidence (Larson et al., 2014). Medical mistrust and mistrust in authorities seem to mediate experiences of racism and inequalities and how this affects responses to COVID-19 vaccines. Trust is frequently mentioned in the literature on vaccines (Willis et al., 2021), although less is known about how trust is experienced, conceptualized, deployed, and (re)built. Medical mistrust refers to a tendency to distrust medical systems and personnel believed to represent the dominant culture in a given society (Benkert et al., 2019). The interpretation that medical distrust is solely due to the Tuskegee Syphilis Study neglects longstanding historical injustice that occurred prior to that experiment and has continued since (i.e.

medical experimentation on slaves, exploitation after the Civil War, etc.) (Gamble, 1997). It also ignores the similarities in cross-contextual findings on trust, and how US historical events might shape minoritized youth's mistrust in the UK.

There are very few studies that have specifically examined trust medical mistrust amongst youth in the context of health research (Ash et al., 2021). However, "youth mistrust" is frequently discussed in public discourse around low uptake of COVID-19 vaccination. Ash and colleagues (2021) found that loneliness, financial insecurity (e.g., job loss, loss of income) due to the COVID-19 pandemic, and eligibility for free or reduced lunch predicted medical mistrust. Insurance status, neighborhood median household income, social support, and perceived COVID-19 risk were not significantly associated with medical mistrust.

The literature on medical mistrust does link this phenomenon to broader experiences with authorities that have ruptured relationships of trust with minoritized communities. Research with adults has shown that COVID-19 vaccine hesitancy among black adults was not only due to high medical mistrust, but this was underpinned by a lack of policy and political responses to the black Lives Matter movement's priorities for change (Momplaisir et al., 2021). Further, police brutality that was experienced personally or through media reports also increased *medical* mistrust (Alang et al., 2020).

Distrust in the broader COVID-19 response, a lack of trust in political authorities, and/or distrust in broader institutions have been cited in a broad range of ethnic minority responses to COVID-19 vaccines and other measures (Davies et al., 2021). Varying forms of (mis)trust in local stakeholders likely play a role in ethnic minority youth's responses to COVID-19 vaccines and vaccine information, although what kinds of trust and their context will need to be further understood.

## 3.8 Youth Experiences during the COVID-19 Pandemic

Pandemic restrictions and the influence of local and community level dynamics are at the forefront of young people's experiences during the pandemic. Early evidence shows that COVID-19 has had a detrimental impact on youths' mental health and well-being, particularly for youth from racial and ethnic minority groups that live in under-resourced communities. Evidence synthesized by The British Academy at the start of the pandemic demonstrates that while older adults were more vulnerable to COVID-19 illness and death, young people were more vulnerable to the socioeconomic effects of pandemic control measures (The British Academy and Society, 2020). Young people from black,

Asian, and other minoritized backgrounds faced particular mental health issues (Widnall et al., 2020). Some young people faced anxiety and depression, but this may have lessened for those young people who did not feel connected to their peers prior the pandemic (Widnall et al., 2020).

One of the greatest disruptions to the lives of youth was the closure of schools and the switch to online schooling, particularly for youth with inadequate space to take classes in the home or inadequate technology to manage online classes (Batley et al., 2021). Youth from low-income ethnic minority groups and their families experienced loss of income, increased stress and family conflict, food instability, and lack of physical exercise compounding experiences of neglect by the state.

Youth are also experiencing a crisis of confidence in the state, its ability to function, and this links to major concerns over future security (Mistlin, 2022). Public discourse often focuses on the need for youth to become more aspirational, or hard-working, but these discourses take a “deficit” view and fail to recognize the range of structural challenges that shape disadvantaged youth today (Spohrer et al., 2018). “Youth” is also a critical developmental period, when values and opinions are formed. Emerging literature points to the COVID-19 pandemic as something that will produce “long-lasting political scars” as young people’s negative experiences of health policies may translate to lower confidence and trust in the state’s capacity to function (Aksoy et al., 2020).

These experiences likely drove or exacerbated mistrust in health communication from medical and public health experts, local government, and other authorities. Emerging literature has pointed to low COVID-19 vaccine confidence among youth (Batley et al., 2021) and differences in vaccine confidence, with lower confidence among minoritized youth (Allington et al., 2021) and those with histories of adversity (Afifi et al., 2021). There is a need to understand the full spectrum of youth responses to COVID-19 vaccine information and to understand the wider context of trust and its role in vaccine confidence. Indeed, community engagement that is youth-centered and attentive to place conditions would be vital to improve vaccine equity.

## 3.9 Conceptual Framework: Political Economy of Youth COVID-19 Vaccine Hesitancy


**Figure 2** Conceptual framework for the "Political Economy of Youth COVID-19 Vaccine Hesitancy," image made by the study team

Our conceptual framework is embedded in these bodies of literature, drawing on political economy of vaccine hesitancy to frame how young people respond to COVID-19 vaccines, and why hesitancy is more than an individual-level construct. Our report will demonstrate how young people's views on vaccination are linked to more than social media misinformation or medical mistrust, but these attitudes are underpinned by longstanding histories of mistrust between governments and minoritized communities, and governments and young people. Against this backdrop, the US and UK governments have reduced funding for essential government services like youth services, youth centres, and recreation centres. In the UK, austerity policies have led to a deficit of funding available for local governments and youth services are on the decline in many places. For racialized minorities, this layers onto existing histories of socioeconomic deprivation. Meanwhile, young people are labelled as "dangerous," or "anti-social," and experience police surveillance through frequent stops and searches. In this report, we will show how these trends underlie youth vaccine uptake, with implications for future public health engagement with youth on COVID-19 vaccination and beyond.

# 4. Methodology

This research used a case study approach with a political economy of health lens and participatory methods with minoritized youth (ages 12-18) in Cleveland and Ealing to explore how youth view the role of experiences of systemic racism, structural inequalities, and historical injustice in shaping responses to COVID-19 vaccines and vaccine campaigns, including consideration of the construction of trust/mistrust. Our research aimed to:

1.1. Explore the context of ethnic minority youth's responses toward COVID-19 vaccines through youth participatory action research (YPAR) with youth (ages 12-18) in Cleveland, Ohio, and the London borough of Ealing.
1.2. Understand how ethnic minority youth conceptualize (mis)trust and how local context might shape (mis)trust and responses to COVID-19 vaccines.
1.3. Collaborate with participant youth to disseminate project findings to public health and community actors to inform youth-centered approaches to COVID-19 vaccine community engagement.

This research was conducted over a five-month period, from November 2021 to March 2022. We used a Youth Participatory Action Research (YPAR) approach which explicitly aims to increase youth participation in research and social change. A YPAR approach allows for flexibility and evolution over the life course of the research.

While we proposed an 8-week YPAR program, the COVID-19 omicron variant waves in the US and UK made this difficult. In December 2021, we switched to focus on remote semi-structured interviews with youth, a limited YPAR program (4-5 weeks) in two specific sites (Clark-Fulton in Cleveland and South Acton in Ealing), and focus group discussions to sample from a wider swathe of each location. We also created Youth Advisory Boards in Cleveland and Ealing that meet bi-weekly and have oversight of the research project. These boards are representative of a wider geographic area of Cleveland and Ealing. Their role is to make key decisions about research dissemination, policymaker engagement, and action planning. We also report key findings from the research as they emerge to elicit feedback from the advisory boards.

Finally, stakeholder engagement is another key pillar of our research. From the start of the research project, we engaged with policymakers including the Cleveland Department of Public Health and the Ealing Council, including their Public Health Team and the

Vaccine Working Group. We have key community partners in each place, including:

- **MyCom** (**https://www.mycomcle.org/**), a group of stakeholders and capacity building organizations working to elevate youth access to caring adults and quality programs throughout the community. They have a series of Youth Councils in the Cleveland area, led by the local Youth Coordinator. The councils may engage in various activities, from skills building to local advocacy.

- **Ealing Council Youth and Connexions Service** (**https://www.youngealing.co.uk/**), which supports opportunities for young people ages 11-19. They run a range of programs, After School Clubs, and evening sessions. We worked closely with their Youth Worker, Youth Kickstarter, and the Bollo Brook Youth Center in Acton.

- **Southall Community Alliance** (**https://www.southallcommunityalliance.com/**), which is an umbrella network of 100+ community groups working in Southall and neighborhing areas. The majority of these groups represent the Somali, Indian, Tamil and Afghan communities. They aim to develop the skills and capacity of disadvantaged groups and communities in Southall, enable Southall groups to identify and meet their needs and participate more fully in society, and to promote equality, community cohesion, and a vibrant civil society.

## 4.1 Youth Participatory Action Research Approach

**Background.** YPAR is a form of Participatory Action Research specifically aimed to increase youth participation in research and social change. This methodology contrasts with the dominant approach in gathering data on children and youth, which is to rely on adult experts. Additionally, there is a general trend in urban planning and public health interventions for these activities to remain driven by individuals external to the target neighborhoods, individuals who are viewed to be the experts when it comes to city planning, public health, and poverty alleviation. This has historically led to decisions being made on behalf of the people for whom they are intended, in effect excluding them from meaningful engagement in the decision-making and planning processes, and further marginalizing community members who have historically been affected by social and structural inequities.

The utility of the YPAR methodology for advancing research related to health equity has shown a significant increase over the past decade. A systematic review of YPAR studies

identified 19 prior studies that engaged youth in participatory research on a range of health-related topics (Anyon et al., 2018). Another conceptual review (Ozer et al., 2020) specifically investigating YPAR and health equity highlighted the value of incorporating youth voices to improve understanding of key issues affecting youth health, development, and well-being. While a number of studies have engaged youth in research on their health and well-being (Andresen & Fegter, 2011; Anyon et al., 2018; Ozer et al., 2020), these studies largely overlooked the unique and contextual-based findings related to youth's perceptions.

**YPAR within the context of health equity** research focuses on obtaining an evidence-based, deeper understanding of a community health challenge to guide solutions that promote health equity from the perspectives of youth themselves (Ozer et al., 2020). YPAR with an equity lens challenges traditionally methodological approaches to child health research and intervention development, ensuring that the participation of individuals from historically marginalized populations and communities, especially children and youth, are included in the research process.

**Our YPAR approach.** YPAR encompasses a constellation of methods (**Table 3**). In this study, we triangulated a range of methods including political economy analysis and evidence review, focus group discussions, and interviews with youth (description below). This enabled our team to build a more robust understanding of youth responses to COVID-19 vaccines.

**Table 3** Overview of methods used in each context

| **Methods in Cleveland** | **Methods in Ealing** |
|---|---|
| Political economy analysis and evidence review | Political economy analysis and evidence review |
| Focus group discussions | Focus group discussions |
| In-depth interviews | In-depth interviews |
| Youth Advisory Board (meets remotely) | Youth Advisory Board (meets remotely) |
| YPAR program in Clark-Fulton | YPAR program in South Acton |

**Youth Advisory Boards.** In Cleveland and Ealing, we created Youth Advisory Boards that meet remotely bi-weekly to enable youth oversight of the project. The study team sits on and creates agendas for these board meetings, although youth are encouraged to raise any issues that may not be listed on the agenda. The researchers are not key decision makers in this space. Youth advisory boards provide sustained opportunities for

youth to express ideas and guide research dissemination and action planning (Ozer et al., 2020).

**YPAR Program.** Though YPAR principles and methodologies underpinned the overall research, we refer to more in-depth engagement using YPAR methods when we discuss regular weekly sessions with the same group of youth over a 4-5 week period.

**In the Clark-Fulton neighborhood of Cleveland**, these YPAR program sessions included a variety of lesson plans (see Appendix for one example) adapted from the YPAR Hub (*YPAR Hub* | *YPAR Hub*, n.d.). Sessions begin with an icebreaker or an introduction to the topic (e.g., inequalities). We then conduct an activity, for example, mapping of the community setting and any community assets. Finally, we use guiding questions to generate structured discussion. We end with a reflection and discussion. The YPAR program also included the youth of photovoice and focus group discussion. They have also been planning an "action," which will be a community event focused on the needs of young people in the area.

**In the South Acton area of Ealing,** our YPAR program included in-depth interviews with young people based at a youth center, and informal group discussions with the same group of 8 young people over a period of 4 weeks on topics such as experiences of the COVID-19 pandemic, views on vaccination, and experiences of racism. They have been planning dissemination, including a presentation at a local university, and an action which will be an "open mic night" to provide space for community youth to raise issues about mental health during the pandemic.

## 4.2 Methods

**Comparative case study approach using political economy of health.** Our team used a comparative case study approach (Bartlett & Vavrus, 2017; Crowe et al., 2011), to generate in-depth, multi-faceted insights about how ethnic minority youth's responses toward COVID-19 vaccination are underpinned by histories of systemic racism and structural inequalities. We relied on a political economy of health theoretical framing to understand the context of youth responses to vaccination. A case study approach was used to describe and explore vaccine attitudes in the everyday contexts in which they are formed (Crowe et al., 2011). It can also provide additional insights into what gaps exist in vaccine deployment, how vaccination is being received on the ground, and what strategies might be more successful given the context. We include a case study for each site, Cleveland and Ealing, along with thematic insights across the two sites. While

traditional case studies may lack generalizable insights, a comparative case study approach (Bartlett & Vavrus, 2016) is an effective qualitative tool to research phenomena across settings. To generate comparative insights across Ealing and Cleveland, we used

**Box 2 Comparative Case Study Approach (Bartlett & Vavrus, 2016)**

A case study approach allows for in-depth, multi-faceted exploration of complex issues in their "natural" or real-life settings. We use a political economy of health analysis to provide contextual depth to each case study: Cleveland and Ealing. It also demonstrates the historical roots of systemic racism and structural inequalities in each place. Our primary data collection methods support how these political-economic phenomena are experienced by youth (ages 12-18). We used a *comparative* case study approach to generate more generalizable insights across our two cases. The comparative case study approach allows us to bring these different methods together to understand, in-depth, the background to ethnic minority youth's responses to COVID-19 vaccination.

**Photovoice**. We conducted photovoice with youth (*n* = 15 in Clark-Fulton) on topics outlined above. Photovoice is a data collection technique which allows youth to use more creative methods to express their ideas and experiences (Carlson et al., 2006), especially for youth who may not be comfortable sharing sensitive information in an FGD or interview. Our team used various prompts ("What was your experience like during the COVID-19 pandemic lockdown?") for youth to then use to take photos of their community or home environment. The following week, we would gather the photos and use them to generate a discussion on the topic.

**Focus Group Discussions (FGDs)**. We conducted FGDs in Cleveland (*n* = 6) and Ealing (*n* = 3) (sample size and demographics in the *Sampling and Recruitment* section below) over 5 sessions to explore lived experiences of social location (ethnic, gender, class, and other identities); physical place (local and community context); and systemic racism and other injustices in large-scale events (e.g., George Floyd murder) and the everyday (e.g., inadequate housing quality or interactions with police); and their effects on experiences of the COVID-19 pandemic, health communication, and COVID-19 vaccines. We also explored how trust is conceptualized, who youth might trust, reasons for (mis)trust in authorities, and opportunities for building trust in vaccine engagement. FGDs are well-suited to the aims of the study as it promotes the direct interaction and communication with youth, allowing them to respond more freely due to a more relaxed

environment and has been successfully utilized in qualitative research with youth (S. Adams & Savahl, 2015; Benninger & Savahl, 2017).

**Semi-structured interviews**. We conducted 1-hour interviews with youth in Cleveland (*n* = 18) and Ealing (*n* = 27) to delve deeper into topics described above. Interviews were conducted remotely, over the phone, or Zoom, based on the participant's preference and what was feasible given COVID-19 restrictions and safety precautions needed. Our interviews covered lived experiences of social location (ethnic, gender, class, and other identities); physical place (local and community context); and their effects on experiences of the COVID-19 pandemic, health information and communication, and COVID-19 vaccines. Individual interviews allowed participants to feel more comfortable responding to questions in a safe and confidential setting, where they did not feel judged by their peers or influenced by peer responses.

**Fieldnotes and observations***.* Our study is rooted in medical anthropology, which uses participant observation and fieldnote writing as a key pillar of the ethnographic approach. Given our extensive time "in the field," our team wrote fieldnotes that were based on observations, including observations in and around the research neighborhoods and youth centers. Participant observation (H. R. Bernard, 2011) provides a deeper understanding of the context of a place, including the built environment, neighborhood infrastructure, and any local assets or services. We also were able to identify any vaccination sites in each place and note access issues.

## 4.3 Sampling and Recruitment

**YPAR Sessions and Focus Group Discussion (FGD) Sampling.** We selected groups for focus group discussions (FGDs) and the longer YPAR program (4-5 weeks) together with our community partners. In November, MyCom identified two Youth Coordinators who would dedicate time to this project, one in Maple Heights (east side) and one in the Clark-Fulton neighborhood (west side). They recruited youth from their locations, from Maple Heights High School and Esperanza (a Latinx community-based organization). We also recruited one school-based group from a west side private, but low-income serving, school. In Ealing, we worked with Youth services at the Council and the Southall Community Alliance to identify groups. We connected with a youth center in South Acton which had existing groups of youth. As YPAR is often a two-way process, we also spent time volunteering where needed, for example, at a Food Hub in Southall. This contributed to a less-extractive research model and better community engagement which underpins our approach.

**Interview Sampling.** We utilized a purposive and snowball sampling technique to identify participant youth for the interviews. We used a range of starting points, primarily from community partners and in Cleveland, through existing youth connections. A purposive sample is a type of nonprobability sample that is produced to be representative of the population and is based on specific characteristics (H. R. Bernard, 2011). We used maximum variation sampling to capture a range of perspectives related to COVID-19 vaccination in each place.

In Cleveland, participants were selected based on age group (12-13, 14-15, 16-18), race/ethnicity (to represent different minoritized groups, e.g., black, Asian, Latinx/Latine), gender (female-male representation), and geographic region (West and East sides). In Ealing, participants were selected based on age group (12-13, 14-15, 16-18), race/ethnicity (to represent different minoritized groups, e.g., black and Caribbean, Asian), gender (female-male representation), and geographic region (Acton, Ealing, Southall).

We paired purposive sampling with snowball sampling, where an index participant would be asked to provide contact details for up to three friends. Snowball sampling is often used in research when research participants are asked to assist researchers in identifying other potential subjects (H. R. Bernard, 2011). Sampling was complete once saturation was reached for the above-mentioned selection criteria (age, race, gender, and geographic region).

**Recruitment.** We contacted each participant using a recruitment script via text message. We briefly described the research study and purpose and linked to a flyer with more information. If the participant was under 18, we obtained their parent or caregiver's phone number and contacted them for consent. Once a participant agreed to participate, we set up a time for the interview or linked them to the group meeting schedule. For interviews, for example, we spent the first 5-10 minutes of the conversation describing the study purpose, ethics considerations (privacy, confidentiality, etc.), and then answered any questions. At the end of the interview, we asked participants to provide contact information for up to three friends.

**Table 4** Overview of sample sizes and demographics in each context

| **Methods in Cleveland (*n* = 61)** | **Sample Sizes and Demographics** |
|---|---|
| Focus group discussions | • 2 FGDs with 3 young people age 15 in Maple Heights (black)<br>• 3 FGDs with 15 young people ages 12-13 (Mixed, white, black, Latinx) (split into smaller groups) in Clark-Fulton<br>• 1 FGD with 10 young people in Clark-Fulton (Latinx) |
| In-depth interviews | 18 interviews with young people (78% ages 16-18, 22% ages 12-15) (56% black, 22% South Asian, 16% Mixed, 6% white) |
| YPAR program in Clark-Fulton | YPAR Program with 15 young people in Clark-Fulton (photovoice, focus group discussions and action planning) |
| **Methods in Ealing (*n* = 62)** | **Demographics** |
| Focus group discussions | • 1 FGD with 6 youth ages 13-14 in South Acton (black African)<br>• 1 FGD with 3 youth ages 17-18 from Northolt (black African, white)<br>• 1 FGD with 10 youth ages 12-15 from Southall (Mixed, largely South Asian)<br>• 1 FGD with 10 youth ages 12-16 from Southall (Mixed, largely South Asian) |
| In-depth interviews | 27 interviews with young people (75% ages 16-18, 25% ages 12-15) (15% black African or Caribbean, 25% white – Polish, Eastern European, 18% Middle Eastern, 18% South Asian, 14% Mixed) |
| YPAR program in South Acton | Modified YPAR program with 8 young people in South Acton (interviews and Youth Advisory Board, mixed with informal discussions and action planning) |

## 4.4 Data Analysis

**Comparative case study analysis.** We used Crowe et al.'s (2011) case study approach to guide the analysis of each individual case and Bartlett and Vavrus' (2016) methodology for comparative case study analysis. Crowe's framework (**Box 3**) is comprised of several stages, including: familiarization, identifying a thematic framework, indexing, charting, mapping and interpretation (Crowe et al., 2011).

**Box 3** Framework approach to case study analysis (Crowe et al., 2011)

- **Familiarization** includes immersion in a selection from the data by listening to audio recordings, reading transcripts, studying notes and so on, in order to list key ideas and recurrent themes.
- **Identifying a thematic framework** includes identifying key issues, concepts, and themes by which the data can be examined. We first identified a priori themes based on the study aims and issues raised by participants. We then created a detailed thematic framework of the data, which will be used to label the data into manageable sections for further exploration.
- **Indexing** indicates applying the thematic framework to all the data in textual form by coding the transcripts using one codebook across the different types of data. Each transcript, fieldnote, or other document, was coded by 1 researcher using NVivo software.
- **Charting** included rearranging the data according to the appropriate part of the thematic framework to which they relate, and forming charts. We created a chart for each key theme, such as mental health or COVID-19 vaccine information. The charts contain distilled summaries of views and experiences. We also inserted relevant context from the political-economy analysis.
- **Mapping and interpretation** involved using the charts to define concepts, map the range and nature of phenomena, create typologies and find associations between themes with a view to providing explanations for the findings.

**Embedding each case study in political-economic context.** Our theoretical framework is the political economy of health, which helped us to embed our findings in the local political-economic context of each case. In order to conduct a more in-depth analysis of the social and place conditions of each site, Cleveland and Ealing, we conducted a political economy analysis to draw out the most salient aspects of the political-economic history, its impact on systemic racism and structural inequalities, and how these dynamics underpin vaccine attitudes and hesitancy. A political economy of health approach takes

into account proximate behavioral factors and the larger political, economic, and social context of vaccine attitudes (Birn et al., 2017). For this analysis, we drew on our extensive literature review, interviews with local youth coordinators about the local context of young people's lives, and themes that emerged from youth interviews. We used the following key analytic questions:

- What is the political-economic and historical context of each place?
- How does this context shape minoritized communities' experiences?
- Were there any key historical events that fractured trust in local authorities?
- How does the context set up contemporary experiences of systemic racism and structural inequalities?

We paired this political economy of health analysis with the primary data collected throughout this study period and inserted our findings at the "charting and mapping and interpretation" stages of the framework approach. We first analyzed the data relating to each individual case (Cleveland, Ealing), before making comparisons across cases. We then conducted a comparison across three axes (Bartlett & Vavrus, 2017):

- **Horizontal comparison** that contrasts one case with another and traces social actors, documents, or other influences across cases,
- **Vertical comparison** of influences at different levels, from community to local and regional, and
- **Transversal comparison** over time.

## 4.5 Significance of the Approach

A comparative case study allowed us to look at patterns of similarity and difference in these two settings. This also required an in-depth look at their political-economic contexts. To further enable comparison, we used similar methods in each site, including the same data collection tools for interviews, FGDs, and power mapping. The strength of this analytic approach and research design was that we gathered views directly from youth from a variety of socioeconomic and ethnic backgrounds, not just from people who serve youth or work with youth at a community level. We also collected information from multiple sources. The use of these various data sources enabled a triangulation of data to build a stronger understanding of youth responses to COVID-19 vaccination. We used visual methods, which allow youth to express their experiences and perceptions in creative ways. This particularly catered to youth who may not feel comfortable expressing themselves verbally. Taken together, this approach builds a stronger and more emic understanding of youth responses to COVID-19 vaccination that is also embedded in

historical and political-economic context. This will enable more nuanced insights with local relevance that public health practitioners can use in vaccination and youth engagement programs.

## 4.6 Challenges in Doing Research during COVID-19

Our team faced several challenges due to the omicron wave, as previously alluded to. Participatory methodologies require sustained engagement, which takes both time and effort. At the peak of the omicron wave in December 2021 in the United Kingdom, COVID-19 guidelines included working from home. In the United States, the omicron wave peaked slightly later, and schools switched to remote learning for periods of time in the Cleveland Metropolitan School District. Young people, in our experience, are facing numerous challenges related to these uncertainties. In the Cleveland context, our experience has been that young people are also often burned out, which makes it difficult to engage them regularly in activities. These dramatic pivots over the last several months made fully participatory research difficult, however, we adapted our YPAR model to suit young people's needs through multiple levels of engagement. Young people in this study had several options. They could participate one time through an interview or focus group discussion, they could participate in the fully YPAR program, or some agreed upon solution in-between. For example, in South Acton, we conducted interviews with youth at the youth center, and a subset of those youth ($n$ = 8) volunteered to take part in the advisory board, where we have validated findings and planned several "actions" based on the research.

## 4.7 Ethics

We obtained ethics approval from two institutions, the Institute of Development Studies (Brighton, England) and Case Western Reserve University (Cleveland, Ohio). Once participants were recruited for interviews, they were given a choice of a phone or Zoom interview, or an in-person interview. For FGDs and the YPAR groups, they met at the location of recruitment – a recreation or youth center, or their school. We maintained all COVID-19 protocols based on the location's regulations and Case Western Reserve University's COVID-19 prevention protocol

# 5. Findings

## 5.1 Case Study 1: Cleveland, Ohio

### 5.1.1 Case Study Context: Cleveland, Ohio

Cleveland is a major city in Ohio, located on the southern shore of Lake Erie. It constitutes part of the Greater Cleveland area, as a large part of the population lives outside of the central city limits. This study focused on the Greater Cleveland area. Located in Cuyahoga County, Cleveland (central city) has a population of 372,624, while Greater Cleveland has over two million residents (US Census Bureau, 2020). In the 20th century, Cleveland was a main manufacturing center and its economic growth attracted large waves of immigrants from Europe and migrants from the rural South (Ohio History Central, 2019). It was a destination city for black communities fleeing Jim Crow as part of the Great Migration.

By the 1960s, Cleveland's economy began to slow down as residents slowly began moving to suburban areas just outside of the city ("inner ring suburbs"). The decline of industry led to the loss of numerous jobs and an economic decline in the city. Cleveland's story is typical of many central American cities, particularly in the country's Rust Belt. The Rust Belt states were the manufacturing center of the United States, prior to the decline of that sector. Rust Belt areas are dominated by socioeconomic trends including high unemployment, declining populations, falling incomes, and increasing structural inequality (Neumann, 2016). As traditional manufacturing jobs began to decline, local leaders throughout the Rust Belt, including in Cleveland, took on globally circulating ideas about postindustrial development to create jobs and amenities to attract middle-class professionals. This approach to Cleveland's revitalization has widened and deepened structural inequalities among urban residents (Neumann, 2016).

Housing discrimination and redlining practices led to the institutionalization of systems of racism and inequality that negatively shaped minoritized communities' experiences in Cleveland as well as other northern cities in the US. Redlining is a practice in which financial and other services are deliberately withheld from ethnic minorities who are classified as "hazardous" to financial investment (Nardone et al., 2020). black residents were actively prohibited from living in white neighborhoods. These practices included the denial of credit, insurance, healthcare, housing loans, and the emergence of food deserts in racialized communities, where those communities lack access to grocery stores or supermarkets. black communities were disproportionately affected by redlining practices.

Many of the redlined communities in Cleveland now face the city's highest rates of poverty and crime. While redlining was officially banned over 50 years ago, the effects of redlining continue today. Researchers have found a strong relationship between a history of redlining in Cleveland the steady decline of neighborhoods, evident in present-day maps of poverty rates, infant mortality, and other indicators (Nardone et al., 2020). The effects of redlining include that neighborhoods are still segregated, with black families concentrated in low-income areas with poor quality housing (Health Policy Institute of Ohio, 2018). The legacy of redlining still impacts home values, inequitable access to mortgages and other lending services. For example, predatory lenders with astronomically high interest rates target low-income neighborhoods and communities of color, which contributes to persistent wealth gaps between white households and households of color (Health Policy Institute of Ohio, 2020). Finally, public school systems are largely funded by property taxes, levies, and other locally assessed taxes and fees. This contributes to lower performing public schools, in areas with lower incomes and lower property values

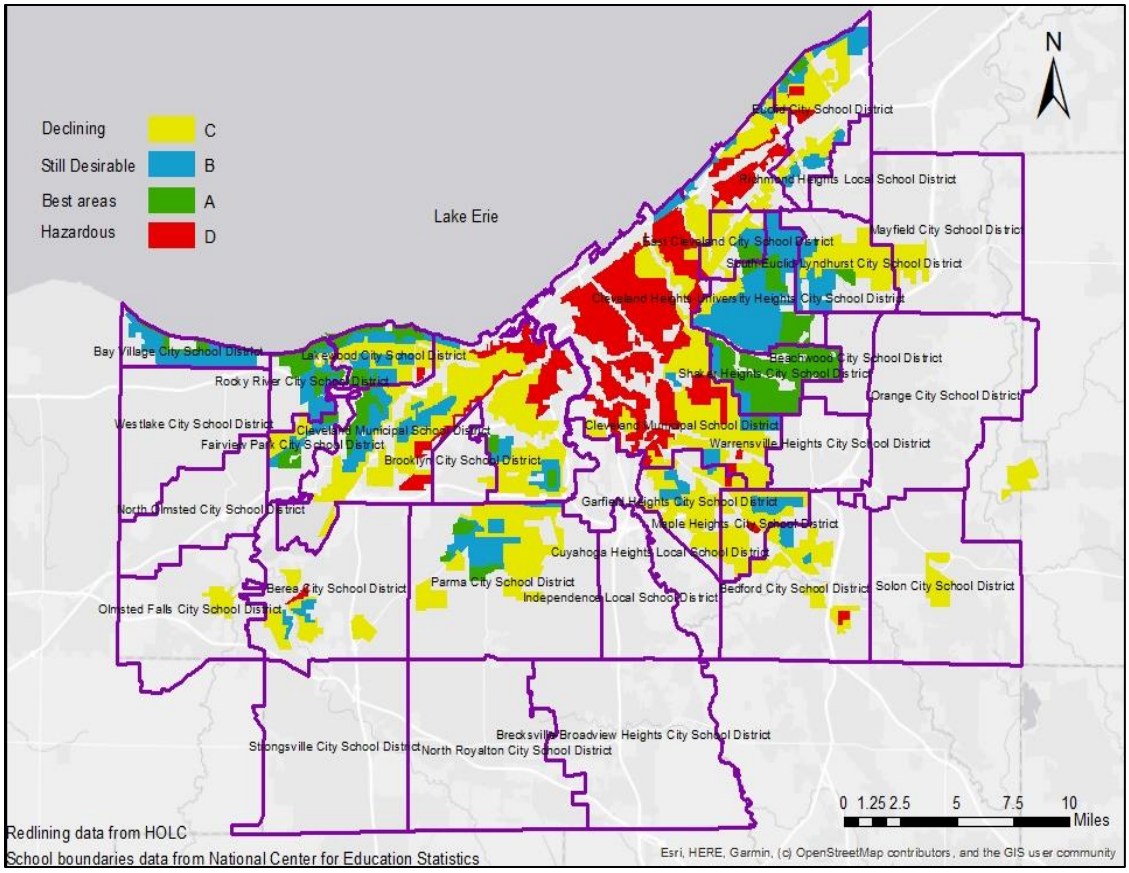


**Figure 3** Map of historically redlined communities based on the 1940 HOLC Security Rating, with redlined areas labelled as "hazardous," which overlay with Cleveland Metropolitan School District, map made by the study team

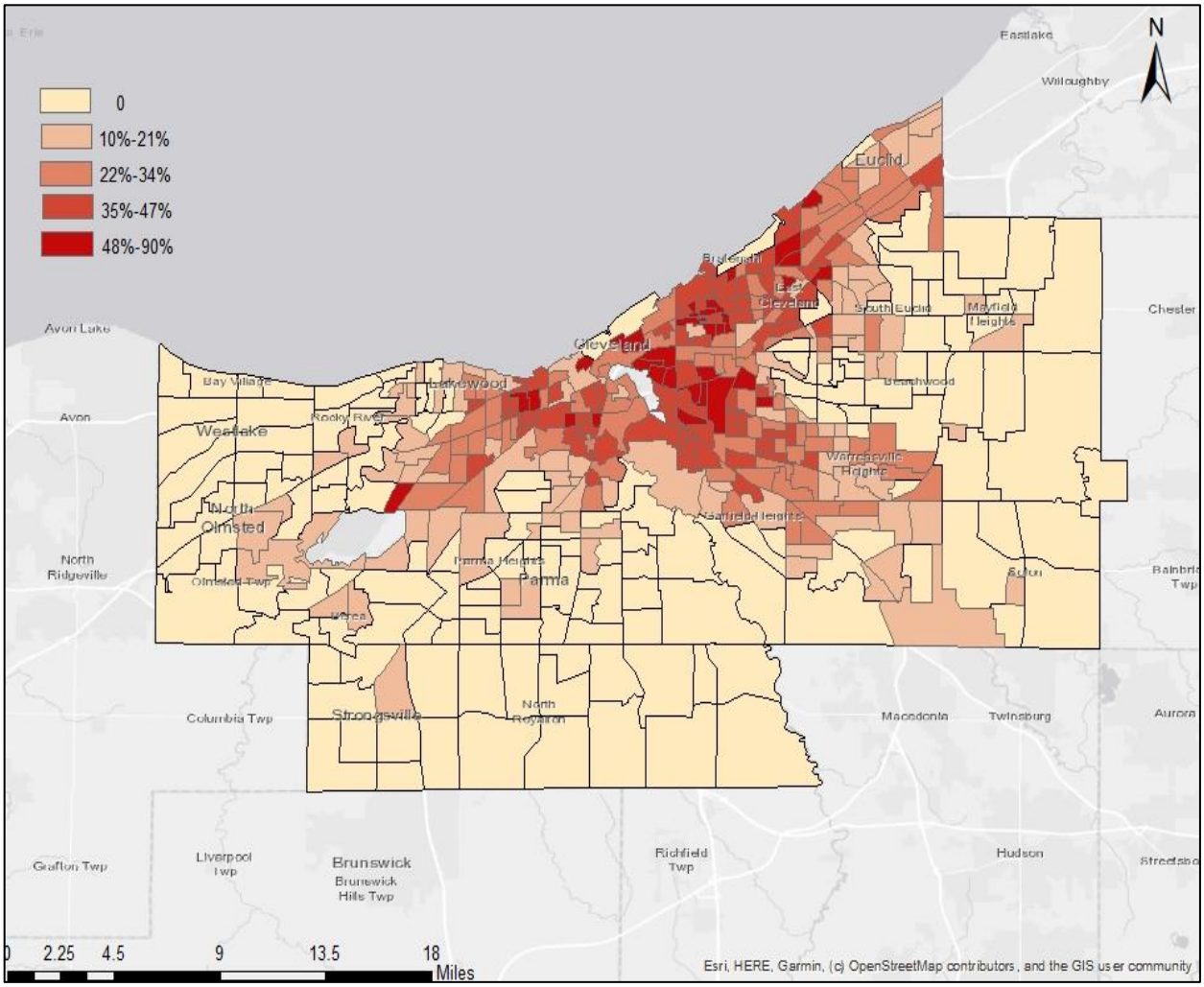


**Figure 4** Poverty levels (% of families total income that is below a threshold) in Greater Cleveland, based on US Census Bureau official definitions of poverty, map made by the study team

There are also small but growing Latine/Latinx communities in Cleveland, largely made up of Puerto Ricans. Puerto Ricans began migrating to Cleveland in the 1950s and first settled around the Hough neighborhood on the east side. Many began moving to the near west side as inner-city neighborhood housing quality declined in the late 1950s. Today, the majority of the Latine/Latinx community lives on the near west side, in neighborhoods like Clark-Fulton and Detroit-Shoreway.

Cleveland's South Asian (primarily Indian) population increased beginning in the 1960s, when changes in immigration laws made it easier to settle in the United States. The Immigration Act of 1965 removed previous quotas. The South Asian community grew in the 1980s and 1990s and large numbers of Indian medical professionals, engineers, and

businesspeople migrated to the area for work in Cleveland's medical institutions, universities, and the corporate sector.

These patterns of structural inequalities underpin how the COVID-19 pandemic disproportionately affected black communities in Cleveland, compared to other minoritized groups. black communities have higher rates of chronic disease, including those known to be co-morbid with COVID-19. For example, hypertension affects 40% of black residents in Ohio, compared to 34.9% of whites, 28.1% of Latine/Latinx, and 13.8% of Asian residents (Health Policy Institute of Ohio, 2018). In the first year of the COVID-19 pandemic, 19.6% of COVID-19 cases, 28.4% of deaths, and 17.9% of hospitalizations have been among black residents, while they make up just 15% of Ohio's population. black residents are also overrepresented among essential workers in the state, increasing their risk of COVID-19 exposure (Nemeth & Padamsee, 2020). Additionally, reports from the Cleveland Office of Minority Health have shown how there are perceptions among black Clevelanders that there has been a maldistribution of resources in the community, also in the health system (Cleveland Office of Minority Health, 2016). This has led to a perceived mistrust of the medical system.

Local policy responses have tried to mitigate and address the impact of longstanding structural inequalities during the COVID-19 pandemic. For example, Ohio Governor Mike DeWine assembled a COVID-19 Minority Health Strike Force in April 2020. The group issued a report which articulated a framework that centered dismantling racism as key to improving health equity through investments and improvements in healthcare and public health, social determinants of health, and the built environment (Ohio Minority Health Strike Force Blueprint, 2020).

Cleveland's history is critical to understanding how the COVID-19 pandemic was experienced by its minority communities. Histories of redlining, present-day residential segregation, quality of public schools, assets in the built environment, and economic opportunity shape how communities of color experienced the COVID-19 pandemic and its socioeconomic impact. This is key to understanding the kinds of challenges that youth faced during the pandemic, challenges which are usually rooted in these deeper histories of exclusion. It is this context that shapes how youth respond to COVID-19 vaccination programs (**Figure 4** Poverty levels (% of families total income that is below a threshold) in Greater Cleveland, based on US Census Bureau official definitions of poverty, map made by the study team**Figure 4**), programs that are embedded in entrenched structural inequalities.

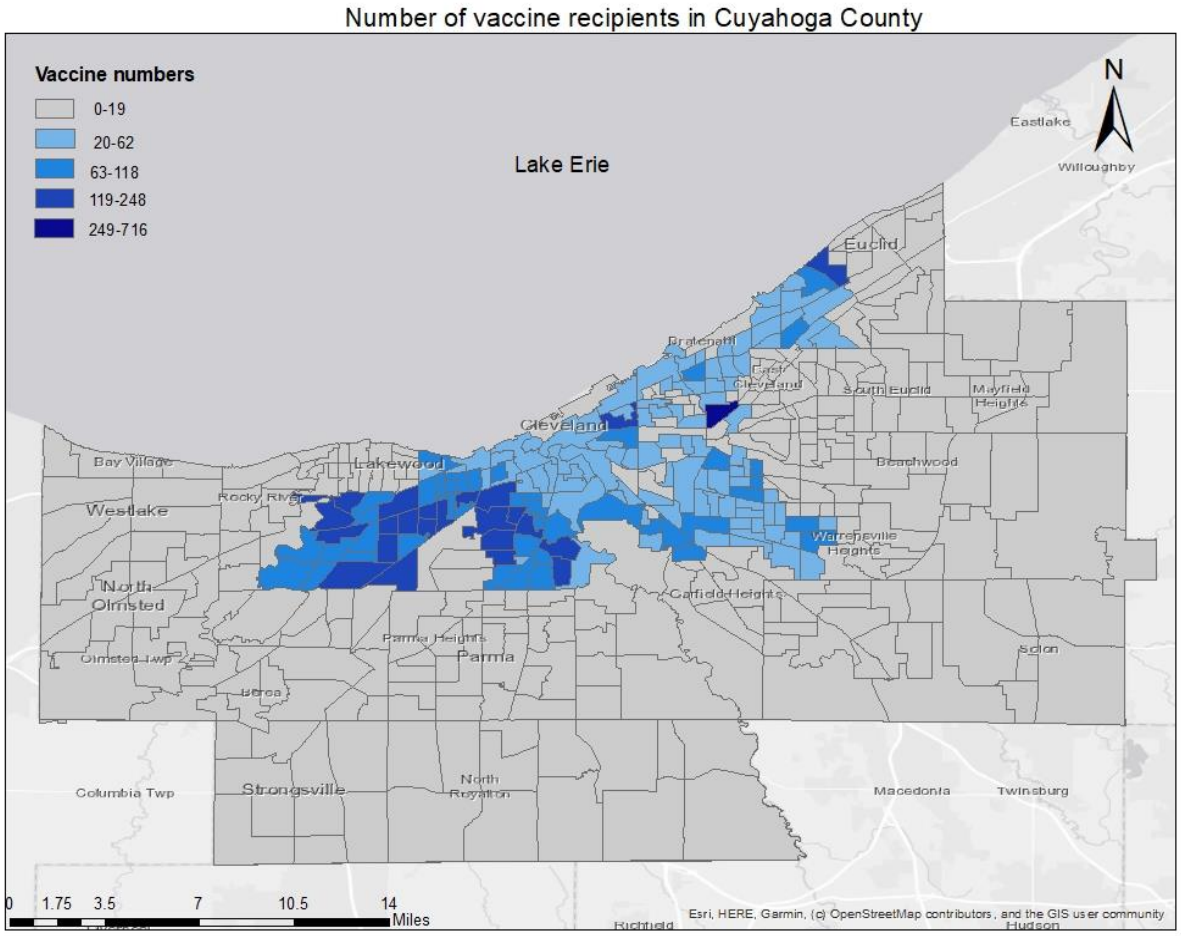


**Figure 5** Told numbers of vaccinated 12-18 year olds in Cuyahoga County (ranging from light blue – lower vaccination - to dark blue, or higher vaccination), map made by the study team, data from Cleveland Department of Public Health, January 2022

### 5.1.2 Political Economy of Youth Vaccine Hesitancy in Cleveland

**Overview.** Cleveland's long and complicated history of racial diversity, marked by discriminatory housing policies ("redlining") and segregation in schools, among other injustices, shapes how the city's black youth relates to and trusts in authorities (Buckner-Brown et al., 2011; Gavin et al., 2015; Moore, 2002) and what kinds of opportunities are available (Kaplan, 1999). Cleveland, Ohio is a key feature of the 'Rust Belt,' which comes from its long history in the steel industry. The city is somewhat geographically divided between a west side and east side, with the Cuyahoga River running between. In Cleveland, as in many other cities, place matters. Where you live in the city determines what kind of housing quality is available, which schools children can go to, and whether there are supermarkets with healthy foods to purchase. Patterns of racial inequities show up in wide health and education disparities, as black populations face higher infant mortality, black and Latine/Latinx are 3 times more likely to live in poverty (compared to

whites) and black Clevelanders have a life expectancy that is 6 years lower than whites (*NEOCANDO*, 2021). These inequities have longstanding historical roots.

**Migrations north and recent historical tensions in Cleveland.** Understanding today's health disparities requires historical context, particularly for racialized and minoritized communities that have experienced disadvantage. Cleveland's black population (Figure 10) traces its roots to over 170 years ago, when African Americans began settling on Cleveland's east side. Between 1890-1915, the start of mass migration from the South increased Cleveland's black population (Kusmer, 2019). While widespread segregation was not seen at that time, Cleveland's burgeoning manufacturing sector did preclude black residents from working in the steel mills and foundries (Kusmer, 2019). By 1930, the black population increased after new migrants came north. Many became concentrated in the Central Avenue ghetto, where they continued to face economic discrimination as well as discrimination in education.

**Housing conditions.** By the 1960s, black residents made up over 30% of Cleveland's population (Kusmer, 2019). At the same time, Cleveland's overall population was increasing while the available housing did not meet the needs of these increasing numbers. black residents became concentrated east and northeast of the Central-Woodland area, into Hough and Glenville. The real estate and housing sector began "blockbusting" techniques that led to whites "panic selling" and fleeing Hough (Hanson, 2014). Once a neighborhood became all black, landlords would divide structures into small, inadequate apartments and raise the rents to exorbitant levels. This exacerbated the poor housing situation, where areas of Cleveland became ghettoized with decreasing housing values (Hanson, 2014).

**Hough riots.** Segregation in public schools continued, where school officials regularly assigned black children to predominantly black schools. In 1966, the Hough riots broke out when residents' longstanding frustration with housing standards, segregation in education, and black unemployment boiled over (Michney, 2020). These conditions, combined with overcrowded housing, overcharging for basic necessities by local shops, and police harassment established the conditions for civil disorder. During the Hough riots, 4 black residents were killed and 30 were injured and it is a defining event in Cleveland's history.

**History of Redlining.** The "Place Matters" project worked to bring attention to the root causes of ill-health and lack of well-being (RWJF, 2014). They theorized that redlining has led to disinvestment in certain neighborhoods, housing decline, predatory lending, and property value loss. This, in turn, drives high rates of foreclosures and vacancies, which

leads to crime and safety and health problems, and asset wealth loss and a dwindling tax base. These fundamental conditions in which people live may make it more difficult to go outside to exercise (because a neighborhood is unsafe), more difficult to access quality education (because education is underfunded due to a dwindling tax base), and harder to access quality foods, clean air and water, and quality housing.

**Systemic racism, structural inequalities, and austerity in youth experiences.** Experiences of BIPOC youth in Cleveland mirror many faultlines in the United States. In Cleveland, narratives of BIPOC youth are racially driven and over-emphasize stereotypes of youth involvement in local gangs, and community violence and gun violence. BIPOC youth are, however, disproportionately represented in the justice system. While disparities have improved in recent years, there are still significant disparities in the justice system (Matei & Harvell, 2020). In 2018, black youth accounted for 56% of incarcerated youth in Ohio (Matei & Harvell, 2020).

A 2014 police shooting of 12-year old Tamir Rice, a black child, on the near west side of Cleveland has entered public discourse on black experiences in the city. The event was one of many nationwide where black men, women, and children were publicly killed by police, spurning the start of the black Lives Matter movement. Today, the city has a black mayor and black police chief, though there are still tensions between the city's largely white police force and its largely black population (McGreal, 2017).

Shortly after the Tamir Rice shooting, in 2014, the US Justice Department published a report finding that Cleveland police officers engage in a pattern or practice of using "excessive force and violating people's civil rights" (US Department of Justice Civil Rights Division, 2014). These events led to the creation of the Community Police Commission which was established to strengthen relationships between police officers and the communities they serve (*Cleveland Community Police Commission*, 2022). There has also been a long history of community organizing in Cleveland around issues of racial injustice (black Lives Matter Cleveland, Khnemu Lighthouse Center), health inequity (Northeast Ohio black Health Coalition), and other social justice issues (Urban League of Greater Cleveland). There are growing numbers of youth-serving organizations as well, that focus on educational and career opportunities.

While Cleveland has longstanding racial inequities, the city has undergone a period of growth and "revitalization," though this has not been equitably distributed. The city has seen both neoliberal urban regeneration plans and community development schemes, but this has not fixed persistent socio-spatial inequalities (Coppola, 2014). These schemes have emerged as a part of the "logics and politics" of post-2007 austerity urbanism

(Rosenman & Walker, 2016). Local political coalitions have promoted demolition of abandoned or foreclosed homes, as a part of this revitalization, though in reality this clears the way for reinvestment and luxury apartment buildings, many of which remain out of reach for Cleveland's poorer residents.

Taken together, these political-economic dynamics of longstanding racial segregation related to housing and urban policies underpin what kinds of opportunities youth have today.

### 5.1.3 Structural Inequalities and Youth Experiences of the COVID-19 Pandemic

Youth experiences of the COVID-19 pandemic are key in understanding youth relationships with adults and authorities in their community, and how these relationships further eroded over the course of the pandemic. Young people faced several challenges during the pandemic, including: remote schooling and disruption to their education, limited resources for physical and mental health/well-being, family or personal illness and death, social isolation, and a worsening of socioeconomic vulnerabilities. These experiences were contoured by structural inequalities, such as having worse internet access or more difficulties accessing mental health care.

#### *Remote schooling and disruptions to education*

Youth reported a high level of uncertainty and anxiety that arose as a result of months of remote learning, hybrid school, and rapid changes from in-person to online classes. In Cleveland, schools shutdown in the spring of 2020 effectively for a number of months. While the reopening of private and charter schools varied, the public school district, Cleveland Metropolitan School District, stayed closed until September 2020, when they were able to secure tablets, laptops, and broadband and Wi-Fi hotspot access for youth. This did dramatically improve access to the internet and enabled participation in online classes. The school district remained in a remote learning format until March 2021.

While the public school district had a unified approach to COVID-19 precautions, other private and public schools outside of the district's control had different and often confusing approaches. Some went to online classes for months, others had a mix of online and in-person classes, and the schedule would often change at a moment's notice. This contributed to the overall sense of stress among students. Some students ($n$ = 10) were able to find support within their family. Others had the socioeconomic means to switch schools if their environment was too stressful, but this meant a change of residence to access a different public school.

> *"Mine was horrible for me. I couldn't comprehend and thing and I felt so stupid. I felt like I was just like the dumbest thing in the world. I was like, I just don't understand so many people are thriving online and I like I can't do it, I was a straight A student, 4.0 GPA, never anything less. It was just a that was always for me. And when the pandemic hit, I got my first D. And I freaked out like I think I was like 'mom, I need to transfer now.'"*
> – Female, Mixed (black and white), 18 years old, Slavic Village

> *"Like, just time in general, like, you have to think about how everything could change and time is very valuable, because it's like everything now is so extreme and definitely different for us. And like, I definitely do miss those experience. So it kind of like, you're just living in the moment, just have to be present you know, and that is stressful."*
> – Female, Latina, 12 years old, Ohio City

Questions were raised by many youth participants over the effectiveness of online schooling, as a majority of participants (*n* = 13) reported negative experiences with remote classes. A few students (*n* = 3) did thrive online, and were able to focus more on school without the distraction of their peers.

> *"I've been struggling in school, but this pandemic, it helped me because I'm just in the house. I've been allowing no people, no distractions; I've been getting a lot of work done. And this, it made me focus on a lot of stuff and maybe better myself."*
> – Male, black, 18 years old, Richmond Heights

Being forced to stay in the house was a positive experience for some youth. One participant went on to describe how his mother was a big source of support. He initially struggled to wake up on time and join classes on his laptop. His mother would wake him up and call him throughout the day to make sure that he was "in school" on Zoom. However, far more students struggled with online school.

> *"Academically, I got lower grades. But I like to get As. Instead, I got like B's. You know, it felt a little bit harder to do because there's no face-to-face interaction with your peers or teachers. So it felt a little bit confusing. And, it felt hard to just reach out to the teacher themselves."*
> – Male, South Asian, 12 years old, Mayfield Heights

Teachers, an important source of support, were perceived to be less available by some youth such as the participant above. Others explained that teachers were often busy trying to set up Zoom, online activities, or ensure students were paying attention. It often created a challenging environment in which to ask questions. Youth also explained that being out of the physical school space contributed to a lack of social interaction. One participant explains:

> *"School, it wasn't the best for me, I guess. Especially because like, we were in the house all the time. And then like, I dunno the pressure really hit hard. I wasn't around my friends. I like had to be in my room or in the house all the time and I'm, like, not really the only child. But my younger brother's like 14 years younger than me. So he was like, a little thing. And I couldn't like really interact with him. Like, I guess have fun with him, but we're two different age groups. So it's kind of like I was on my own."*
> – Female, black, 16 years old, Cleveland Heights

Many of the participants are still scrambling to catch up academically after months of struggling to learn in online classes. Some have taken on extra jobs so that they can earn more money. While many classes are back in person, there is still a profound sense of isolation, loneliness, and anxiety over the future. Many students feel that the school system has failed them, while others feel that the schools are not doing what they can to keep students safe during the recent omicron variant surge.

> *"We have some teachers who don't even put their masks on correctly. Really, they pull their masks down sometimes. Yeah, it's like one of my math teachers. I understand that it gets hot under the mask sometimes. So it's okay, if you put a mask down for a second, like to get some air, or like, you just put your mask down. But can't they do that in the restroom or outside the class? Drink water, pull it back up. But what like, pull your mask down the class full of students?"*
> – Female, black, 16 years old, Cleveland Heights

This participant went on to explain that they were not certain why there were two sets of rules, one that applied to teachers and one to students. She perceived a lack of communication between school administration and students, and felt that this contributed to her sense of irritation with her school.

Adjusting to a new way of being in school, including a new routine, was also mentioned to be difficult for many of the participants.

> *"We used to have like eight classes a day. It's three big blocks of courses. And we were able to go upstairs and downstairs but not on the floor where you are. Great. And I definitely like miss the bell, like you're just kind of reminded of it."*
> –Female, Pacific Islander, 12 years old, Ohio City

> *"Yeah. And you got to get up and move and see people in between. I remember that in middle school being kind of like the highlights of the day. Just being able to walk around even though you had maybe just a few minutes. But yeah, you can look forward to that bell."*
> –Female, Latina, 12 years old, Ohio City

Participants in our YPAR group, as noted above, reported that it was these under-appreciated normalcies that they missed, like the ringing of a bell between classes. Without these markers of time, and the socializing that came with it, school was less engaging.

### *Mental health challenges and perceived anxieties*

Many participants' COVID-19 experience was characterized by stress, uncertainty, instability, and a lack of clarity over what might happen in the near future. Youth also described perceived anxieties over getting COVID-19 and passing it to vulnerable family members. Others had pre-existing mental health challenges that worsened during the pandemic and in three cases, actually improved quite a lot. Older teens in the study reported more experiences with depression and anxiety than younger teens, and females reported more mental health challenges than our male participants.

Several participants (*n* = 10 from the interview group) described mental health issues throughout the pandemic, particularly in the early days. These descriptions varied, from generic descriptions of "mental health issues," to feelings of helplessness, post-traumatic stress, sadness, and hopelessness.

> *"Yeah, I was somebody who deal with like, mental health issues, like it was is hard. I got too much going on. I feel like it was a lot of pressure for real. I always gave up. So many times, like I would have mental breakdowns, stuff like that. But I have people around me that help, like football, my friends and my family and for real, my girl."*
> –Male, black, 18 years old, Lee Miles & South Euclid

For those youth participants who could cope with mental health challenges, the availability of support in their social environment was critical. For some teens who described mental health challenges, two cases were perceived to be severe, and both fortunately received treatment and improved during the pandemic after finding support from psychiatrists and therapists. One participant describes her experience suffering with depression since middle school, and how this was affected by the pandemic.

> *"And this was like, way before the pandemic, because it was just like, I was deemed as being lazy, and I'm not lazy, I was just like, very sad. And so like, it's really hard to like, focus on schoolwork, and focus on everything else, when like, there's these like, negative thoughts just going on in your brain that you kind of feel like, you can't really do that stuff, or what does it matter if you do that stuff or not? Like, who cares, you know. Because like, sometimes, like, school had gotten to a point where it didn't even feel like you were in learning you were just memorizing for the next test. During the pandemic, it was a little bit difficult because I just sometimes, like, I just wouldn't show up to my online classes. Like, I didn't have to show up to my online classes. Or you just like, you kind of just show up, and you kind of just like, sit there and listen, basically, you don't really do much, or they let you sign off early and things like that. On top of that, during this period of time, for most of the pandemic, I wasn't medicated. I didn't have an antidepressant or anything. I tried holistic methods like ashwagandha and St. John's warts, but I felt like it didn't really help that much. So eventually, I, when I turned 18, I got to talk to an adult psychiatrist, and she put me on Lexapro* [an anti-depressant]*, and we're, we're good. We're great. And that's it, it feels better. But before, like, it just felt like, anxiety and depression, like made so many things just so difficult. It just felt like, everything was like so irrationally difficult in my head."*
> –Non-binary, 18 years old, Native American and black, Buckeye-Shaker

In addition to this participant, four additional participants described long-term challenges with mental health. For example, one participant talked about the ongoing struggle with mental health and post-traumatic stress disorder. Another participant found support from her mother, who encouraged her to see a therapist. Like the participant above, when they improved their mental health, other aspects of their life improved as well, from school to social interaction. One younger teen who talked about mental health challenges described finding space online to socially connect to his peers.

> *"At first, I felt like really depressed and like, bored, you know what to do, what to do. But then, eventually, I started finding new things online. Like, I started a YouTube channel to just like, cope with it. And like, yeah, we started, like, started doing stuff that I've never thought we'd do in the past. But now, we just like post vlogs like unboxing videos, vlogs of our trips. Sometimes we play like a game among us, sometimes one or two times a week."*
> – Male, South Asian, 12 years old, Mayfield Heights

These participants were largely able to cope with mental health challenges, due to the support of family, sports coaches, friends and partners, and finding an online community. Nevertheless, additional sources of support are needed for youth, particularly those who did not find the support they needed.

### *Policing practices and youth experiences in their neighbourhood*

Several young people in this study, particularly young black men, spoke about the impact of policing practices on their everyday experiences. These narratives would often emerge earlier in the interview, when discussing how they fared during the pandemic and lockdown. Rather than focus on school as a major challenge, as other youth did, for some young men a major area of concern is policing practices in their neighborhood.

One young man of color (18 years old, Euclid) spoke about traumatic experiences that he had with local police. The first time, he was young, maybe 12 or 13 years old, and he describes stopping on the sidewalk on his way home and looking at someone's house. While he was standing there, someone must have called the police, because an off-duty police officer shows up moments later as he is walking away from the house. He was arrested for "trespassing," his mother was called and she had to come speak to the police, and he recalls feeling humiliated. He recalls having to go to court and taking a plea deal, whereby he plead guilty to something that he did not do, just to avoid any jail time. This was not the last incident he would face.

> *"I was home, chilling in the garage with some of my friends. I think a police officer went past our house, and then came back. As he came back, he came up into the garage and he freaks out. He said, 'everybody,' – he pulled out his gun and said – 'put your fucking hands in the air, put your fucking hands up.' We were like terrified. Like two more officers showed up and then like basically yeah, it was a lot of stuff that you know… my mom wanted to go and report it at the station, but the police convinced her not to."*
> –Male, black, 18 years old, Euclid

He described this as another traumatic experience. He went on to describe how he mostly stays in the house, going only to work or other places where he needs to be, but while limiting his movements. For him, isolation during COVID-19 was not particularly new, as he would already limit his movements out of the house.

### *Sources of support: Family and social networks*

Having several different sources of support, whether within a participant's family or friend group, made a difference in how participants experienced the pandemic's many challenges. Several participants (n= 25 from interviews and FGDs) described their support systems, which primarily centered around their parent (*n* = 10) and most often the mother, or around their friends. However, these relationships of support were often tenuous as parents and friends were also described as facing challenges during the pandemic, from working in vulnerable environments to struggling with their own mental health challenges. Participants mentioned how the pandemic showed them who their true friends were and who they could really trust, because those were the ones who continued to reach out when it was not possible to be socializing in person.

In a focus group discussion at one school, younger youth (ages 12-14) talked about "putting up a wall." One student felt that adults, particularly their mother, would ask them something. When the student responded, asking their mother to do something in a particular way, they felt that they were not heard. They went on to describe how they did not understand why their mother asks their opinion, when it was not perceived to be valued. Other students in the group agreed that they had similar experiences with various adults in their lives. This contributed to their sense that their voices did not matter or that adults were generally dismissive toward them.

Many participants live in vulnerable households, with parents working in essential jobs like health care, some live in single-parent households, and others described working to support their families. Some live with extended family due to a variety of reasons, such as wanting to live in a "safer" neighborhood, to living with an aunt because they did not get along with their parent. Within these complicated environments, sports coaches also became an important source of support and stability. Some coaches would step in and use creative means to hold practice, even when schools were closed. One participant describes:

> *"With putting school online, that's one thing you tend to take away: a sport. Sports keep people out of trouble. It's where I can take out my anger without like doing something dumb. The pandemic took that away. Like before school started back up [in person], I was working two jobs. I was working at Chic-fil-A. I used to wake up at like four in the morning to walk to Chick-fil-A and by six o'clock, as soon as I get off at Chick-fil-A half, I walk to Marco's and get off there like 11 or 12. I decided to make money and stay out the way. I didn't let the pandemic slow me down. I was also showing up to football practice, our coach made sure we had a place to practice and that kept me out of trouble."*
>
> – Male, black, 18 years old, Lee Miles & South Euclid

Two themes are represented in this participant's narrative. First, transitioning to remote school meant that he could not participate in sports and sports were an opportunity to stay out of trouble. Prior to this quote, the participant spoke about his home neighborhood of Lee Miles where there was multi-dimensional poverty and he regularly witnessed theft and drug sales. He wanted to leave that area and his family moved to South Euclid to a better social environment. Second, at his new school in South Euclid, sports were a major source of support for him and his friends. However, several friends quit football during the pandemic. Most would stay at home, but he chose to start working to support himself and his family. At times, he wanted to quit football, but he cited his girlfriend as a reason for staying involved and he needed that support.

### 5.1.4 Youth Responses to COVID-19 Vaccination

Youth discussed a range of views on vaccination, ranging from total refusal to acceptance of the three-dose vaccination including booster shots. Out of 18 interview participants, 10 were vaccinated and 8 were unvaccinated. Our YPAR group was largely vaccinated. Few youth were totally accepting or totally refusing of a COVID-19 vaccine. Most participants constituted a middle ground, which ranged from uncertainty about information on the vaccine, to identifying peer pressure as a reason to not get vaccinated, to needing the vaccine so that they could travel. Many youth just did not prioritize vaccination as a relevant or important aspect of their lives. Several reported low risk perceptions of COVID-19. However even some of these youth perceived those around them to be of high risk, which was one of the motivations for receiving the vaccine. In this section, we describe the range of youth responses to COVID-19 vaccination, focusing on perspectives based on social differences (gender, age, geographic location, social location). We then describe how vaccine attitudes are embedded in a wider ecosystem of parental and peer influence. Then, we discuss the role of social media and (mis)information in informing their views.

### *Youth disinterest or refusal of the COVID-19 vaccines*

Many youth reported an unwillingness to get vaccinated. Those who did not want to get the vaccine were largely older teens and identified as black and were also east side residents. While some expressed an outright refusal of the vaccine, their decision-making was often complicated.

> *"I really didn't want to get vaccinated because some people at the beginning of the vaccination, people would say you know, that they do stuff to people or don't take it, it might feel funny after. Stuff like that, people just saying stuff making me not want to take the vaccine. But yeah, that trying to convince me not to take it. You know. I was like, I'm still scared. I don't want to take it. I know it's probably the right decision."*
> –Male, black, 18 years old, Richmond Heights

This participant described how his mother had taken the vaccine after initial hesitancy. She changed her mind when her sister died from COVID-19 and began to take the virus more seriously. He also takes the virus seriously and described different prevention strategies like wearing masks or avoiding crowds. However, he did not know whether the vaccine prevents you from getting COVID-19 or prevents you from dying from COVID-19, but that combined with other information that it was not safe led him to decide that he did not want to get vaccinated. He did not want the vaccine because he did not want to "end life early" from any potential bad effects of the vaccine.

Others cited low risk perception as a reason to not get vaccinated. This was a sense among youth participants that they are not at high risk of severe COVID-19 or death from the virus. Because of that, they did not feel as though COVID-19 was a threat to their long-term health or well-being. Many participants had had COVID-19 throughout the pandemic and described it as a mild cold. Even those who had family members who were ill or died, described the difference between those family members and themselves. They were younger with no co-morbidities, and this impacted how they perceived risk in relation to the virus. One participant talked about this and also discussed the idea that people can still get COVID-19 even once they're vaccinated.

> *"I am not vaccinated. I don't really see any change, as I see people getting COVID who had the vaccine, so it's like, oh, no… I don't, really want it. COVID is always everywhere, all around the place. So it's like, I don't really think that the COVID vaccine would help me, personally, I don't see the point. I just stay safe with masking and all."*

–Male, black, 18 years old, South Euclid

This idea of "not seeing the point" was raised by this participant. He did go on to say that his mother is vaccinated and has told him to get vaccinated. She talked to him about the vaccination, but he replied that he was "not a big fan." They disagreed and the issue was not really resolved, but he is 18 years old and so felt that he could make a decision for himself.

Only one participant cited religious reasons in his vaccine refusal. While he did not identify with any particular religion, he did describe vaccination as being "the mark of the beast." When probed on what that meant, he described this further:

> *"I believe in like, the rapture, or like, one day God will come. Everybody who did good and life was already good. will go to heaven. Everybody else will be left down here. That's what I believe, I believe. And I believe like, if you get the vaccine, it will be one of the people who are left down."*
>
> –Male, black, 18 years old, Lee Miles & South Euclid

Earlier in the interview he had not identified with any religion, but when probed about his views on the "mark," he described reading this in the Bible a couple of months prior to the vaccine becoming available in the US. Once it did become available, he associated that reading with the vaccine. When asked whether he's spoken to anyone else about this, he said his brother feels the same way.

### *Youth uncertainty in relation to the COVID-19 vaccines*

Several young people in this study (*n* = 14 of 18 interviewed, 3 FGD participants), whether or not they had taken the COVID-19 vaccine, expressed uncertainties. These uncertainties ranged from concerns over safety to questions over how quickly the vaccines were developed and the lack of data over time to monitor any long-term health outcomes. When asked where they received information, some said that they do their "own research" which ranged from looking on Google or social media, to reading scientific studies. Many others reported that they did not have a person whom they could direct their questions to, while others were not interested in additional information.

> "*I think about the intentions and also the time period of the vaccination development, of the vaccine coming, after we found out about COVID. And also, the information that our media is portraying, that we knew about COVID and knew about the entire possible pandemic, and we did nothing about it. So, they [her unvaccinated friends] feel like, oh, well, they're not telling us information, but now they're telling us information. They're telling us to get it but they're not giving us all the information and so they feel like they're being blindsided in a way, by not fully knowing all the facts and all the figures and you just feel like it didn't go through the correct testing and the correct procedures to be given to the public."*
>
> –Female, black, 18 years old, Lee Miles

Although the participant above is vaccinated (her university requires it), she highlights many of the concerns that her peers shared when making decisions about vaccination. Young people in this study are inundated with information, from social media and other sources. This plurality of information makes it difficult to know what to decide in relation to the vaccine.

> *"So, people were saying, like, you know, people that got the vaccine are dropping faster than the people that don't get the vaccine. And I'm not doing any research on this? I don't know if that's true, but this is what I'm hearing."*
>
> –Female, black, 17 years old, Buckeye-Shaker

She is currently unvaccinated but is considering vaccination and went on to explain that she needed to do research on this. In the meantime, she takes COVID-19 prevention seriously and makes sure to stay away from crowded spaces, wear a mask, and use sanitizer regularly. Her father is vaccinated, but she lives with her mother who is not vaccinated.

Another participant expressed these uncertainties. She is not able to get vaccinated because she has an autoimmune disease and has not reacted well to vaccines in the past. Despite this, she is still not sure about the safety of the vaccine.

> *"I just wish I don't know I wish I had an answer. I wish I had one opinion, there's so many points of views and perspectives and angles to look at this, there's so many different parts of it that you have to think about, and consider before even trying to formulate a sentence about it that, I don't know, I really, I do. I just wish that it was over."*

–Female, Mixed (white & black), 18 years old, Slavic Village

Separately, she spoke about friends' vaccination concerns that "they're just pushing the vaccine out to anybody," which seemed to make her friends wary about getting it. Though, in her friend group, very few people are talking about the vaccine at all. She feels that it's just not a priority or topic of discussion in her group.

During a focus group discussion, one participant (Female, black, 15 years old, Maple Heights) mentioned that her mother encouraged the vaccine and so the participant got it. She trusted her mother because she worked for one of the large hospitals in Cleveland. She was scared at first to get it because others said it hurt or got sick after, but her experience getting it at the clinic was good, she did not feel anything (like pain) or have any pain or illness after. She also mentioned that her dad had a respiratory issue and so she was very worried about getting him or her grandmother who lived with them with Alzheimer's sick. That was another motivation to wear masks and get vaccinated. She mentioned that she did get COVID at one point during the pandemic, and was not worried about herself but socially isolated in her room to protect her father and grandmother.

A second participant (Male, black, 15 years old, Maple Heights) in the same focus group mentioned that he did not usually get vaccines, mostly because he had allergies, but he did get the COVID one. He did not want to at first, because he was not sure if he would have an allergic reaction or if it was safe because of the mixed information he was hearing about its safety. Then, over time, he knew so many people who got it and were fine. He noted that he got it at a walk-in pharmacy location, and had no adverse reaction.

A third participant in the focus group mentioned that she got the first dose of the vaccine with her mom but neither of them received the second dose. When asked if there was a reason, she said not really, they just never went back, then over time she started reading up on it and was worried they there was not enough research monitoring it over time and noted that sometimes adverse side effects can occur years later. She then stated that she did not think she would get the second one. She said her mother is spontaneous, so she thinks she spontaneously decided to get it then changed her mind. She spoke about her mother's comments around the need for other forms of prevention such as probiotics and vitamins, healthy eating, the participant seemed to agree. She also mentioned that they both recently had COVID, with uncomfortable but minor symptoms.

A final area of confusion was why vaccinated people were still getting COVID-19, which played into youth's narratives that the vaccines may not actually work. One participant, who is vaccinated, explains the views of her friends:

> *"And they act like okay, well, why do we need vaccines, and I'm like, a vaccination is not a cure. They think that if you get the vaccination, you won't get COVID. And so, when they see vaccinated people getting COVID, they get confused, or they feel like they've won an argument or something."*
>
> –Female, black, 16 years old, Buckeye Shaker

### *Youth acceptance of the COVID-19 vaccines*

Those young people in our Cleveland case study who are vaccinated tend to be younger (12-14 years old) rather than older (15-18 years old). In the school-based YPAR group, youth are almost all vaccinated. Getting vaccinated also linked into participants' narratives over "safety," that getting the vaccine allowed them to feel safe and to protect others around them. It also allowed their parents to feel that they were safe engaging in social settings, such as going to the mall or a birthday party. Many spoke about the vaccine being a mutual choice between them and their parents and that it made them feel safer, that they were able to go out more and re-start their lives. Their parents also allowed them to go out more because they were vaccinated. Being vaccinated was an important marker in their lives between the pandemic as a major limiting factor in their social interactions and being able to re-join the world.

Participants who spoke about being vaccinated also usually had parents who were vaccinated and friends who were largely vaccinated as well.

> *"I got to two doses, and I got the booster like, like few days ago…Yeah, everyone [in my family is] vaccinated. My brother's only got the two doses though, because the boosters are available to him, but everyone in the family is vaccinated…all my friends also vaccinated, I don't know when they're going to get the booster but they said they're gonna get it."*
> –Male, South Asian (Indian), 12 years old, Solon

This young participant spoke about his sources of information, which were either the CDC website or *The New York Times.* When we asked how he decides which information to follow, he spoke about needing to understand the scientific studies underlying a news report or policy guideline. If the news report was not backed by scientific evidence, he felt

that he could not trust it. This decision-making led him to get vaccinated as soon as he was eligible.

Similarly, another participant spoke about getting the vaccine, though he did know some friends who were unvaccinated.

> *"I strongly advise the vaccine, I'm definitely not against it. That is 100%, I am not against it. I have a few friends whose families are against vaccination, and I have some friends who just you know, they, they don't have enough time to go and get it because they have so many sports, and they have so many things going on that they don't have enough time to, you know, get the vaccine, or they don't… just some people just don't bother getting the vaccine."*
> –Male, South Asian (Indian), 13 years old, Westlake

Family and friend dynamics played a role in participants' responses in varying ways. From the YPAR group, two participants said that their mothers chose for them to get vaccinated, while another's older sister took her along to get vaccinated, even though their mother did not want them to get vaccinated. This was important because in the US youth would need an adult to sign the consent form for you to get vaccinated.

> *"Well, I got the vaccine, on Friday, I'm waiting two more weeks to get the other second dose. My mom didn't want me to get the vaccine but my sister was like, arguing with my parents telling her to get it because her school requires it and she doesn't want to take like the COVID tests like every single day."*
> –Urban Community School FGD, Clark-Fulton

Lastly, only one participant described getting vaccinated to be able to travel.

> *"I had to get the vaccine. But I got it a couple of weeks before that I was supposed to, because I had to go to Puerto Rico. I got it two weeks before my birthday. But they said that it was fine. It was."*
> –Female, Latina, 12 years old, Clark-Fulton

### *Sources of information: Social media and online information*

Young people in this study described the plurality of sources that they are regularly exposed to, almost all online on news websites or social media, although overhearing their parents listening to the news on the television was additionally mentioned as a source of information. For young people who spent much of the pandemic in social

isolation, spending time on social media became a point of connection with the outside world. However, this experience differed by age. Older youth (15-18 years old) were more likely to have smart phones and know others with smart phones compared to younger youth in this study. For older participants (15-18 years), social media sites like Instagram and TikTok were most popular and was where they would get most COVID-19 information, unless their parents were speaking to them about it. Only one person mentioned a specific account where they received information:

> *"Oh, you know, this page was called the Shake Down. And like, some people just repost things. It's not necessarily, I don't follow the anti-vax cause. But like, some people, I follow, just repost some stuff and take the time to watch the video. And I don't watch it, like I want to care about it as much. It's just that's what I'm hearing is what they're seeing."*
> –Male, black, 17 years old, Cleveland Heights

For older teens who referenced social media, it is not a conscientious choice to seek out COVID-19 vaccination information there. Instead, they describe seeing information that their friends re-post or used to share when the vaccines first came out. They are not, per se, following accounts that traffic exclusively in vaccine misinformation, nor are they likely to know about specific people in the anti-vaccination movement. The information is more diffuse and pervasive as narratives have spread across a wider network of people. Now, friends' shared posts are less frequent. However, that previously shared misinformation stood out in several participants' minds. One participant spoke about her experiences on TikTok:

> *"Like I've been seeing online, I don't know if it's true or not, which is scary…I'm not sure about the information. It could have probably been clearer, like vaccines affect your genes or something, or just stuff like that. Because we've heard that it does something like once you get it in, it affects your pregnancy or something. I don't know. But there's just like, little stuff like that. Like if I see that then, what else could happen?"*
> –Female, black, 16 years old, Buckeye Shaker

This participant's narrative is emblematic of the kind of uncertainties that we heard from young people in this study. They were most exposed to vaccine misinformation last year (2021), when vaccines were becoming more widely available, but this exposure has decreased in recent months. As the participant describes, she has heard just enough

stories of vaccine safety issues, which contributed to her decision to not get vaccinated. She went on to conclude that:

> *"I probably think they're not telling the whole truth about COVID."*
>
> –Female, black, 16 years old, Buckeye Shaker

### *Parental Influence*

There were age differences in terms of the level of parental influence on young people's decisions to get the COVID-19 vaccine. Younger participants in this study reported that their parents' were a major influence in their decision to get vaccinated. In contrast, older participants (16-18 years old) spoke about one-off conversations that they had with their parents. For those who did speak about vaccination with their parents, it was often a parent telling them to get vaccinated, and their response was to either decline or say that they were not sure yet.

One participant's mother and girlfriend told him to get vaccinated, though he said he was not sure about the safety of the vaccine.

> *"I personally haven't gotten it myself, but my mother is telling me I should get it and my girlfriend has hers. I haven't got it yet. But with her [my girlfriend's] experience, it hurts basically, her arm hurts at first, but honestly it doesn't really affect you so much."*
> –Male, black, 18 years old, Euclid

He went on to describe how the vaccine was not a priority for him, but instead getting into college, playing sports, and finishing school were more important priorities. Another older teen did not know whether his mom was vaccinated, and he was not vaccinated, though he described the precautions his mom still took to prevent COVID-19.

> *"Yeah, she doesn't talk about it. But she, like she was actually like, don't like quite go out with the mask and stuff. She made sure she had a mask on. Like, and I also heard people say that, like masks don't help and stuff like that. But yeah, my mom*

> *was actually doing quite good with the management research and staying safe if she walked out the house sanitizing stuff."*
> –Male, black, 17 years old, Cleveland Heights

For younger participants (ages 12-15), parents were described as being influential in decisions to get vaccinated. Younger participants reported on family decision-making with regard to the COVID-19 vaccine. Their parents and, if applicable, older siblings received the vaccine, and they supported the participant to get vaccinated when they were eligible. This came up during our YPAR sessions with younger participants on the near west side, in Clark-Fulton. Younger participants made these decisions with their parents and described feeling that they were keeping their family safe by getting the vaccine.

### *Histories of injustice and youth views on vaccination*

While there are common experiences among communities of color in Cleveland, racism and inequality is experienced differently by different communities and people. While narratives related to histories of medical experimentation were mentioned by black youth in this study, Latinx/Latine young people did not discuss this. Instead, there are other more salient aspects of their experience that may apply. The well-known Tuskegee Syphilis Study was mentioned, by one participant who is vaccine hesitant and by three others who have taken the vaccine but raised it as a concern for others who have not been vaccinated. One other participant felt that the study had been misconstrued, that while of course it was medical experimentation on black communities, it does not necessarily apply to the COVID-19 vaccines. One vaccinated young person speaks about this history of experimentation.

> *"I am in African American woman who has like many health issues, a lot of my friends are African American, African American women. Um, there's a lot of like, things that go on in like, the public health system that discriminates against us that we have, like no control over. And we talked about how in hospitals and things like that, there's a higher percentage of African American woman dying during childbirth, because they refuse to believe that African American women don't feel pain as much as other ethnicities women do. And there have been like, many like different like studies that African Americans, men and women have been used as kind of medical crash dummies for things. And so, there have also been, like studies done on that. Um, and also being a Native American part Native American, there have been studies and things where, when Christopher Columbus came over here, they brought sicknesses and Western medicine, stuff like that, and*

> *injected us with it. And we've died, like, Native Americans who've died because of the Western medicine that's been given to us."*
> –Non-binary, Native American and African American, 18 years old, Buckeye-Shaker

As they say, this is not just about one event in history, but it is about longstanding health inequities, about maternal mortality and not being taken seriously by medical providers, and it is about their history as a Native American in the United States.

The participant who has not been vaccinated speaks about her views on Tuskegee and other histories of injustice. She describes herself as being "50-50%" on whether to get vaccinated, but these histories make her doubt whether she should.

> *"I know, you probably hear this as an example, the Tuskegee experiment. Has that experiment really had, like an impact on my decision? I'm not saying that, like, you know, they're trying to do it again, or anything like that. But like, you can see how people are a little iffy on, you know, taking stuff from the government. A lot of people forget that history. And it's crazy how they're like, I didn't even learn this in school. I learnt it on TikTok. I don't understand why they don't teach this. But that's all I really just know about that. I'm already 50-50 on whether I should get it [the vaccine] or not."*
> –Female, black, 17 years old, Buckeye-Shaker

She links this to current "controversies" in US public discourse about Critical Race Theory.

> *"My English teacher, she had us write a letter to I think it was somebody on like a government or something for herself. And it was about teaching critical race theory, in school. And like a lot of people, he was telling us, like, you know, a lot of people don't want that, because they're scared of like, you know, what the black people will basically do, like retaliate or something, we'll be so upset that you know, we'll tell you something, but my thing is, like, y'all know, it's wrong. I will just tell you; our schools teach us the same thing over and over again. We've learned about the same black people every year. Everybody knows who Martin Luther King is, Rosa Parks."*
> –Female, black, 17 years old, Buckeye-Shaker

She goes onto explain that she would like to learn about other historical black figures who have advocated for civil rights and justice. She is concerned that the curriculum in her

school is still white-centric, teaching about well-known people who have not been too controversial, unlike Malcom X or others in the black Panther Movement. For her, she is not learning what she needs to learn in school to find out the full story about black history in the US.

**Box 4** Emic understandings of "trust" in Cleveland, Ohio

Understanding how young people view, operationalize, and deploy trust requires an emic or insider definition. This allows young people to say what "trust" means to them, in their own experience. Participants reported various definitions of trust in relation to COVID-19 vaccination. While it was difficult to define as an abstract or hypothetical construct, young people operationalized trust as something that is relational.

Young people operationalized trust as knowing that someone was not going to steal from you (having honest intentions), knowing that someone cares about you, and knowing that someone is honest. It is more of a "vibe" or an intuition than something that requires a lot of thought. In Cleveland, young people were most likely to trust their parent, specifically their mother, and a significant other.

### 5.1.5 How Youth Define and Operationalize Trust in Relation to COVID-19 Vaccination

As alluded to in previous sections, young people's experiences during (and before) the pandemic color their views and relationships with people in power, from government leaders to medical providers. Young people in Cleveland have extremely small circles of trust, particularly young men in this study, who spoke about trusting their mother and their girlfriend. In terms of authorities, youth described trust differently based on age. For younger youth, their circles of trust were wider, they expressed higher trust in government and medical providers. For older youth, they expressed low trust both in the government and in medical providers, including the CDC which they perceived to be secretive or providing confusing guidance.

For older unvaccinated youth, it was hard to trust people, and many described being wary of others. This may be rooted in experiences in neighborhoods where you cannot trust

others, as some youth linked this to their narratives of living around “untrustworthy” people such as those engaged in selling drugs or petty crime.

> *“Firstly, just I'm not really big on trust. Like, honestly, listen – I've been taught, taught to not easily trust so and so. It'll be like just the **vibe** I get from just being around them with like, I feel like you're trustworthy. I'll give you a shot at me last, just, but I can obviously tell.”*
> –Male, black, 18 years old, Euclid

Of note, for older youth, trust did not necessarily map onto taking up guidance, where vaccination was concerned. Several older youth described being told by their parents to get vaccinated, but the conversations were stopped when the young person declined to get vaccinated. In fact, several of the older youth have parents who work in the health care system, as nurses, doctors, or administrative staff. Despite being told by those vaccinated, health worker parents to get vaccinated, several youth remain unvaccinated.

Similarly, young people, particularly those who play sports and therefore need to see a doctor more regularly for check-ups or physicals, reported trusting their doctor and receiving vaccination advice from their doctor. As one young man described it, his doctor was nice and was telling him to get the vaccine, but he did not want to. However, interestingly, her guidance did not factor into his decision making.

In this case, it may be important to separate out medical (mis)trust from trust in the vaccine. While we may assume these are linked, unvaccinated youth, including those who “trust their doctor” reported low trust in the vaccine. One person vaccinated with two doses explains this thinking:

> *“So I got both of them. And I was fine. I just caught COVID I caught COVID. Gosh, it was like February 24. And I caught it. So I'm like, okay, well, I know like, it's not gonna - it's not going to stop you from getting it. You just gonna get COVID with the vaccine. But I still had like bad symptoms. I thought it would like, make my symptoms better. Not worse. I can’t taste or smell. It was hard for me to breathe. It*

*was just a lot of problems when I was sick. I don't trust them or I don't think I'll get the booster."*
–Female, black and Latinx, 18 years old, Collinwood

For older vaccinated youth, trust in medical providers does map onto vaccination uptake. Those who were vaccinated reported trust in their doctor, public medical figures like Dr. Anthony Fauci, and others who provide guidance or advice on COVID-19.

*I'm gonna trust you to take care of me if I got COVID or, you know, I trust the CDC to tell me what to take. I'm gonna trust them to tell me. I feel like it would hurt them more than help them. If doctors thought that the vaccines were bad or that COVID was fake, we would know by now, many more doctors will be speaking out about it. I feel like the few that we have seen have not really, their reasoning has not been good, in videos I've watched.*
–Female, Mixed (white and black), 18 years old, Slavic Village

This participant's reasoning was similar to others who expressed trust in medical providers, including the younger youth in this study who were almost all vaccinated. Younger participants (ages 12-14) described a perception that doctors' intentions were good, that they had no reason to lie to them about COVID-19 or the vaccine. In our group discussion with youth in Clark-Fulton, young participants spoke about trusting doctors, who are trained to give good information and ensure that people are safe.

## 5.2 Case Study 2: London Borough of Ealing

### 5.2.1 Case Study Context: London Borough of Ealing

The borough of Ealing is in the northwest quadrant of London (outer boroughs), in the UK. It is home to about 350,000 residents, nearly half of whom, were born abroad in over 170 different countries (Greater London Authority, 2020; Ealing Council, 2020). This number is also thought to be an undercount, due to the large number of undocumented immigrants residing in the borough. Due to this rich mix of people, Ealing is one of the UK's most diverse local authorities, with some parts of the borough hosting more diverse residents than others. In Southall for instance, in Ealing's southwest, well over half of the population are from ethnic minority or migrant backgrounds, with Asian, Eastern European, African, Caribbean and other roots, as well as identity groups coalescing around regional origins, religions, languages, kinship, class and caste (Baumann, 1996). Figure 12 shows the distribution of people from ethnic minority backgrounds across Ealing, with higher densities in the outer wards, and particularly in Southall, but also northern wards, and pockets across Acton.

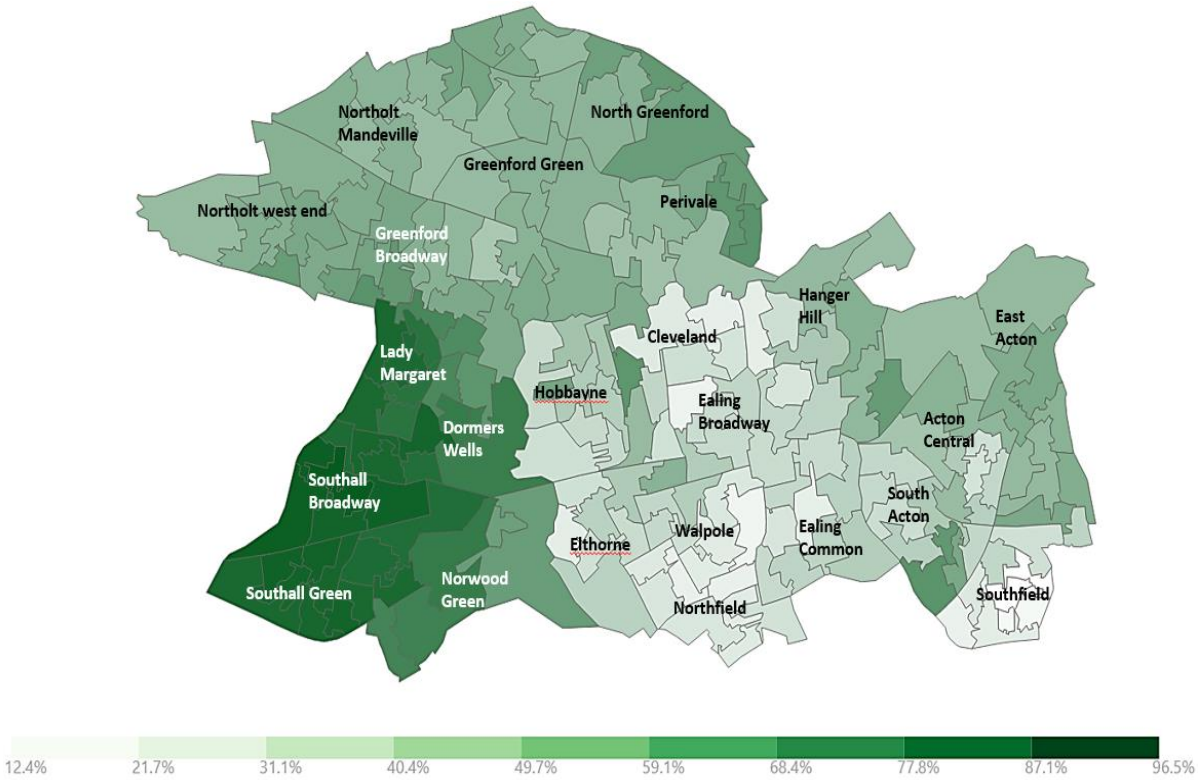


**Figure 6** Percent of population from ethnic minority backgrounds across Ealing, used with permission by LSOA (2011 Census data, map provided by Ealing Council)

Some migrant origin communities have been long established in Ealing. This includes many South Asian groups, and smaller numbers of Afro-Caribbean residents, who arrived in the post-war period during which the UK actively recruited residents of commonwealth (formerly colonized) nations to work in the UK's public sector services including the newly established National Health Service (NHS). More recently established groups include Polish migrants who arrived with Poland's ascension to the EU, relatively sizable numbers of Somali and Afghan immigrants, and many smaller groups. This diversity may complicate political representation and can affect different residents' sense of representation and voice locally as newly established groups tend to have less established political representation. For example, in one study of Somali and Polish Ealing resident experiences, Scuzzarello (2015) found that some Somali residents felt that they were not politically represented in relation to South Asians in the borough, and that the concerns of their community were thus not being heard. Interestingly, Polish migrants, although also more recent to the borough and also lacking explicit political representation (e.g. councillorships), were less concerned with political representation in general (Scuzzarello, 2015).

The migrant experience in Ealing, as elsewhere in the UK, has been shaped by an increasingly 'hostile environment' for migrants. What began as the gradual rolling back of post-war open-door policies has become, particularly from the turn of the 21st century, an escalating 'restrictionalism' which has made migration to the UK increasing difficult, and being a migrant in the UK increasingly challenging. For instance, it has become more difficult for migrants to join already settled family, while migrants in the UK, have seen increasing differentiation to their legal rights and entitlements, including access to healthcare. Due to data sharing practices between some public services and the Home Office (responsible for enforcing immigration law), undocumented migrants in particular often fear seeking needed care or protection due to worries about criminalization or deportation (Doctors of the World, 2017; MedAct et al., 2020).

This hostile policy environment has effectively institutionalized forms of racism which exclude many migrants – who are often from BIPOC backgrounds – from critical services and opportunities in the UK. The Ealing-based campaign group the Southall black Sisters for instance, have documented how migrant women have struggled to access culturally appropriate services (Berg, 2019), and have even been deterred from seeking protection and refuge from domestic violence (Imkaan, 2020). Other forms of historical institutional racism have also occurred locally in Ealing, such as the forced bussing of children only from South Asian families in Ealing from 1963 to 1981. Although justified by the local council as necessary to desegregate schools, this was experienced by local families as racist (Bebber, 2015). An anthropologist documented the experiences of youth asylum seekers from the Democratic Republic of the Congo who experienced their relationship with Hillingdon council (Ealing's neighboring borough), their 'corporate parent' as 'anything but a caring one' (Wahlström, 2009). Due in part to limited funding due to austerity policies in the UK, as well as limited prioritization of asylum seeker services at the council level,, these young people  were provided with only the most basic of housing, and experienced their encounters with the administrative, health and legal systems as impersonal, bureaucratic and lacking of care. Rather, they found resilience through their personal relationships (such as with individual social workers), and social networks, especially faith communities.

These kinds of experiences and encounters may continue to impact the ways in which people in ethnic minority and migrant communities regard and trust the state and other official institutions. Public racist hostility has also occurred historically such as through the presence and activity of the fascist National Front in the borough in the 1970s (Copsey, 2000) (fiercely resisted and actively countered by Ealing anti-racists), and in 2013, vehicles driven through the streets emblazoned with the words 'Go home or face arrest' (Hall, 2017).

### 5.2.2 Political Economy of Youth Vaccine Hesitancy in Ealing

**Austerity policies.** Austerity policies in the UK have been marked by reductions in government spending on social services, most recently in the *Welfare and Reform Act 2016* (British Medical Association, 2016). The British Medical Association warned that the effects of spending cuts are disproportionately harmful to children, young people, and low income families, and in particular, those who were already disadvantaged such as migrant children (British Medical Association, 2016). A recent (re-)emergence of a political economy perspective in youth studies in the UK demonstrates that austerity policies have further led to youth marginality, while youth have been constructed in political discourse "as trouble/in trouble" (Shane & Ruth, 2017). This discourse is evident in the British tabloid media, which thrives on images of young adults as living in dangerous spaces in housing estates, whereas this focus masks the lack of opportunity and marginality that young people face in the country today (Shane & Ruth, 2017).

Austerity policies at the national level have restrained the budgets of local authorities which has made life yet more difficult for many in Ealing and across the UK as this has resulted in cuts to local social programs and services (Marmot, 2020; Stuckler et al., 2017). The Greater London Authority estimates that London boroughs may have seen a 63% reduction in real terms to their core funding over the last decade (London Councils, 2018). In the context of Ealing, this has at times included funding for youth-oriented programs.

Ealing been subject to broader economic and political processes that have affected London and the UK, such as soaring costs of housing and increasing precariousness of the job market. National austerity policies have eroded public services and an increasingly 'hostile environment' towards migrants in the UK, have also shaped local government-resident relations and trust. Racism too, has marred life for people in Ealing. High-profile historical tragedies have occurred locally, including the murders of Sikh teenager Gurdip Singh Chaggar by a white gang in 1976, and teacher Blair Peach in 1979 by police during peaceful protest against the local council's authorization of the fascist group National Front to meet in Southall Town Hall (Nijjar, 2019). Although Southallians had been active in the fight against racial discrimination, xenophobia and exclusion for decades prior, these and other events and experiences led to the rise of a vibrant political mobilization around black politics uniting people, and particularly youth, in the Asian, Afro-Caribbean and other communities (Nijjar, 2020).

It is in this historical context, as well as more recent and ongoing experiences of racism, xenophobia and economic exclusion in which Ealing residents – including youth – are now presented with the possibility of taking up COVID-19 vaccines.

**Economic challenges and barriers**. Many residents of Ealing also face economic precarity and poverty, including in-work poverty. Overall, the borough ranks 87th most deprived of 326 local authorities in England, according to the Index of Multiple Deprivation (IMD). The IMD is an official measure used in England taking into account income, employment, education, skills and training, health and disability, crime, barriers to housing service and living environment. Ealing residents struggle particularly with issues of long-term unemployment (including predating the pandemic), an insufficient supply and quality of housing stock and rising rates of gig-economy and zero-hours employees (Hrynick & Ripoll, 2021). For instance, 49% of Ealing's social care workers are on zero-hours contracts compared with 42% in London and 25% in England (Skills for Care, 2020). Ealing also ranks the 8th London borough for overcrowded housing (PHE, n.d.) while almost half of Ealing's LSOAs (Lower-layer Super Output Areas – small areas of a similar population size) are within the most deprived deciles for 'barriers to housing and services' and most are within the lower deciles of 'living environment' of the IMD (McCullough, 2020).

People from ethnic minority backgrounds are disproportionately impacted by many of these issues. For instance, while 79.4% of Ealing's white residents were employed in 2019, 72.7% of Indian residents, 56.7% of black and black British residents, and 46% of residents from Pakistani and Bangladeshi backgrounds were employed (ONS, 2021b). On a national level, the Trade Union Congress has shown that 1 in 8 black people were in insecure employment in 2016 (UK average, 1 in 17) (Trade Unions Congress, 2017).

These pre-pandemic realities are likely to have been exacerbated for many. Illustrating the high number of local jobs impacted by the pandemic, 20% of Ealing residents (33,000 workers) were on furlough in January 2021, placing it second among all London boroughs for the number of people on furlough (Yordanova, 2021). Young people are likely to have been disproportionately affected as they are more likely to be employed in sectors affected by pandemic control measures, and have lost more jobs (ONS, 2021a). Ealing's sizable undocumented population, many of which may be employed informally, will likely also have been significantly impacted due to the lack of access to support such as furlough. The economic challenges experienced by these groups and others in Ealing may have proved for them more pressing than whether they access COVID-19 vaccination.

**Housing.** Housing, including inadequate supply and quality, is a critical issues in Ealing. Ealing ranks the 8th London borough for overcrowded housing (PHE, n.d.) while almost half of Ealing's LSOAs (Lower-layer Super Output Areas – small areas of a similar

population size) are within the most deprived deciles for 'barriers to housing and services' and most within the lower deciles of 'living environment' of the IMD (McCullough, 2020). Local organisations have noted the ways in which migrant and ethnic minority communities face structural barriers and discrimination in relation to accessing housing, and also face poor quality and unsafe conditions (Diriye, 2020).

**Health disparities.** Life expectancy is 5.8 years lower for men and 3.6 years lower for women in the most deprived areas of Ealing, compared to less deprived areas (PHE, 2019). Public Health England flags other wider determinants of health, such as rough sleeping and violent crime as higher than the regional average (PHE, 2019). Health disparities are also racialized, with conditions such as diabetes, asthma, obesity and hypertension disproportionately impacting areas with higher proportions of ethnic minority residents due to the structural inequities they face.

COVID-19 also disproportionately impacted racialised communities in Ealing, with western parts of the borough being more affected by transmission, serious illness and death. On a national level, efforts to understand this disproportionate impact on people from ethnic minority backgrounds found that even controlling for key social and economic variables, the heightened COVID-19 mortality rate for people from black backgrounds were still twice as high as that of their white counterparts (ONS, 2021a).

**Vaccination rates in Ealing**. Vaccination rates in Ealing initially lagged behind London and England more broadly (although London as a city has also lagged behind England and the UK). This is despite the disproportionate impact of the virus on Ealing, which has had higher infection rates than its neighboring boroughs, the city of London and England overall. **Table 5** shows infection rates up to the date of October 2021.

**Table 5** Total number of COVID-19 infections and infection rate per 100k in Ealing, NWL, London and England

| **Area** | Total number of infections (to 15 October 2021) | Rate per 100,000 people |
|---|---|---|
| **Ealing** | 31,802 | 14,034.5 |
| **Northwest London** | 171,685 | 12,497.9 |
| **London** | 728,484 | 12,347.8 |
| **England** | **3,917,812** | **12,364** |

*Data source: Ealing COVID-19 Dashboard. Table originally in Hrynick and Ripoll, 2021.*

At the borough level, the percentage of the population (age 12+) that has received a first dose of COVID-19 vaccine is 69%, while 62.8% have received a second dose, and only 41.5% have received a booster, or third dose (see **Table 6**).

**Table 6** Percentage of people (12+) vaccinated with one, two and three doses of COVID-19 vaccine in Ealing, London and England

| Area | 1 dose | 2 doses | Booster |
|---|---|---|---|
| **Ealing** | 69% | 62.8% | 41.5% |
| **London** | 69.4% | 63.4% | 43.8% |
| **England** | **79.7%** | **74.1%** | **57.1%** |

*Data source: UK Government, 2022 'Vaccinations in Ealing'. Reflects data as of 30 January, 2022.*

Among Ealing youth aged 12-15, 46.4% have had at least one vaccine, while among those aged 16-17, 54.6% have had at least one vaccine dose (UK Government, 2021 'Vaccinations in Ealing'). This picture is more variable at the sub-borough level. For instance in some areas of Ealing such as Elthorne Park, vaccination stands at 78%, 73.4% and 56.6% (first, second, and booster doses respectively), while in North Acton, only 57.5%, 49.3% and 28.2% of people are vaccinated (first, second and booster doses respectively). This represents an over 20% point gap with respect to first doses, while there are nearly double as many people (proportionately speaking) who have had both doses and a booster in Elthorne Park than North Acton. Elsewhere across the borough, rates fall somewhere between these, with for instance, Southall Green achieving a fairly high rate of 71.1%, 62.2% and 34.1%, and, Greenford North achieving 66%, 59.8% and 38.5% coverage (first, second and booster doses respectively). Other areas with particularly low rates include Perivale (64.9%, 59.3%, 37.5%), East Acton (58.6%, 52.4% and 31.8%) (UK Government, 2021)

## Emerging data on inequalities and young people's experiences in Ealing during the pandemic: Insights from a local youth worker

**Box 5** Young people's messages for policy makers

While young people expressed gratitude for the work of public health in England, many cited psychosocial and socioeconomic support needs. Respondents from a recent survey asked for the following support from local government:

- Financial, food, and economic support
- More job and career opportunities
- Safety and reduced crime in their neighborhoods
- More youth friendly activities, like indoor football
- More youth clubs and youth centers, including space for homework and study
- Better access to trained mental health practitioners
- Opportunities to meet with authority figures and decision-makers
- Improved relationships of trust with local government

Insights into how the pandemic shaped young people's lives will provide us with context for how they respond to COVID-19 vaccination. A youth worker from Ealing provided us with invaluable insights into young people's experiences during the pandemic, including the very negative impact of lockdown. A survey (7th Dec 2021) they conducted with 14 young people largely from minoritized backgrounds showed that the pandemic had deep and lasting negative effects on their education, as one person cited that they would have gotten different grades or a better GCSEs score. Another said that everything they cared about was restricted or inaccessible. The survey also demonstrated that young people's families faced negative socioeconomic impacts of lockdown, as some parents were forced to leave their work and subsequently lost income and the ability to support their family.

Another survey with 16 young people found that while they were aware of current COVID-19 prevention guidance, they felt that government advice was confusing and inconsistent, which may contribute to low uptake. In the survey, respondents were largely unvaccinated (9 of 14), and cited a lack of trust, "no point" to being vaccinated, or not being ready as reasons why they did not take the vaccine. Two of them said they would get vaccinated if someone incentivized them, with cash incentives, to do so. In the other survey ($n$ = 16), young people felt that social media advertising that promoted vaccination would not really make a difference in their opinions, but rather parents should be better

engaged. Youth should be made aware that they do not need parental consent for vaccination over the age of 16 and that there are exceptions (Gillick-competent exceptions) for those younger than 16.

Overall, young people feel “forgotten and ignored,” and like their opinions do not matter or are not listened to when policies are being created. Youth are facing a mental health crisis, which was in part exposed by COVID-19 lockdowns. Young people expressed a lack of mental health support in schools and that there was a need for additional support from neutral, non-teacher, trained mental health staff.

Finally, young people in Ealing are influenced by four overlapping factors – social exclusion, inequalities, faith, and messaging. Young people have felt excluded from many parts of society, especially mainstream political-economic spheres, and this exacerbates a lack of trust in government and authority. Young people have felt like they do not matter to authorities, and so one response is mistrust in the COVID-19 vaccination engagement efforts, among other government-led initiatives. In one sense, not taking the vaccine may feel empowering. Young people also found that their faith, particularly for Muslim youth, can be one critical foundation when other institutions are not present. Lastly, as young people enjoy being part of social groups, belonging to social media platforms can offer a form of social inclusion that they lack elsewhere. While they may not trust or believe information on social media, some may become desensitized, and “even if you know it’s not true, it’s all you see and hear.”

### 5.2.3 Structural Inequalities and Youth Experiences of the COVID-19 Pandemic

Young people in Ealing faced numerous challenges during the UK’s lockdowns, the first of which began on 23 March 2020. Participants in this study described a sense of solidarity during the first lockdown and that they felt like their community, and the country, were “in this together.” It also coincided with improving weather in Ealing, when youth were increasingly able to go outside for breaks. However, it was during the second lockdown, announced on 02 December 2020, that young people began to experience an increased and crisis-like sense of social isolation, eroding mental health, and uncertainty related to school and their future. Our sample in Ealing came largely from two disparate locations: Greenford and South Acton. Throughout the following sections, we reflect on participants’ responses in relation to their social location and place conditions, including how longstanding issues related to structural inequalities led to different concerns for youth from South Acton, compared to Greenford.

Youth experiences of the COVID-19 pandemic are key in understanding youth relationships with adults and authorities in their community, and how these relationships may have further eroded over the course of the pandemic. Youth experienced several challenges during the pandemic, including: mental health issues, disruption to their education, and a worsening of socioeconomic vulnerabilities.

### *Mental health*

The COVID-19 pandemic response measures substantially impacted young people in ways that they described as detrimental to their mental health, particularly for older teens. Uncertainties related to school and lockdown, social isolation, and disruption to their educational and career goals contributed to a sense that they did not have control over their lives and that their future plans were now unclear. While lockdowns had a very negative impact on many youth, successive lockdowns became increasingly difficult due to isolation, with this taking a negative toll on mental health. This was compounded by the stress of being constantly at home, particularly for those who live with several other family members or in a small home. Of 27 participants, 18 (*n* = 6 from South Acton and *n* = 12 from Greenford area) spoke about issues with mental health during the COVID-19 pandemic. For those in the Greenford area, a largely middle class area in Ealing, mental health issues became more apparent during the second lockdown across social groups.

> *"And because it was like the second lockdown was in like winter time, it was just really depressing and like, not nice. So, I think, yeah, that was a really not enjoyable experience by the end of it."*
> – Female, Arab, 17 years old, Greenford

> *"And then by the time of the December lockdown, where we all still went to school, but nothing else was open, and then that lockdown from New Year's to March, pretty much those were the ones where I genuinely worried and a lot of my friends genuinely worried for their mental health. I guess you didn't have the vaccine program for the March lockdown, but for the December lockdown, we all saw it for what it was. And you kind of knew that this is going to be here for a while or you thought in the summer you thought we're seeing the end of this and then you go get thrown back into it. And I think that did is what led to young people contemplating mortality a bit more. And just thinking what, what is happening with all this?"*
> – Male, white, 16 years old, Greenford

Older teens, such as the participants above, experienced the second lockdown as a time of great uncertainty. For teens in Greenford, mental health was a major concern as participants described experiencing anxiety and depression during that time. It was in December that participants began to realize that the pandemic was a long-term problem, rather than something that they had to deal with in the short-term. This contributed to a sense of uncertainty.

Participants from Greenford also spoke about the steps they took to improve their mental health during the pandemic, from finding resources or sources of support online to starting mental health counseling and therapy. One participant was able to find resources that helped them to improve their mental health outcomes.

> *"Well, I have I seek, I get, therapy, like every week, so that sort of, sort of helped me, I think, yeah, I think I started in lockdown. And that really got me through it, you know, eventually talking to someone. But it's a shame because I'm in a place where I can afford those things, but I know others can't. And they don't have access to those things. As a young person, like, you're very young, even though we have social media, like I never saw anything that promoted things like that. Like counseling or, you know, for others, like something that's okay. Like, I didn't, I wasn't aware of these sorts of things. So, like, and I think that's a lot of young people, like, they just have to basically face whoever they're dealing like, there's no, there's no exposure, I guess, to anything that would support."*
> – Female, South Asian, 18 years old, Greenford

As this participant describes, having access to mental health services made a difference in her ability to manage her mental health. She found information online and was able to access therapy, though she notes that some are not able to do this for financial reasons, alluding to the socioeconomic differences that shape mental health care access. One female participant from South Acton was able to access care, though she was the only participant from that area who did.

> *"Mentally I did, I did fall in I think I fell into a bit of a depression state. Because I just I couldn't do it. I felt really attacked by it. Like sitting at home. So, I did, but I did have a counselor at that point. I was talking to her trying to figure out myself."*
> – Female, South Asian, 16 years old, South Acton

Participants, largely those from Greenford, also spoke about how the pandemic and stressors related to school affected their mental health. One participant (below) described this as a cumulative effect, where academic pressure spiraled into feelings of stress

related to their achievement. This participant, similar to others, had less outlets for stress and found it difficult to cope.

> *"Because I was in year 10 at the time, and I am quite an academic person, as well as the for me, like, the pressure to like continue doing well in school, like got a lot and like, the workload seemed to pile on. And like it was hard to stay motivated and stuff like that, which like, spiraled into like, feelings of like, oh, I'm not going to do well, like when it comes to exams, that sort of stuff. And it was like the stress of whether we'd have exams or not. And then it was also because, as I said earlier, I'm quite a sporty person. And so not having those sports clubs to go to, I think affected me quite a lot because a lot of my friends came from sport as well. And so like, I wasn't talking to them as much, and obviously wasn't playing sports, which then led to like, like self-esteem issues, that sort of stuff. And then you know, it was a bit of a spiral."*
> – Female, white, 16 years old, Greenford

For South Acton participants in this study (*n* = 14), mental health was less of an issue compared to stress related to socioeconomic challenges. When we first asked one participant from South Acton about his experiences during COVID-19, he mentioned that COVID-19 fundamentally did not matter to him, because he had the stress of providing for his family. He lives at home with his chronically ill mother who is unable to work and a younger sister. He is the main provider for his family, which also includes his brothers currently incarcerated who he supports with small amounts of money to use in prison.

> *"P: It was alright, it was hard. I was still going out…it didn't matter in terms of getting in trouble. There's a lot going on with my life. Family. COVID didn't matter."*
>
> *MS: What's going on, if I can ask?*
>
> *P: I'm looking for employment. COVID didn't matter, I was focusing on other things. I still am. My mom, I gotta take care of her, you know? If you just stay at home, you can't get money. It's just me and my mum and my sister. I got four brothers in prison."*
> –Male, Somali, 18 years old, South Acton

He went on to ask about ways that he could manage stress, because he did not have any way to manage it, other than by smoking regularly.

### *Education during the pandemic*

For students in this study, the pandemic, especially during the early days, was a major disruptive force in their education and career path. Participants experienced various disruptions, from uncertainties around and eventual cancellation of critical exams such as the GCSEs, managing school-life balance, and online school were major sources of stress. The General Certificate of Secondary Education (GCSE) is an academic qualification offered in England and other UK countries for a specific subject such as Mathematics or Science. Preparations for the GCSE exams begin usually in Year 9 or 10 and exams are taken in Year 11. Several participants in this study did not finish their GCSEs during the COVID-19 pandemic, dropped out of college or did not pursue higher education, particularly in the South Acton group. Several others are unemployed and trying to decide what they can do.

For some participants, taking the GCSEs is a major life event that marks a transition in their education, once completed. Fourteen interview participants described taking or planning for the GCSEs during the pandemic, which for some was a great source of stress. The pandemic, including lockdown and a switch to online school for some, meant that a stressful time became even more so due to these circumstances. Only one participant from the South Acton group discussed the GCSE as a source of stress.

> *"And I thought it was quite stressful, and especially because I'm doing my GCSE this year, I felt like it's held quite a bit back. So, I thought I'm not on the same. Not on the pace I should be."*
> – Female, South Asian, 16 years old, South Acton

There was a sense among some participants that switching to online school and other mitigating circumstances meant that the GCSE preparation was more difficult, leaving some to feel unprepared. One participant, unprompted, described the challenges they faced, including not being able to practice for the exams.

> *"And I think a lot of people like would say the same because everyone, like, from the start, you get into like, year seven, everyone's like, the jump from GCSE to A level was very hard, because you have to be so independent. But then that element of like having to do with pretty much four months of work by yourself did make that a bit easier. But I just think maybe when the exams come, that will be much harder, because we haven't had the practice for GCSE. Yes, what was the question? Sorry, I went on."*
> –Female, Mixed (white/black Caribbean), 16 years old, Greenford

As this student describes, she felt like she had to complete her work independently and found that she felt unprepared for the GCSE exams.

For younger students not yet thinking about the exams, school was stressful for other reasons, particularly for those with poor internet connection or difficulty keeping up with online schooling. One younger participant (12 years old) from South Acton described challenges she faced in taking classes online. She was using an older computer that would often not connect to Microsoft Teams, the platform they used for school. Her internet connection was also problematic, and she would often have to turn her camera off to maintain that connection. Her teachers would ask her to turn it on, but then she also described being mocked by her peers because her camera quality was poor. She went on to describe what this was like.

> *"And the work was, they either gave you too little space on the sheet, or they would give you the file and you'd have to somehow send it over a computer. And we didn't know how to do that, and eventually they taught us how to send pictures of our work over the computer. So you either had to hold it up in while you were in the meeting, because it was all over Microsoft Teams. Or you'd have to somehow find out how to send it over into the class file. And that's basically what year five was like for, I think we had, we had like three months at school and then quarantine happened, and then just kind of carried on until year six."*
> –Female, Polish, 12 years old, South Acton

Eventually, she was able to return to in-person school, as the school opened up one classroom for students who had parents who were essential workers. She was then able to go to this small classroom during her school days, where they mixed different years into the same room.

For another student in South Acton, his experience with school had long been difficult, but this became worse during the pandemic. Now 18 years old, he described having to leave school in Year 9 for undisclosed personal reasons. When he tried to return, they placed him in an annex room (or "off school grounds," as he described) with another student and a substitute teacher who spent 5 hours per day with them in that room. He felt like he was in near-isolation, and would ask the school why he was in that room instead of being in a classroom. He was preparing for his GCSE exams, but he describes feeling like he was abandoned by the school.

> *"Their story with me was, 'yeah, you're new.' Really truly what it was is if I ended up failing my GCSEs, they didn't want me to be a part of their statistics or something, something like that. And the other kids. They were 'too bad' to be in school, but really truly, those were some very good kids. Yeah, there was maybe one or two guys who were bad, but this was not a solution."*
> –Male, Mixed, 18 years old, South Acton

He went on to say that he felt like the school system had failed him, and they were just trying to protect themselves and their academic reputation. He linked this to his experiences with police, which were described in other parts of our interview when he talked about the impact of "Stop and Search" policies on young people like him in South Acton. He also felt that police were trying to meet their quotas, and only cared about those numbers.

For other participants in our study, interactions with the school system were deemed highly stressful and problematic. Several younger girls in the South Acton YPAR group spoke about their school, a local academy, which they perceive to include faculty who hold racist views. The teachers are largely white, while the students are largely from minoritized communities. This plays out in ways that create a stressful environment.

During one of our Youth Advisory Board meetings, four girls began to speak about their experience at school. This discussion was triggered by a locally significant event where a young male student was prevented from praying (*Salah*) at lunchtime on the playground. Their school has a white Head Teacher, who they perceive is part of creating an environment that is "intolerant" of cultural differences and does not value the lives of its multicultural students. The girls felt that the school only sees them as "numbers," where they have to report that students are doing well in order to access funding as a private academy. Ethnically diverse students at the school are also asked to share photographs for the school's promotional materials, but the girls described that this contrasts with the general environment of intolerance. One example was given, where a girl spoke about her support for the black Lives Matter movement, and she described her teacher's response as "all lives matter," which she felt was said in a mocking manner. Lastly, they described being put in "isolation," a punishment that has changed names over time, but includes being put in a room alone for a full day. They felt they were disproportionately targeted for school disciplining and punishment on the basis of their ethnicity. They were looking forward to graduating from that school after this final term. The discussion went on to include others in the room, including our male advisory board members, and it shifted to their experiences with policing in the community.

### *Stop and Search, community violence, and interactions with the police*

Participants in this study, particularly young men from minoritized backgrounds living in South Acton, Acton, and Northolt (the most deprived areas of Ealing) on estates,[1] described their interactions with the police often under the "Stop and Search" policy.[2] For participants from South Acton, many described knife violence in the area and that stop and searches were frequently carried out. Most of the older young men (16+ years old) we interviewed or spoke to had experienced this. One participant of Lebanese descent spoke about his experiences with stop and search, and being stopped by police not 20 feet from his home. He worried that his mother would see him being stopped by the police and assume he had "done something wrong." He goes on to explain.

> *"So basically, I don't know how to explain. Personally, they [the police] judge you straightaway on your image, how you present yourself. They don't give you the option to talk or express yourself to them. For example, if I go walk in the flats, if I got my hoodie up, I'm walking like this, just me being me, honestly, generally I'm not doing nothing. They see me, they'll come straight over, and sometime if they don't have their camera on, oh my god, because now they have to wear a body camera. So if they don't have that on, honestly, they don't care, they tell you to 'shut up,' they'll be rude to you, they can do whatever they want honestly."*
> –Male, Lebanese, 19-years old[3], South Acton

When we probed on this idea of being judged on your image, he felt it was a combination of the way he dressed – he pointed to his tracksuit, trainers, and hoodie – with his ethnic background that led to the police stopping him. These stops were frequent enough that it made him feel almost resigned to the situation.

Another young man in the study, who described his experiences above in school, also spoke about the role of the police on his estate. He spoke about them often entering the

---

1 An estate in England is a large-scale public housing building, with stigmatized connotations due to the numbers of low-income families that live there, often from minoritized or immigrant backgrounds.

2 Stop and Search is a power given to police in England and Wales to search an individual if they have "reasonable grounds" to suspect the person is carrying illegal drugs, a weapon, stolen property, or something that can be used to commit a crime such as a crowbar. Section 60 orders mean that some stop and searches can be carried out without "reasonable grounds" in a set area for a defined period of time (15-24 hours), often following a violent incident in the area. Opponents of Section 60 argue that it unfairly targets people form ethnic minorities, as recent statistics from March 2020 show that 25% of those searched were black. More here: **https://www.bbc.com/news/explainers-47475566**

3 Note: We had a very small number of participants outside of our sampling age range. We worked with youth at one youth center and did not feel it was appropriate to exclude youth on the basis of age. We note their ages throughout the reported findings.

building and walking around the stairwells, stopping young men that they came across. This point mentioned above about turning off body cameras was mentioned independently by other young men in the study. During one of our youth advisory board meetings, the youth felt that police try to goad young men into responding with threats or insults. One person describes this:

> *"They do this quite frequently, maybe two times a month. They'll just turn up at my block, or estate, they'll turn up and they'll just walk up and down the stairs. They'll be hiding out. Trying to catch anyone. It's so weird, and when they don't get anything, or say they catch a group of kids, teenagers, 16-18 years old, and they're just hanging out in the park for example, off the block that they live at, they'll come in, they'll search everybody, under no grounds. And, they'll get angry when they don't get anybody doing anything or having any drugs or anything like that. A few times, they harass us. I see them twice a month, up to no good. It's quite funny, last week, they were – I was coming in, going home, and I see the police chasing people out of my block. A couple of the people, even though they're not doing anything wrong, they're just tired of getting stopped, they'll run. Which is wrong, but they'll run and they're getting chased. I have nothing to do with anything that's going on, I'm just trying to go home. They stop me, search me, and they started… what's the word, insulting me, about where I live. It was so odd! They were really trying to get a reaction out of me. They said 'are you embarrassed to be living here'? It's so out of order. He's got his camera rolling, he's not ashamed. I told him, 'what kind of question is that?'"*
> –Male, Mixed, 18 years old, South Acton

The younger girls in our YPAR group in South Acton described other cases of their brothers or friends being stopped, searched, and insulted by police trying to get a reaction, as they describe it. One girl's brother was stopped a few months ago, and the police had him pinned to the ground with his arm twisted behind his back. She was watching this happen and did not know what to do. The police insulted her brother as he was on the ground. Another girl in our group describes being stopped by the police while she was on the bus, coming home from school. They had been looking for a black female suspect, who was only described as "being tall." She felt that often they are looking for suspects with vague descriptions, and this ends up harming other minoritized youth in the area. When we asked the girls what was going on, they responded by saying that the police have power, they love their power, and they abuse their power. When asked whether they felt like they had power, the resoundingly answered with a "No."

In neighboring Northolt, participants who live on estate describe a similar environment, where there is ongoing violence, but that the police response is perceived to be ineffective. During a focus group discussion, Northolt resident young men spoke about this, when asked about their experiences in their community.

> *P1: "I hated it, there's all this fights, all this police on."*
>
> *P2: "Pretty much all the time… it's not really justified. I've surprisingly not been targeted, but they're always around. It's just annoying…there's still lots of violence. They're pretty much there for attention."*

The second participant went on to say that some young people in the area were involved in fighting and violence, but that still the police response was broad and not necessarily justified, even though he was not individually affected by it.

### *Youth centres as safe, life-saving spaces*

Young people in this study, particularly those who spent time in youth centers, described the value of the youth center space to their lives. For participants from Northolt, they travelled over one hour each way to reach the youth center because there was no comparable option where they lived. For participants in Action and South Acton, the youth center was a safe space where they could go after school, after work, to meet their friends and find support from youth center workers. Among our South Acton participants, the primary youth center worker was described by several young men as a "father," or a second father figure, who provided support, skills training as needed, and life and career advice. They felt like they could speak to him and that he listened to their perspective, whereas they did not have that kind of support elsewhere. Nevertheless, among the wider community, there seems to be some perception among adults that the youth centers are "dangerous" or violent spaces. One girl who started working at her local youth center describes this.

> *"People think, okay, it's a youth center, it's full of like drug dealers, and all of this, but it's not like that. People just hold really strong views about the centers that I don't think are true. I know that they aren't true. Because a lot of parents stopped their kids from going to the youth center because they think it's bad, but it's because my mom did that. First, my mom thought it was a place for drug dealers or gang people. But obviously, she had to let me go there at one point because I was doing a music job, because she had to let me go. And she came in a few times. She looked around and she did start liking it. And then she did see that her*

> *point was wrong. But a lot of parents, they don't come in to see what it's like. They kind of just judge it. From what outside stories they do hear, but every place has a bad story. So, they kind of just judge it off like that and don't really look at the good stuff."*
> –Female, South Asian, 16 years old, South Acton

As the participant above notes, while she was able to convince her mother to be able to go to the youth center, there is a broader perception in the community that the youth center is a space where there are "drug dealers" or "gang members."

Despite this perception, the youth centers that we visited or worked with were clearly safe spaces for young people in the community. For some, it provided refuge from recruitment into neighborhood gangs, for others, it ensured they had something to do off of the streets. For others, it was a way to access services and the arts, as the latter was often cut from budgets at local schools. It was also a place to find advice and social support. When asked what opportunities young people have in the area, one participant spoke about not having a lot of opportunities growing up.

> *"Crime was always there, it was always so readily accessible for me to go and do and get paid. Wow, okay. Other things, legitimate things, until I turned 18, 17-18, and until I got the help of [Youth Center worker], there was nothing. Nothing. Schools will kick you out and shun you out and block you. I had a bad experience at school and most of the people I know did. And that takes a big toll on your life."*
> –Male, Mixed, 18 years old, South Acton

For others, who have challenging home or family environments, the youth center is a place where they can get away from those stressors. One younger participant (13 years old, white, male) attends a youth center almost every day after school.

> *"I struggle with anger issues, so if I don't show them, it means no one has actually pissed me off. In school, they show a lot, I just don't like it, it feels like a prison. None of the teachers there are really that nice, so. They make it feel like, generally it feels like you're in some multi-grant business, where if you have a shoe lace loose, you get told off. I'm walking down the corridor, I laugh, and I get sent home."*
> –Male, white, 13 years old, South Acton

He described his school as a "prison," because you enter through three different gates and have to walk around in single-file lines without speaking in between classes. His family is another source of stress, as he worries about his father who is chronically ill and

unable to provide. He lives alone with his father. The youth center is a space where he can mitigate those stresses, be around social and youth worker support, and just play games.

**Box 6** Reasons cited for COVID-19 vaccine refusal

These are the range of reasons cited for not getting COVID-19 vaccinated:

- Concerns over safety of the vaccines, particularly in the long-term
- Concerns over fast development of the vaccines and lack of testing
- Concerns over family members or others they knew who had died or gotten sick after getting vaccinated
- Disinterest or lack of relevance to their lives
- Perception that they were strong and healthy
- Perception that they could develop natural immunity without vaccination
- Perception that the government was forcing them to get vaccinated

### 5.2.4 Youth Responses to COVID-19 Vaccination

Youth discussed a range of views on vaccination, ranging from total refusal to acceptance of the three-dose vaccination including booster shots. From this, we identified a spectrum of attitudes toward COVID-19 vaccination from total refusal to total acceptance, including the booster dose. Out of 27 interview participants, 13 (48%) were not vaccinated, 11 were vaccinated with at least two doses, and 3 had received 1 dose. This varied greatly by location, as 71% of South Acton participants were unvaccinated (29% had at least one dose) versus 12% of Greenford participants. Our focus group participants in Northolt were not vaccinated (one was vaccinated, but was forced to get it by his mother), nor were about half of Acton focus group participants. Many unvaccinated youth either cited safety or side effect concerns, or did not prioritize vaccination as a relevant or important aspect of their lives. In this section, we describe the range of youth responses to COVID-19 vaccination, focusing on perspectives based on social differences (gender, age, geographic location, social location). We then describe how vaccine attitudes are embedded in a wider ecosystem of parental and peer influence.

*Youth disinterest or refusal of the COVID-19 vaccines*

Young people in this study cited a range of concerns (**Box 6**) about the COVID-19 vaccines, though for a majority of the unvaccinated in South Acton, vaccination was simply not a major priority in their lives. Young people's narratives, for those who were unvaccinated, were largely complex and embedded in government mistrust, though mistrust was not mentioned by all. For several participants, COVID-19 vaccination refusal was more passive. It was not discussed by their parents or at schools, and their friends were less likely to be vaccinated or to talk about it. Several unvaccinated participants did not necessarily encounter COVID-19 vaccine information at all, though what they did hear sparked concern. This compared to our participants from Greenford, who were more likely to say that they had heard information from the BBC or other news outlets, particularly when their parents were watching the news. For unvaccinated participants, they were less likely to seek out information and did not usually mention the news as a source of information.

Unvaccinated participants mainly spoke about safety concerns or side effects, including issues related to what they perceived to be fast development of the vaccines and the lack of safety testing. No participant mentioned conspiracy theories, such as those commonly heard about microchipping. In fact, several differentiated their concerns from conspiracy theorists, and would disavow that alternative thinking. In terms of safety concerns, several were worried about safety and how quickly the vaccines were developed.

> *"I haven't done it. My main reason, for example, for other medicine, like for example, paracetamol, how long did they take to develop it? How many researches did they do, how many hours? I don't need it, I'm a young healthy guy."*
> –Male, Lebanese, 19 years old, South Acton

> *"Other things, they need 5 years study, 10. Okay. People are going to get the vaccine, more might die. I care for my life more. If you have the vaccine, and me no, am I gonna kill you? When I see stuff on the TV, I think everything is fake, nothing on the TV is real."*
> –Male, Moroccan, 17 years old, South Acton

The older participant above said he uses his "own logic," but does not seek out vaccination information elsewhere. Interestingly, he told his father and mother to get vaccinated, but he did not want to get vaccinated himself. Both participants above felt that they were younger and healthy, whereas they understood why older adults wanted to get vaccinated, to protect themselves from getting severe disease.

Another participant spoke about vaccine safety in relation to her family members. These narratives were fairly common, several young people reported hearing stories about family members who had heart attacks (*n* = 2), other health problems, or had died after getting vaccinated. One female participant from South Acton spoke about how her mother's friend died because of the booster, while her dad's friend also died because of the vaccine. She felt that her parents were not lying about this, it was not on the news, it was a personal, second-hand account. She went on to describe her feelings.

> *"I am too scared to get it. I don't even necessarily know what's in it because they could see what's in it, but not give you the full story or just give it really scientific words to cover up something. So, I'm really just scared to get it. Yeah, my mom's got it, but she hasn't really felt anything but my dad had a really bad reaction to it. He was in hospital for a while."*
> –Female, South Asian, 16 years old, South Acton

While the participant above focused on personal accounts linking the vaccine to safety concerns, this participant links her vaccine refusal also to the fast development, but also to the government pushing vaccines on the public.

> *"Personally, I don't want to get the vaccine, no one in my family wants to get the vaccine. Because I feel like it's a bit strange that COVID has been around two years, and they've already made a vaccine. But now there's a new strand going around. And it's like that vaccine was made before that strand came along. So it's like you really don't know. And they haven't even had enough time to test it. Like you don't know what will happen in five years if you take the vaccine, because the side effects aren't there yet, but they will be later. Just don't trust it. So why is the government forcing us to take the vaccine, can't go anywhere without this vaccine, can't do anything. And soon we're gonna have these little cards that we need to travel and everything. Like, why is that necessary?"*
> –Female, white, 18 years old, South Acton

The participant above cites her concerns about the vaccine, and how no one in her family wants to get vaccinated. In fact, she feels that she does not trust the COVID-19 vaccine, because it was developed quickly and there may be long-term safety issues. She, like several others, felt that the government was really coercing people to get vaccinated, and this was not well liked.

One participant (Male, 20 years old, Mixed, South Acton) was not happy about COVID-19 vaccination mandates for health workers, and said that it was disrespectful to the kind of

work they had done throughout the pandemic. He felt that the UK government as a whole was pushing the vaccine. When asked what he thought about it, and where he gets information on the vaccine, he described his experience.

> *"P: To be fair, I haven't been looking for information. I've just seen it all over the place, on social media, I know that a lot people do take social media seriously, which is wrong, especially people younger than myself. I've seen this, it's not good for you, so on. I use Instagram.*
>
> *MS: Do you see friends posting, or is it celebrities, or other people?*
>
> *P: The blog pages, or meme pages, I guess you could say. These are pages that everyone follows, everyone knows of. They post stuff about the vaccine.*
>
> *MS: What have you heard about it?*
>
> *P: It affects people differently, a lot of people don't get side effects. I do know one person, a friend, said his uncle got a heart attack from it. I don't know, I had a friend who's had COVID twice, he was vaccinated, he got it again…I don't really appreciate the rules now, you have to get three vaccines, you have to keep coming back. I'm not getting the first one… they keep releasing new ones, keep you immune, immune, immune. At this point, I feel like, if you were to get COVID, you could just build a natural immunity anyways, instead of getting a booster to do that for you."*

He clarified his stance by saying that he did not intend to get vaccinated anytime soon. As he describes above, it seemed like a lot of effort to keep getting new doses, when he felt that natural immunity was an easier way to protect himself.

For participants in the Northolt focus group, largely vaccine hesitant, vaccination narratives linked to both safety concerns and class dynamics. For one young man, he described a living situation at home that was extremely difficult as he did not get along with his mother at all and in fact "hated her." He said that she had forced him to get the two doses of the vaccines, and had taken him to the clinic to get vaccinated. For another participant (Male, black, 19 years old, Northolt), he described knowing a cousin who "had died" after getting vaccinated and had a pre-existing heart condition, and this led him to decide not to get vaccinated. He said that it was difficult to talk about this with his "posh" family members, who were all vaccinated and did not believe that his cousin had died due to vaccination.

> *"Half of my family has got the vaccine already. Half my family are literally, they are that posh that they decided they were going to get the vaccine. But yeah. They decided they wouldn't blame it [his death] on the vaccine…"*

His "posh" family members, as he describes them, decided not to blame his cousin's death on the COVID-19 vaccine. When we asked him to clarify his thoughts, he went on to say that:

> *"Literally, like normally, when you speak to them, you have to speak to them so that you can't offend them. Literally."*

### *Youth acceptance of the COVID-19 vaccines*

**Box 7** Reasons cited for COVID-19 vaccine acceptance

These are the range of reasons cited for getting COVID-19 vaccinated:

- Protection against COVID-19
- Reduce the spread of COVID-19, to return "back to normal"
- Have received other vaccinations, including childhood vaccines, with no problems or side effects
- Protect family members from getting COVID-19
- Family are vaccinated
- Following public health/medical guidance and advice

In contrast to the narratives that were described, largely by young people in South Acton, other participants were enthusiastic about vaccination (**Box 7**). Participants (*n* = 9) from Greenford, and neighboring areas like Perivale or Hanwell, spoke about their decision to get vaccinated which related to protecting themselves, protecting vulnerable family members, and generally following scientific guidance on vaccination. Young people in the study who were vaccinated also generally tended to be from less deprived backgrounds, with parents working as civil servants, teachers, or in other stable jobs. Similar to the unvaccinated cohort, vaccinated participants also were more likely to have friends and family members who were vaccinated.

> *"Yeah, so all my family's vaccinated, like double Vax, except me, my sister because it was only available to us like recently. And we could only get it after that, because we actually had COVID. Before that we had to wait a certain amount of time. So, I'm doing my second one soon, which I'll definitely get because, for me*

> *like the vaccine, like, for me, there was no hesitation to take the vaccine. Because it was, obviously it hasn't solved the pandemic, but it's greatly reduced the effects of the virus. And like, for me, the pros outweigh the cons, you know, like, most of my family's got it, you know, because we all just, you know, the pros outweigh the cons."*
> –Female, white, 16 years old, Greenford

The participant above links her vaccination rationale to her family members' vaccination status and reducing the effects of the virus. She did not perceive any real negatives to getting the vaccine, but does reference general concerns over how quickly the vaccine was developed. For her, as a "science person" (as she phrases it), she was able to do research on the vaccine development and realized that it was developed so quickly because it had a huge amount of resources and capital behind it.

Another participant references a friend who is unable to get vaccinated because their parent will not allow it. His friend does not want to cause a rift in the family by going against his mother's wishes, although the friend does recognize that he may be a risk to others as someone who is not vaccinated. He continues on to describe that is approach to the vaccine was "why not?"

> *"But I think the general consensus is just like why not? Like I'm not like the sort of, when you see anti-vax rhetoric and stuff like that about, 'you can get all this, you could get all this, you could get all this.' I don't think anyone really cares. I've not seen anyone my age at a vaccine center, and I know this isn't good, but I don't think anyone my age genuinely really reads the side effects sheet you get given. I've just seen a lot of them in the bin outside. And that's, I think, the general consensus is like we've had as a generation. We've had tetanus shots, we've had, well, if you're a girl (because they didn't offer them to boys at the time) - HPV shot against some cancer and stuff like that. So, I've been on holiday. So, I've needed flu shots and stuff like that."*
> –Male, white, 18 years old, Greenford

He goes on to describe how "doing research" means following the scientific method, asking questions, and not, as some people might think, looking for information that backs up your pre-determined point of view.

Another Greenford participant spoke about learning information in Biology class that helped her to decide to get vaccinated. She learned how a vaccine works and this helped her to be sure that some of the theories out there were not scientifically possible.

> *"I think, well, the vaccine, like helps a lot. Because I think, especially like doing, like, biology in A level. Now. It's like, there's nothing to be worried about, like, because I know how a vaccine works and how, like it's made and so like, I know, there's no chips in it or whatever. And so, there's, like a sense of like, security that I know, like, nothing's gonna go bad. Like, you might have like a dead arm for a day. But it, like, hopefully, like it works. And it like prevents you from getting like hospital level COVID."*
> –Female, mixed (white/black Caribbean), 16 years old, Greenford

As she described above, her science education in school enabled her to have a sense of security as they learned how a vaccine works and she applied this knowledge to the COVID-19 vaccine.

Finally, for those vaccinated participants, they felt that misinformation could quite easily be challenged and debunked. While one participant was vaccinated and found that people around her were open to getting vaccinated, there were some who perpetuated misinformation about the vaccines.

> *"There are some weird interpretations. And realistically, other people say that, like, they have been developed quite quickly, but what purpose? What ambition? Why would the government have ambition, like in implanting something to track where you're going? Like, you know, you have nothing to hide? Right. So, like, it's like, why would they do that? Like, I mean, even though they already know that, I think I feel that the government already know. Like, they already have that information anyway. It's not like they fixate on it. It's just there. I mean, how do you think like, you know, terrorist attacks are sorted so quickly, then they can sort of anticipate, you know, the stuff like that. But in my opinion, I just think it's [the vaccine] better for the community, and it's just healthier. It's just safer."*
> –Male, South Asian, 17 years old, Perivale

She went on to describe that while she is a healthy person and would not die from getting COVID-19, she wanted to get vaccinated to protect the older generation. She said it was a 15-minute appointment that just enabled her to protect others in the community.

### 5.2.5 How Youth Define and Operationalize Trust in Relation to COVID-19 Vaccination

**Box 8** Emic understandings of "trust" in Ealing, London

Understanding how young people view, operationalize, and deploy trust requires an emic or insider definition. This allows young people to say what "trust" means to them, in their own experience. Participants reported various definitions of trust in relation to COVID-19 vaccination. While it was difficult to define as an abstract or hypothetical construct, young people operationalized trust as something that is relational. They could trust someone if they "knew them," knew their intentions, and their behavior toward others. Generally, many are wary of outsiders, particularly in South Acton, Acton, and Northolt.

An integral part of this research was to understand how young people understand, operationalize, and deploy trust in relation to their views on and uptake of COVID-19 vaccines. Young people in this study spoke about trust in various ways, most often as associated with:

- **Privacy** in interpersonal relationships and the notion that someone will not tell others what you have told them in confidence.
- **Intentionality**, or having good intentions and having an individual's best interest at heart.
- **Familiarity,** or knowing someone for a while, which allows you to know how they think and act toward others.
- **Reputation,** or how others view an individual's character and trustworthiness.

These emic definitions of trust demonstrate that trust was conceptualized to be relational, especially in how the other "trusted/not trusted" party acted toward the individual. Trust, as participants define it, hinges on knowing a person or knowing their intentions. As one participant explains:

> *"I mean, to like, trust someone you would have to know in some way, shape or form that they're trustworthy. That kind of defeats the question, but like, they will have, like a reputation where you know, that they're not going to be untrustworthy. Yeah. Because if they haven't, like a reputation of like being untrustworthy, or lying, or being accurate of that information, then like, you wouldn't trust them."*
> –Female, white, 16 years old, Greenford

While “trust” is itself a vast heuristic, we focus on trust in relation to government and the medical establishment. Medical trust and trust in government, as we report below, mirrors and is embedded in young people’s relationships with other adults in their lives, particularly those in other positions of authority. Therefore, it is impossible to separate out “trust in government” from trust in educational and police institutions, which shape many young people’s lives.

Young people (when asked about their trust in government) most frequently referred to the Prime Minister and unfolding controversies including the flouting of COVID-19 regulations through backyard parties at 10 Downing Street, the Prime Minister’s residence.

> *“I think if it comes out of Boris Johnson's mouth, I'm probably not going to be trusting him very much, especially recently. But I think, as a general rule, if he's on BBC News, then I'll probably trust that. I don't generally follow local government politics and stuff there. In terms of the big government, I think there were like a couple people that were close to Boris Johnson, can’t remember one guy's name, but the one that was kissing his secretary or something, I probably wouldn't say anything, but I wouldn't trust anything that he said now. And then there was also that woman that made a bunch of horrible laws, that I probably wouldn't trust either.”*
> –Female, white, 16 years old, Greenford

This point was taken further by another participant who spoke about how youth were initially the ones blamed for having parties, and it felt like that was unjust given the recent revelations about the Prime Minister.

> *“I don't know maybe, like thinking about the pandemic. Maybe if we were, like, kept in the loop of it. I feel like the youth are quiet. Isolated. I mean, I remember at one point, like, it was the youth that was blamed for spreading the virus with the parties and everything. And I feel like no one really thought about at that time, like what the actual youth thought or like what we were doing, and I feel like we should be considered a bit more. I don't know how that would be done. But, yeah.”*
> –Female, white, 16 years old, Greenford

This sense of abandonment and stigmatization resonated with other youth narratives in this study, as public discourses around youth are taken by young people to be further evidence that they are not actually considered or asked what they are doing.

> *"I feel like the government should kind of speak out about the good stuff that we do, and not the bad things like young people getting stabbed. I feel like they should announce that we do good things. It's good things in the community. Like when we do little fundraisers and stuff like before, like that should be announced that people should know, that's what we do as well. It's not only the bad things, and the bad views that people have on young people."*
> –Female, South Asian, 16 years old, South Acton

The participant above further pushes the narrative that young people are perceived to be "bad" or doing "bad things," and that this was felt to be unfair. This was combined with a sense that politicians just don't care about young people, but rather, they only care about re-election.

> *"I think it's like, when like the government make decisions. They just don't have young people in mind when they make those decisions. So, like, if anything I would like, recommend that they, I don't know do like some sort of survey or something. If they genuinely cared about the experiences of young people, then they do like some sort of survey to actually find out what young people think and what they want, and that because no politician is going to be making laws about what young people want because they don't know what young people want. But often like it's useless anyway, because the politicians don't care about young people. They don't genuinely care about any people anyways, they just want you know, get elected next year."*
> –Female, white, 16 years old, Greenford

These findings point to relationships of mistrust between young people and politicians at the national level, who are perceived to not care about young people's interests. This likely would exacerbate youth mistrust in government, with a range of potential consequences on how young people take up policy guidelines and buy into political processes.

Trust in government was complicated by this sense of not trusting individual, well-known politicians. However, many young people did separate trust in politicians and government from trust in COVID-19 vaccine information, as alluded to above. This was especially true for vaccinated youth, particularly from the Greenford area, who spoke about trust in medical providers and school teachers.

> *"I think doctors are probably the main one. And school teachers, especially ones that like understand science, and like viruses and what would go on with them. And then the government, like the big one, not local, is just is a bit of an iffy one, because I mean, especially what has come out now with the parties and everything is a bit frustrating, obviously, because I think Mom missed Christmas last year, everyone was tearful. We were all in our houses. And so now, I don't trust them [the government] as much as I would have in the beginning. But other than that, like doctors, teachers, probably the main one."*
> –Female, mixed, 16 years old, Greenford

While the participant from Greenford does trust medical providers and science teachers, this does not hold true for many participants from South Acton.

For young people, particularly in South Acton, trust in relation to COVID-19 information mirrored their broader relationships with adults, including parents, teachers at their school, and other authority figures, including the police. It is impossible to separate South Acton youth (mis)trust from their everyday relationships with other adult authority figures. When asked who they do trust for COVID-19 information, many South Acton participants remarked that they just did not know, and that was why they were on the fence in terms of vaccination uptake. They were however, likely to keep their circles of trust very small, to parents or other close relatives. One participant (Male, Arab, 13 years old, South Acton) explains:

> *SR: Who would you trust for COVID-19 information?*
>
> *P: I actually don't know. If I have to ask, I'll trust my uncle. I grew up with him, when my dad wasn't there. My mom's brother. He's smart and he knows about these things, and I just trust him…*
>
> *SR: Do you trust medical providers, or doctors?*
>
> *P: Not every doctor, can be. Like, you see me, my mom – when I was young, she was busy, she just let us to the doctor, and she's gone because she had to do something. She was always telling me, don't trust that doctor, you never know.*
>
> *SR: That particular doctor, or..?*
>
> *P: Every doctor. If he does something, just shout.*

*SR: Have you been to your GP?*

*P: Never.*

*SR: Where do you get information on the vaccines?*

*P: No, nowhere. Websites, or… yeah, websites…*

Despite these low levels of trust, a few participants were still vaccinated, including the participant above. For South Acton vaccinated participants, this did not necessarily relate to trusting the COVID-19 vaccine or vaccine information, but was rather to allow them to travel as they had family ties abroad.

Similarly, while many young people receive information from social media, it did not necessarily mean that they trusted that information. For South Acton youth, in the absence of trust toward medical providers and established sources of COVID-19 information, there was nothing that was trusted that filled that gap, other than parents. For young people in Greenford, there was more exposure to the BBC and other news media sites, which they seemed to trust for information.

## 5.3 Discussion: Comparative Case Study Analysis and Implications for COVID-19 Vaccination Engagement with Young People in the US and UK

In this final section, we report on analyses across the two case studies, focusing on themes related to the research aims. We describe how context matters for young people in the narratives that they share about COVID-19 vaccination, primarily at the community level. Young people's narratives are embedded in their experiences within the community. Participants spent the largest proportion of their interviews discussing their COVID-19 pandemic experiences as well as vaccination, and spoke less about trust, information, structural inequalities and systemic racism. As we will discuss below, these pandemic experiences differed for those in deprived neighborhoods compared to those in more resourced areas.

### 5.3.1 What young people are saying about COVID-19 vaccination across contexts

Few qualitative studies have looked at vaccine hesitancy from the perspective of youth themselves. Others focus on parent attitudes and influence, though we have seen that this varies based on family relationships and age. We heard a range of young people's

responses to COVID-19 vaccination. Differences in vaccine uptake to date mapped onto two different variables: age and socioeconomic status of community. Younger participants largely had higher rates of vaccine uptake, across contexts, which differs from findings in early studies of COVID-19 vaccine hesitancy among youth (Fazel et al., 2021). In terms of socioeconomic status, participants from communities with experiences of deprivation and racism were less likely to be vaccinated.

These patterns point to a divergence from prevailing narratives that youth are exposed to misinformation on social media and are more vaccine hesitant because of it. Young people do not necessarily lack good vaccine information, though promoting digital and news literacy could be one part of mitigating vaccine hesitancy (Herr, 2021). Many are inundated with vaccine information from a plurality of sources, from news reports, to parental advice, to stories or anecdotes shared on social media sites like Instagram and TikTok. Others, such as those in the Ealing case study in South Acton, may have less exposure to information, but also expressed that they did not actually want more information.

### *Younger youth are less likely to be vaccine hesitant*

Vaccine acceptance differed by age across contexts, with younger participants (ages 12-14) being much more likely to be vaccinated compared to older participants (ages 15 and older). This contrasts with recent studies that found that COVID-19 vaccine willingness did not differ by age (Afifi et al., 2021; Willis et al., 2021). Narratives of “safety” were key, and it was interesting to note how “safety” was a recurring term that was interpreted differently by different age groups. In Cleveland, for example, younger youth spoke about vaccination as a way to be safe, to protect themselves and family members. For younger youth, vaccination ensured that they were safe in terms of their health and well-being. For older youth, being “safe” meant also doing what was best for their health, and that was to avoid what was perceived to be a risky or unsafe vaccine. This could point to one area of intervention, where notions of safety are discussed and validated, safety concerns are honestly acknowledged, and young people are given a chance to ask questions about the vaccine.

These age-related differences are related to social context, as younger participants also discussed how their parents are influential in their thinking and how they receive vaccine information from their parents. Younger participants, especially in the Cleveland context, were less likely to have access to smart phones and therefore were most likely not as exposed to vaccine misinformation on social media compared to older youth. Younger youth in this study, particularly in Cleveland, were more likely to listen to their parents who had told them to get vaccinated and made sure it would happen. We know from existing

literature on parent decision-making that some parents rely on their social norms to make their vaccination decisions (E. K. Brunson, 2013; Sobo, 2015).

Further, younger participants, particularly in the US, spoke about the vaccine as a way to "return to normal," because it enabled them to attend more events, play sports, and visit friends' houses without worrying too much about COVID-19. Young participants in Cleveland spoke about needing to be vaccinated to attend friends' birthday parties and other social events, which allowed them to feel socially connected and more "normal" again. In contrast, in Ealing, the hardest times were during lockdown in terms of social isolation. It is likely that there has already been some sense of returning to normal. Additionally, for those individuals who did not ever prioritize COVID-19 prevention or could not be restricted due to needing to work, a "return to normal" would look very different and may not be relevant at all.

In contrast, for older youth, the "return to normal" had happened much earlier, as they likely had more autonomy (by virtue of being older) to visit friends and were more connected to others through social media and their phone. Older youth in both case studies were also working during the pandemic and were outside of the house. Those in Cleveland described their in-person work as something that saved them during the pandemic, because it allowed them to get out of the house and interact with others. Therefore, "returning to normal" may not be as applicable or as much of an incentive for older youth to get vaccinated.

One deviation from this age difference in vaccination was that older teens in Greenford, in the Ealing case study, were largely vaccinated compared to their counterparts in South Acton. In Greenford, older youth spoke about "following the science," and spoke negatively about their anti-vaccination peers who they though were perhaps listening to conspiracy theories over scientific guidance. In South Acton, similar to the older youth in Cleveland, concerns over safety dominated vaccine response narratives. This points to the importance of social location and place conditions in shaping how youth experience relationships with authority, and how that in turn affected their narratives on COVID-19 vaccination.

### *Structural inequalities and vaccine hesitancy*

We know from past studies that systemic racism plays a role in medical mistrust among diverse populations, though less is known about the intersections between racism and class, and experiences of deprivation (E. K. Brunson & Schoch-Spana, 2020; Jaiswal, 2019). While the Cleveland sample was predominantly black or Latinx/Latine youth, the Ealing sample was more ethnically diverse and there were differences based on

intersections of race/ethnicity and class. These differences also mapped onto local geographies, with youth in the more resourced area of Greenford expressing very different experiences compared to youth in the more deprived area of South Acton. This showed up in how young people in deprived areas experienced the pandemic in relation to other ongoing challenges, and how this created a less conducive environment for taking up COVID-19 vaccines.

In terms of vaccine refusal, we heard stories of young people who felt that the vaccines were unsafe and that it was best just to not get it. We heard more stories related to uncertainty than to certainty over the vaccine. As described in our findings, many who are "vaccine hesitant" are inundated with information, unlikely to know which information to trust, less likely to have a parent convincing them to get vaccinated or to be vaccinated, and less likely to have friends who are vaccinated. This creates an information and social ecosystem whereby young people are less exposed to positive vaccine information and stories or anecdotes. Existing literature on COVID-19 vaccine hesitancy shows that knowing others or having "social norms" related to vaccination are key to overcoming hesitancy (Cristea et al., 2021; Euser et al., 2022).

For young people in South Acton, for example, almost everyone was unvaccinated except for those who needed the vaccination to travel to see family abroad. Participants not only spoke about their vaccination status, but how parents and friends were similarly unlikely to be vaccinated. In one interesting case, a young person did not want the vaccine, but he told his parents to get vaccinated for their own safety. He was relying on natural immunity rather than a vaccine.

### *Community experiences and in-group influence*

Taken together, these data show that vaccination may to some extent, rely on in-group solidarity, or at least basing behaviors and actions on what others in your in-group are doing. An in-group is a group of people who identify with each other based on a variety of factors, like gender, social class, age, race/ethnicity, and neighborhood. Most vaccinated interview participants suggested that most of their friends and family members were vaccinated while the same was true of most unvaccinated participants, who reported most of their friends and families were also unvaccinated – although it was not always explicitly articulated as a reason for individuals' vaccine decisions. Through our observations at the youth center in South Acton for instance, in-group thinking or bias was

common but not necessarily explicitly articulated. They had similar narratives of their day-to-day realities, in which many described being more in survival mode. In contrast, interviewed participants in less deprived Greenford, seemed more future-oriented, with more of their concerns focusing around school and academic struggles and success. Vaccine narratives that emphasize future-oriented thinking may not resonate with youth who face everyday precarity. The more similar positionalities and challenges faced by youth in each local context may shape their experiences and thinking in similar ways, while aspects of 'belongingness' or solidarity with one another as fellow in-group members may also play a role in the social reproduction of vaccine attitudes among them.

### *Youth vaccine hesitancy continuum*

Based on these findings, we suggest a framework (**Figure 7**) of youth COVID-19 vaccine hesitancy, ranging from total refusal to total acceptance, with a large number of people in-between in the "just not sure" category. We modified the 2014 SAGE Working Group on Vaccine Hesitancy framework based on our study findings.

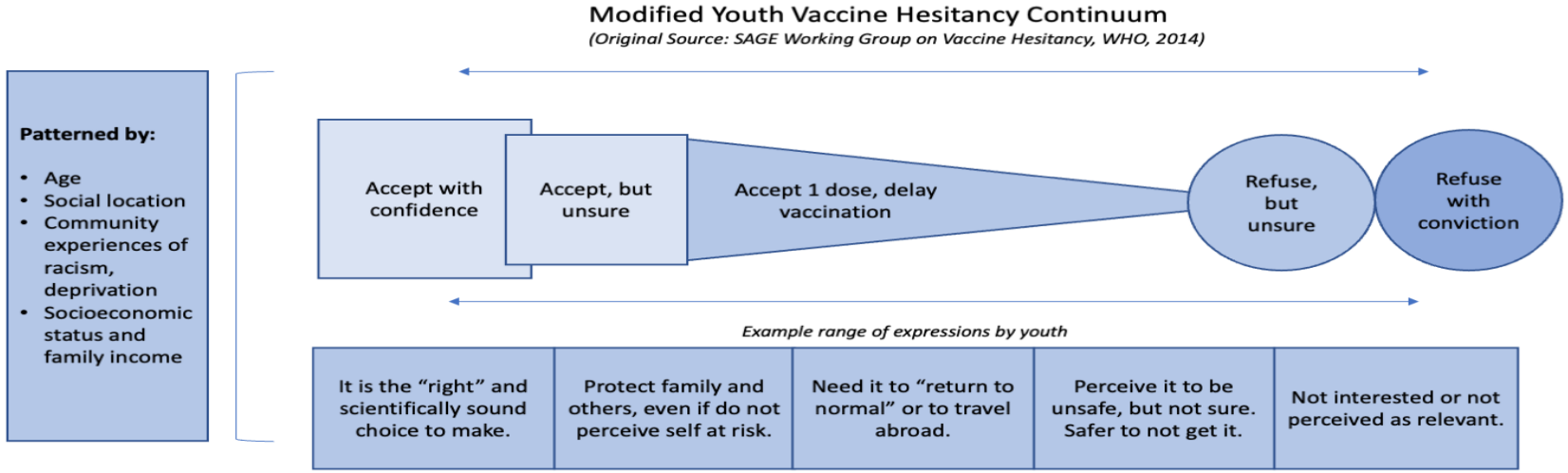


**Figure 7** Range of responses to COVID-19 vaccination, modified from the SAGE Working Group model (2014), image made by the study team

### 5.3.2 Community, Place Conditions, and Youth Experiences

As discussed above, young people's responses to COVID-19 vaccines do not exist in a silo, instead they are embedded in multiple, interlocking influences, from family and peer influence, to community and place. While young people do not necessarily articulate these linkages in linear or connected ways, patterns of responses to vaccines show differences that are linked to race and ethnicity and social class. In our political economy analyses, we demonstrated how in the Cleveland context, minoritized youth living in historically redlined areas are more likely to experience socioeconomic deprivation and fewer opportunities. In Ealing, austerity policies have led to funding cuts for local governments and youth services, whereas youth services provide critical opportunities which at-risk youth fundamentally rely on. In the absence of opportunity, young people living in poverty have to think about working, avoiding the police, and getting through a school system that they perceive values them less. The experiences of young, minoritized, socioeconomically deprived participants fundamentally shapes how they relate to and respond to public health guidance on COVID-19 vaccines.

*Structural inequalities and youth lived experiences*

Young people spoke about their experiences of the education system, housing, and police surveillance, particularly in deprived areas of Cleveland and Ealing. In Cleveland, we did hear narratives that relate to black Americans experiences in the medical system, which includes histories of medical experimentation like Tuskegee. We also heard about redlining and how it affects where you live and what opportunities you have in life. In Cleveland, unlike in the UK, a predominantly black public school system has prioritized black-centered education, with teachings about black Lives Matter, social justice, and redlining. This could be why these narratives show up in young people's interviews. However, speaking about those issues did not necessarily predict vaccination status, as several youth still were vaccinated despite discussing the relevance of medical experimentation to their communities.

In Ealing, we heard more clearly that experiences of living on estates or in deprived areas like South Acton or Northolt shape young people's experiences in the education system and with police surveillance. It is significant, because in terms of local authorities and government, young people tend to interact with an education system that they perceive to

be racist and with police that they perceive to be taking advantage of their power by arbitrarily stopping and searching teenage boys in the area.

Nationally, in England, this directly relates to discourses about youth as "troublemakers." Young people know this discourse and refute it, saying that if policymakers just spoke to us, they would know what is going on in our lives. As reported by the Ealing youth worker and matched by study findings, young people know about this discourse and it contributes to their sense of social exclusion and marginalization. Being frequently portrayed as "bad" in social discourse is sometimes mirrored in vaccination discourse around youth who are non-compliant. It is important to avoid stigmatized labeling of the unvaccinated as non-compliant as it risks further alienating those who lack trust in our institutions and systems. More research is needed to understand any potential linkages between public discourse, youth perceptions and lived experience, and vaccination uptake.

### *The "Proximity Argument": What are young people and their families most concerned about?*

Young people's attitudes, responses, and uptake of COVID-19 vaccines are not linearly linked to experiences of systemic racism and structural inequalities. Instead, young people, embedded in a peer and family network, are also experiencing COVID-19 vaccine information as their communities experience it, and have long experienced medical information.

Across case studies, the data suggest that youth's responses to COVID-19 vaccines derive from lived experience in their community, including experiences derived from structural inequalities, such as redlining and socioeconomic deprivation. For youth in deprived areas, daily concerns are passed onto youth by their parents and peer groups, which may relate more to everyday experiences of racism or socioeconomic deprivation. Unvaccinated youth may not be as concerned about COVID-19, or may not perceive it as relevant to their lives. In deprived areas, communities may prioritize livelihood security and safety over concerns about COVID-19.

In this case, we can use something of a "proximity" argument. Many parents of minoritized youth speak to their children about keeping safe, staying away from police, or acting in a certain way if they are stopped by police. These are very present and pressing concerns. Meanwhile, young people's parents in more middle class areas are having conversations about COVID-19, how to protect yourself, wearing a mask, and getting vaccinated.

### 5.3.3 Trust and Mistrust in Authorities: Government, Medical Establishment, and Intuition ("Gut Feelings")

Trust was hypothesized to be a key part of these relationships as something that linked young people's vaccine attitudes to national public health discourse and vaccine information. Trust was operationalized by young people in a relational way, meaning that people could be trusted if they were familiar, if they acted in a way that demonstrated good intentions, if they were honest and transparent, and reliable. Low trust in politicians at the national level was matched by less familiarity with local politicians and fewer opinions on local government. Government was not trusted across both settings and age groups. In both Ealing and Cleveland, older teens tended to trust those they were most familiar with – their mothers and girlfriends or boyfriends. This did not translate into higher vaccine uptake, as several Cleveland participants recounted that their parents asked them to get vaccinated and they did not. Also in both sites, younger youth had trust in their parents *and* parents were a source of influence in getting vaccinated.

However, more research is needed to understand the phenomenologies of trust in relation to vaccine hesitancy. Anthropological research on vaccination in global settings has disabused many of the idea that the general public is "ignorant" or only in need of education to accept vaccination (Giles-Vernick et al., 2016). Vaccine decisions are often not linear, and a paradigm that frames "ignorant publics" in need of information, which leads them to accept a vaccine, may not be applicable to those with longstanding relationships of mistrust with authorities and institutions. In addition to talking about trust, we draw on a notion of "intuition," or someone's "gut feelings" that may direct them to feel a certain way toward vaccination without a conscious, rational, decision-making process.

*(Mis)trust in government, being left behind*

What this study of youth vaccine hesitancy points to is that vaccine hesitancy is about more than the vaccine, but it is about the institutions that a vaccine represents. Vaccines have social lives, meaning they take on political-economic, and social context, as anthropologists have long shown (Whyte et al., 2002). Similarly, vaccine hesitancy is social (E. K. Brunson & Schoch-Spana, 2020). It represents, as this study has shown, histories of mistrust and social exclusion. Our findings demonstrate that youth feel socially excluded, particularly those youth living in deprived areas. As the Ealing youth worker's own data showed, these feelings of social exclusion can have ripple effects in terms of mistrust in government, mistrust in authorities, and now, vaccine hesitancy.

*Medical (mis)trust*

Medical trust, or trust in doctors, public health, and other medical providers, did map onto vaccine attitudes more than other forms of trust. This matches the literature on adults

from minoritized communities that have longstanding reasons to not trust the medical establishment (Benkert et al., 2019; Gamble, 1997). One study (Alang et al., 2020) has explicitly linked experiences of police brutality to higher levels of medical mistrust, compared to those with no negative police encounters. This may point to the notion that young people, when they have negative experiences with one kind of authority (police, school), may translate that to mistrust in others (medical providers). For younger youth in Cleveland and Greenford youth in Ealing, trust in health care providers led many to take the "scientific approach" to vaccination, meaning that they were more likely to get vaccinated. That did not necessarily translate to vaccine uptake among older youth in Cleveland who did trust their family doctor.

Hypothetical questions about trust may be difficult for young people, especially younger participants, to answer. Young people did offer more insights when asked who or what information they trust, and why. Of note, many did not trust social media as a source of vaccine information. For those who did take the vaccine, they saw information on social media and then would check that information with a credible source like the NHS or CDC. For those who were not vaccinated, while they did not necessarily trust social media information, they also did not have an alternative nor were they necessarily seeking out alternative sources. It was more a matter of exposure and quantity – unvaccinated youth were exposed to accounts of vaccine safety issues, family members or friends who had become sick or died after the vaccine, and similar accounts on social media. There was less interrogation of the underlying causes of those illness or death accounts, and more an acceptance of the idea that "they got vaccinated, and died."

While trust, particularly medical trust, is still a vital concept to understand in vaccine hesitancy research, it must be placed in context and understood based on developmental stage. For young people, ideas of who they trust are still evolving. Younger youth may have less exposure to community experiences of racist policies like redlining, police brutality, or unfair discipline in the education system. Younger youth may be shielded from needing to work to provide for their families. The concept of trust is quite general and needs to be further unpacked. For many young people, trust is contextual, it is relational, and it may even be emotional. It is based more on an intuition, a "gut feeling," rather than a rational assessment of familiarity, transparency, honesty, and good intentions.

### *Community, rather than individual-level trust, and "intuition" or "gut feelings"*

As this report has shown, trust plays out in unexpected ways in youth vaccine hesitancy. On the one hand, high levels of mistrust in government did not always lead to vaccine hesitancy, as these sentiments were pervasive among youth in this study. Medical

mistrust was more predictive, though again, we may need to focus on “trust in the vaccine” rather than these other constructs. Finally, trust may not necessarily be an individual construct, or may not be relevant to studies of youth vaccine hesitancy as an individual construct. Young people’s trust in the vaccine is embedded in a social world (E. K. Brunson & Schoch-Spana, 2020).

Community trust may be a more relevant construct to study vaccine hesitancy among youth. Community (mis)Trust important for minoritized youth with strong connections to migrant communities, black communities or other groups that have been historically oppressed and have experienced injustice over generations. These community experiences, and everyday lived experience of inequalities and racism, particularly for older youth, creates an environment in which authorities (writ large) are less likely to be trusted (Alang et al., 2020). In these cases, it becomes easier to accept questions over safety. Indeed, based on historical experience, it is prudent to be cautious when accepting new or potentially unsafe medical technologies. Therefore it is vital that we understand and deploy notions of youth (mis)trust as historically-rooted, contextualized, and relational.

A focus on “intuition,” or a “gut feeling,” may capture the wider range of initial and lasting responses of youth to vaccination. The concept of trust, as we have shown, may be too general and needs to be further unpacked, including how it relates to community experiences of structural inequalities. Young people may relate their feelings of (mis)trust to whether people in their social groups trust authorities and institutions. As we have shown, many youth feel socially excluded. In the absence of institutions that support young people, young people may turn to other youth as sources of information. There may be some trust in the collective wisdom of those around you, and if others are unvaccinated, they may know something that you do not. In short, more research can be done to unpack the phenomenologies of mistrust, and to explore alternative concepts like intuition or gut feelings and what role they play in vaccine hesitancy.

# 6. Recommendations

As we enter a more protracted phase of the COVID-19 pandemic, it is possible to focus on people who have been “left behind,” or less engaged in ensuring that they are equipped with information and access to services. Vaccine equity in Cleveland, Ohio and Ealing is critical as it will ensure that COVID-19 vulnerable communities have a high level of protection against COVID-19 disease and death. Vaccine equity points to the need for

additional, tailored strategies that are responsive to, or embedded in, young people's wider needs. Developing equity in COVID-19 vaccination means that young people are meaningfully engaged. We propose the following key considerations for vaccine engagement with youth in each site.

## 6.1 COVID-19 Vaccine Engagement Strategies for Youth in Cleveland

1. **Recognize that vaccination decision making is a complex and ongoing process** rooted in young people's political-economic and social experiences. It is not necessarily linear, in that someone will receive good vaccination information and act on it. For young people experiencing poverty, vaccination may not be a priority in their lives. Instead, engage with narratives that place vaccination within this context – of keeping young people safe in their risky work environments or at school, and how vaccination can help to ensure that they will not miss work due to lengthy illness.
2. **Engage in listening sessions with youth to understand** how remote schooling and disruptions to their education may impact how they relate to adult policy makers, including in public health. Young people were affected more by COVID-19 lockdowns or remote school than by the virus itself. Use these sessions as a way to provide information on COVID-19 vaccination.
3. **Support social media campaigns and engage peer leaders,** building on the work of the Guardians of Cleveland initiative. These individuals should be young people from the communities that they would serve. Disseminate information through social media accounts like Instagram and Tik Tok, through locally well-known individuals.
4. **Consider shifting discourse around why young people should get vaccinated.** Telling most young people to get vaccinated for their own health may not resonate with their experience of having a mild case of COVID-19, or the perceived idea that "natural immunity" is a substitute for vaccination. Emphasize that young people should get vaccinated for their own health, to prevent symptoms associated with Long COVID, and to protect vulnerable family members.
5. **Partner up with or start cross-sector mental health initiatives to respond to** what may be an emerging crisis of anxiety, depression, and other mental health issues amongst youth. While many youth found critical help and their mental health improved during the pandemic, others express a lack of support. Working within schools and with community partners could be a critical aspect of supporting mental health.

6. **Work with other sectors, including the Mayor's office, to create positive spaces for youth.** While recreation centers and youth centers play a vital role in young people's lives, there is a need for more youth-friendly spaces and for opportunities for young people to share their concerns and their voices. This may include space for young people to discuss a related crisis of policing and police surveillance in Cleveland.
7. **Provide support to trusted mentors, teachers, and parents,** to engage in positive conversations with young people about vaccination. This information could be tailored toward older teenagers, which we have found to potentially be more vaccine hesitant compared to younger peers. This could also include template lesson plans for teachers to teach news and media literacy skills, so that young people are equipped to discern between credible information and misinformation.
8. **In the long-term, build relationships of trust with young people,** and not just with youth-serving organizations which may only reach some youth in Cleveland.

## 6.2 COVID-19 Vaccine Engagement Strategies for Youth in Ealing

1. **Recognize that vaccination decision making is a complex and ongoing process** rooted in young people's political-economic and social experiences. It is not necessarily linear, in that someone will receive good vaccination information and act on it. For young people experiencing poverty, vaccination may not be a priority in their lives. Instead, engage with narratives that place vaccination within this context – of keeping young people safe in their risky work environments or at school, and how vaccination can help to ensure that they will not miss work due to lengthy illness.
2. **Partner up with or start cross-sector mental health initiatives to respond to** what may be an emerging crisis of anxiety, depression, and other mental health issues amongst youth. While many youth found critical help and their mental health improved during the pandemic, others express a lack of support. Working within schools and with community partners and parents could be a critical aspect of supporting mental health. Train independent, non-teacher mental health staff for placement in schools.
3. **Engage in listening sessions with youth to understand** how remote schooling and disruptions to their education may impact how they relate to adult policy makers, including in public health. Young people were affected more by COVID-19 lockdowns or remote school than by the virus itself.

4. **Facilitate dialogues between young people living in deprived areas and local police,** on “neutral” territory and with cross-sector involvement, including key community partners, youth workers, and parents. These dialogues could be a space for listening to young people’s experiences with police and identifying solutions to end harmful policing practices.
5. **Increase funding for, and engagement with youth services as a critical space in vulnerable youth’s lives.** Youth services, including youth centers, are quite literally, life-saving services for young people. Many vulnerable young people in this study described how local youth workers were like a second parent to them and had connected them to vital services, like learning how to write a resume, or to job opportunities. These critical workers and youth centers must be better funded and supported.
6. **Improve availability of other youth-friendly activities and services,** including indoor football, safe spaces for homework and study, and so on.
7. **Consider shifting discourse around why young people should get vaccinated.** Telling most young people to get vaccinated for their own health may not resonate with their experience of having a mild case of COVID-19, or the perceived idea that “natural immunity” is a substitute for vaccination. Emphasize that young people should get vaccinated for their own health, to prevent symptoms associated with Long COVID, and to protect vulnerable family members.
8. **Disseminate information that young people over 16 do not need parental consent for vaccination.** As heard by a local youth worker, some young people have the misconception that they need parental consent to get vaccinated. This is one potentially easy fix, to share information about the age of vaccine consent via news, schools/teachers, and social media.
9. **In the long-term, build relationships of trust with young people.** Young people, particularly from deprived areas, are wary of outsiders and are likely not to trust people outside of their inner circles.

# References


Abramovich, A., Pang, N., Kunasekaran, S., Moss, A., Kiran, T., & Pinto, A. D. (2022). Examining COVID-19 vaccine uptake and attitudes among 2SLGBTQ+ youth experiencing homelessness. *BMC Public Health*, *22*(1), 122. https://doi.org/10.1186/s12889-022-12537-x

Adams, R. (2022). Disparities in children's Covid vaccination rates map England's social divides. *The Guardian*. https://www.theguardian.com/society/2022/feb/01/disparities-in-childrens-covid-vaccination-rates-map-englands-social-divides

Adams, S., & Savahl, S. (2015). Children's perceptions of the natural environment: A South African perspective. *Children's Geographies*, *13*(2), 196–211. https://doi.org/10.1080/14733285.2013.829659

Afifi, T. O., Salmon, S., Taillieu, T., Stewart-Tufescu, A., Fortier, J., & Driedger, S. M. (2021). Older adolescents and young adults willingness to receive the COVID-19 vaccine: Implications for informing public health strategies. *Vaccine*, *39*(26), 3473–3479. https://doi.org/10.1016/j.vaccine.2021.05.026

Aksoy, C. G., Eichengreen, B., & Saka, O. (2020). The Political Scar of Epidemics | Systemic Risk Centre. *Systemic Risk Centre Discussion Papers DP 97*. https://www.systemicrisk.ac.uk/publications/discussion-papers/political-scar-epidemics

Alang, S., McAlpine, D. D., & Hardeman, R. (2020). Police Brutality and Mistrust in Medical Institutions. *Journal of Racial and Ethnic Health Disparities*, *7*(4), 760–768. https://doi.org/10.1007/s40615-020-00706-w

Allington, D., McAndrew, S., Moxham-Hall, V., & Duffy, B. (2021). Coronavirus conspiracy suspicions, general vaccine attitudes, trust and coronavirus information source as predictors of vaccine hesitancy among UK residents during the COVID-19 pandemic. *Psychological Medicine*, 1–12. https://doi.org/10.1017/S0033291721001434

Andresen, S., & Fegter, S. (2011). Children Growing Up in Poverty and Their Ideas on What Constitutes a Good Life: Childhood Studies in Germany. *Child Indicators Research*, *4*(1), 1–19. https://doi.org/10.1007/s12187-010-9073-3

Anyon, Y., Bender, K., Kennedy, H., & Dechants, J. (2018). A systematic review of youth participatory action research (YPAR) in the United States: Methodologies, youth outcomes, and future directions. *Health Education & Behavior*, *45*(6), 865–878.

Ash, M. J., Berkley-Patton, J., Christensen, K., Haardörfer, R., Livingston, M. D., Miller, T., & Woods-Jaeger, B. (2021). Predictors of medical mistrust among urban youth of color during the COVID-19 pandemic. *Translational Behavioral Medicine*, ibab061. https://doi.org/10.1093/tbm/ibab061

Bartlett, L., & Vavrus, F. (2016). *Rethinking Case Study Research: A Comparative Approach*. Routledge. https://doi.org/10.4324/9781315674889

Bartlett, L., & Vavrus, F. (2017). Comparative Case Studies: An Innovative Approach. *Nordic Journal of Comparative and International Education*, *1*, 5–17. https://doi.org/10.7577/njcie.1929

Batley, P. N., Batley, N. J., Mushfiq, H., Perrin, E., Bellikli, T., Contractor, A. A., Mousavi, S., Khan, A., Toko, P., & Nichols, T. (2021). *COVID Stress Factors, Willingness to Be Vaccinated, and Reasons for Vaccination Hesitancy Amongst Ethnic Minorities and Youth*.

Baumann, G. (1996). *Contesting Culture: Discourses of Identity in Multi-ethnic London*. Cambridge University Press.

Bebber, B. (2015). "We Were Just Unwanted": Bussing, Migrant Dispersal, and South Asians in London. *Journal of Social History*, *48*(3), 635–661. https://doi.org/10.1093/jsh/shu110

Benkert, R., Cuevas, A., Thompson, H. S., Dove-Meadows, E., & Knuckles, D. (2019). Ubiquitous Yet Unclear: A Systematic Review of Medical Mistrust. *Behavioral Medicine (Washington, D.C.)*, *45*(2), 86–101. https://doi.org/10.1080/08964289.2019.1588220

Benninger, E., & Savahl, S. (2017). A Systematic Review of Children's Construction of the Self: Implications for Children's Subjective Well-being. *Child Indicators Research*, *10*(2), 545–569. https://doi.org/10.1007/s12187-016-9382-2

Berg, M. L. (2019). Super-diversity, austerity, and the production of precarity: Latin Americans in London. *Critical Social Policy*, *39*(2), 184–204. https://doi.org/10.1177/0261018318790744

Bernard, D. L., Calhoun, C. D., Banks, D. E., Halliday, C. A., Hughes-Halbert, C., & Danielson, C. K. (2021). Making the “C-ACE” for a Culturally-Informed Adverse Childhood Experiences Framework to Understand the Pervasive Mental Health Impact of Racism on black Youth. *Journal of Child & Adolescent Trauma*, *14*(2), 233–247. https://doi.org/10.1007/s40653-020-00319-9

Bernard, H. R. (2011). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Rowman Altamira.

Bhopal, S., & Nielsen, M. (2020). Vaccine hesitancy in low- and middle-income countries: Potential implications for the COVID-19 response. *Archives of Disease in Childhood*. https://doi.org/10.1136/archdischild-2020-318988

British Medical Association. (2016). *Cutting away at our children’s futures: How austerity is affecting the health of children, young people and families*. https://www.bma.org.uk/what-we-do/population-health/addressing-social-determinants-that-influence-health/cutting-away-at-our-children-s-futures-how-austerity-is-affecting-the-health-of-children-young-people-and-families

Brunson, E. K. (2013). How parents make decisions about their children’s vaccinations. *Vaccine*, *31*(46), 5466–5470. https://doi.org/10.1016/j.vaccine.2013.08.104

Brunson, E. K., & Schoch-Spana, M. (2020). A Social and Behavioral Research Agenda to Facilitate COVID-19 Vaccine Uptake in the United States. *Health Security*, *18*(4), 338–344. https://doi.org/10.1089/hs.2020.0106

Brunson, E., Schoch-Spana, M., Carnes, M., Hosangadi, D., Long, R., Ravi, S., Taylor, M., Trotochaud, M., Veenema, T., & CommuniVax Coalition. (2021). *Carrying equity in COVID-19 vaccination forward: Guidance informed by communities of color*. The Johns Hopkins University.

Buckner-Brown, J., Tucker, P., Rivera, M., Cosgrove, S., Coleman, J. L., Penson, A., & Bang, D. (2011). Racial and Ethnic Approaches to Community Health: Reducing Health Disparities by Addressing Social Determinants of Health. *Family & Community Health*, *34*, S12. https://doi.org/10.1097/FCH.0b013e318202a720

Burki, T. (2019). Vaccine misinformation and social media. *The Lancet Digital Health*, *1*(6), e258–e259. https://doi.org/10.1016/S2589-7500(19)30136-0

Carlson, E. D., Engebretson, J., & Chamberlain, R. M. (2006). Photovoice as a Social Process of Critical Consciousness. *Qualitative Health Research*, *16*(6), 836–852. https://doi.org/10.1177/1049732306287525

CDC. (2022). *COVID-19 Vaccination and Case Trends by Age Group, United States | Data | Centers for Disease Control and Prevention*. https://data.cdc.gov/Vaccinations/COVID-19-Vaccination-and-Case-Trends-by-Age-Group-/gxj9-t96f

*Cleveland Community Police Commission*. (2022). Cleveland Community Police Commission. https://clecpc.org/

Cleveland Office of Minority Health. (2016). *Round 2: Local conversations on minority health*.

Coppola, A. (2014). A Cleveland model? *Métropoles*, *15*, Article 15. https://doi.org/10.4000/metropoles.4950

Copsey, N. (2000). ‘The National Front is a Nazi Front!’: Opposition to the National Front, 1967–79. In N. Copsey (Ed.), *Anti-Fascism in Britain* (pp. 115–152). Palgrave Macmillan UK. https://doi.org/10.1057/9780230509153_5

*Coronavirus (COVID-19) vaccines*. (2020, November 26). Nhs.Uk. https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/coronavirus-vaccine/

Côté, J. (2014). *Youth Studies: Fundamental Issues and Debates*. Macmillan International Higher Education.

*COVID-19 Vaccination Dashboard*. (2022). https://coronavirus.ohio.gov/dashboards/covid-19-vaccine/covid-19-vaccination-dashboard

Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, *43*(6), 1241–1299. https://doi.org/10.2307/1229039

Cristea, D., Ilie, D.-G., Constantinescu, C., & Fîrțală, V. (2021). Vaccinating against COVID-19: The Correlation between Pro-Vaccination Attitudes and the Belief That Our Peers Want to Get Vaccinated. *Vaccines*, *9*(11), 1366. https://doi.org/10.3390/vaccines9111366

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, *11*(1), 100. https://doi.org/10.1186/1471-2288-11-100

Davies, B., Lalot, F., Peitz, L., Heering, M. S., Ozkececi, H., Babaian, J., Davies Hayon, K., Broadwood, J., & Abrams, D. (2021). Changes in political trust in Britain during the COVID-19 pandemic in 2020: Integrated public opinion evidence and implications. *Humanities and Social Sciences Communications*, *8*(1), 1–9. https://doi.org/10.1057/s41599-021-00850-6

Diriye, S. (2020). *The Impact of COVID-19 on Ealing's BAME Communities*. GOSAD. https://www.gosad.org.uk/sites/gosad.hocext.co.uk/files/2020-09/THE%20IMPACT%20OF%20COVID-19%20ON%20EALING%27S%20BAME%20COMMUNITIES.pdf

Doctors of the World. (2017). *Deterrence, delay and distress: The impact of charging in NHS hospitals on migrants in vulnerable circumstances* [Research Briefing]. Doctors of the World. http://www.doctorsoftheworld.org.uk/wp-content/uploads/import-from-old-site/files/Research_brief_KCL_upfront_charging_research_2310.pdf

Donà, G. (2021). Race, immigration and health: The Hostile Environment and public health responses to Covid-19. *Ethnic and Racial Studies*, *44*(5), 906–918. https://doi.org/10.1080/01419870.2021.1881578

Dottle, R., & Tartar, A. (2021). Half of U.S. States Have Big Racial Vaccine Gaps Heading Into Omicron. *Bloomberg.Com*. https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/us-vaccine-demographics.html

Doyal, L. (1979). *The Political Economy of Health*. Pluto Press.

Dubé, E., Gagnon, D., Nickels, E., Jeram, S., & Schuster, M. (2014). Mapping vaccine hesitancy—Country-specific characteristics of a global phenomenon. *Vaccine*, *32*(49), 6649–6654. https://doi.org/10.1016/j.vaccine.2014.09.039

Dubé, E., Laberge, C., Guay, M., Bramadat, P., Roy, R., & Bettinger, J. A. (2013). Vaccine hesitancy. *Human Vaccines & Immunotherapeutics*, *9*(8), 1763–1773. https://doi.org/10.4161/hv.24657

Dubé, E., Vivion, M., & MacDonald, N. E. (2015). Vaccine hesitancy, vaccine refusal and the anti-vaccine movement: Influence, impact and implications. *Expert Review of Vaccines*, *14*(1), 99–117. https://doi.org/10.1586/14760584.2015.964212

Edelman. (2020). *Edelman Trust Barometer 2020. Global Report.* Edelman. https://cdn2.hubspot.net/hubfs/440941/Trust%20Barometer%202020/2020%20Edelman%20Trust%20Barometer%20Global%20Report.pdf?utm_campaign=Global:%20Trust%20Barometer%202020&utm_source=Website

Estes, C. L. (1991). The New Political Economy of Aging: Introduction and Critique. In *Critical Perspectives on Aging*. Routledge.

Euser, S., Kroese, F. M., Derks, M., & de Bruin, M. (2022). Understanding COVID-19 vaccination willingness among youth: A survey study in the Netherlands. *Vaccine*. https://doi.org/10.1016/j.vaccine.2021.12.062

Fazel, M., Puntis, S., white, S. R., Townsend, A., Mansfield, K. L., Viner, R., Herring, J., Pollard, A. J., & Freeman, D. (2021). Willingness of children and adolescents to have a COVID-19 vaccination: Results of a large whole schools survey in England. *EClinicalMedicine*, *40*. https://doi.org/10.1016/j.eclinm.2021.101144

Feagin, J., & Bennefield, Z. (2014). Systemic racism and U.S. health care. *Social Science & Medicine*, *103*, 7–14. https://doi.org/10.1016/j.socscimed.2013.09.006

Gamble, V. N. (1997). Under the shadow of Tuskegee: African Americans and health care. *American Journal of Public Health*, *87*(11), 1773–1778.

Gamlin, J., Segata, J., Berrio, L., Gibbon, S., & Ortega, F. (2021). Centring a critical medical anthropology of COVID-19 in global health discourse. *BMJ Global Health*, *6*(6), e006132. https://doi.org/10.1136/bmjgh-2021-006132

Ganti, T. (2014). Neoliberalism. *Annual Review of Anthropology*, *43*(1), 89–104. https://doi.org/10.1146/annurev-anthro-092412-155528

Gavin, V. R., Seeholzer, E. L., Leon, J. B., Chappelle, S. B., & Sehgal, A. R. (2015). If We Build It, We Will Come: A Model for Community-Led Change to Transform Neighborhood Conditions to Support Healthy Eating and Active Living. *American Journal of Public Health*, *105*(6), 1072–1077. https://doi.org/10.2105/AJPH.2015.302599

Geoghegan, S., O'Callaghan, K. P., & Offit, P. A. (2020). Vaccine Safety: Myths and Misinformation. *Frontiers in Microbiology*, *11*. https://doi.org/10.3389/fmicb.2020.00372

Giles-Vernick, T., Traoré, A., & Bainilago, L. (2016). Incertitude, Hepatitis B, and Infant Vaccination in West and Central Africa. *Medical Anthropology Quarterly*, *30*(2), 203–221. https://doi.org/10.1111/maq.12187

Gov.uk. (2022). *Vaccinations in the UK | Coronavirus in the UK*. https://coronavirus.data.gov.uk/details/vaccinations

Hall, S. M. (2017). Mooring "super-diversity" to a brutal migration milieu. *Ethnic and Racial Studies*, *40*(9), 1562–1573. https://doi.org/10.1080/01419870.2017.1300296

Hanson, P. (2014). Cleveland's Hough riots of 1966: Ghettoisation and egalitarian (re)inscription. *Space and Polity*, *18*. https://doi.org/10.1080/13562576.2013.879773

Harvey, M. (2021). The Political Economy of Health: Revisiting Its Marxian Origins to Address 21st-Century Health Inequalities. *American Journal of Public Health*, *111*(2), 293–300. https://doi.org/10.2105/AJPH.2020.305996

Health Policy Institute of Ohio. (2018). *Health policy brief: Closing Ohio's health gaps*. https://www.healthpolicyohio.org/wp-content/uploads/2018/10/PolicyBrief_Equity.pdf

Health Policy Institute of Ohio. (2020). *Ohio COVID-19 disparities by race*. https://www.healthpolicyohio.org/ohio-covid-19-disparities-by-race/

Herr, O. (2021). *Young people and vaccine hesitancy—What role does social media play?* British Science Association. https://www.britishscienceassociation.org/blog/young-people-and-vaccine-hesitancy-what-role-does-social-media-play

Hrynick, T., & Ripoll, S. (2021). *Evidence Review: Achieving COVID-19 Vaccine Equity in Ealing and North West London*. Social Science in Humanitarian Action Platform. https://www.socialscienceinaction.org/resources/evidence-review-achieving-covid-19-vaccine-equity-in-ealing-and-north-west-london/

Imkaan. (2020). *The Impact of the Dual Pandemics: Violence Against Women and Girls and COVID-19 on black and Minoritised Women and Girls* [Position paper]. https://rapecrisis.org.uk/media/2253/dual-pandemics-imkaan-report.pdf

Jaiswal, J. (2019). Whose Responsibility Is It to Dismantle Medical Mistrust? Future Directions for Researchers and Health Care Providers. *Behavioral Medicine (Washington, D.C.)*, *45*(2), 188–196. https://doi.org/10.1080/08964289.2019.1630357

Kaplan, D. H. (1999). The Uneven Distribution of Employment Opportunities: Neighborhood and Race in Cleveland, Ohio. *Journal of Urban Affairs*, *21*(2), 189–212. https://doi.org/10.1111/0735-2166.00011

Khubchandani, J., & Macias, Y. (2021). COVID-19 vaccination hesitancy in Hispanics and African-Americans: A review and recommendations for practice. *Brain, Behavior, & Immunity - Health*, *15*, 100277. https://doi.org/10.1016/j.bbih.2021.100277

Kusmer, K. (2019). *African Americans*. Encyclopedia of Cleveland History | Case Western Reserve University. https://case.edu/ech/articles/a/african-americans

Larson, H. J. (2020). *Stuck: How Vaccine Rumors Start -- and Why They Don't Go Away*. Oxford University Press.

Larson, H. J., Cooper, L. Z., Eskola, J., Katz, S. L., & Ratzan, S. (2011). Addressing the vaccine confidence gap. *The Lancet*, *378*(9790), 526–535. https://doi.org/10.1016/S0140-6736(11)60678-8

Larson, H. J., Jarrett, C., Eckersberger, E., Smith, D. M. D., & Paterson, P. (2014). Understanding vaccine hesitancy around vaccines and vaccination from a global perspective: A systematic review of published literature, 2007–2012. *Vaccine*, *32*(19), 2150–2159. https://doi.org/10.1016/j.vaccine.2014.01.081

Larson, H. J., Schulz, W. S., Tucker, J. D., & Smith, D. M. D. (2015). Measuring Vaccine Confidence: Introducing a Global Vaccine Confidence Index. *PLOS Currents Outbreaks*. https://doi.org/10.1371/currents.outbreaks.ce0f6177bc97332602a8e3fe7d7f7cc4

Leach, M., & Fairhead, J. (2007). *Vaccine Anxieties: Global Science, Child Health and Society*. Earthscan.

London Councils. (2018). *London's local services: Investing in the future | London Councils*. London Councils. https://www.londoncouncils.gov.uk/our-key-themes/local-government-finance/london%E2%80%99s-local-services-investing-future/london%E2%80%99s-local

MacDonald, N. E. (2015). Vaccine hesitancy: Definition, scope and determinants. *Vaccine*, *33*(34), 4161–4164. https://doi.org/10.1016/j.vaccine.2015.04.036

Marmot, M. (2005). Social determinants of health inequalities. *The Lancet*, *365*(9464), 1099–1104. https://doi.org/10.1016/S0140-6736(05)71146-6

Marmot, M. (2020). Health equity in England: The Marmot review 10 years on. *Bmj*, *368*.

Marmot, M., Friel, S., Bell, R., Houweling, T. A., & Taylor, S. (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. *The Lancet*, *372*(9650), 1661–1669. https://doi.org/10.1016/S0140-6736(08)61690-6

Matei, A., & Harvell, S. (2020). *Data snapshot of youth incarceration in Ohio*. Urban Institute.

McCullough, N. (2020). *How might coronavirus impact the West London economy?* (p. 129).

McGreal, C. (2017, March 3). Cleveland's dividing lines over race issues come to light under Trump. *The Guardian*. https://www.theguardian.com/us-news/2017/mar/03/cleveland-ohio-fault-line-race-police-trump-black-lives

MedAct, Migrants Organise, & New Economics Foundation. (2020). *Patients not passports: Migrants' access to healthcare during the coronavirus crisis*. https://www.medact.org/wp-content/uploads/2020/06/Patients-Not-Passports-Migrants-Access-to-Healthcare-During-the-Coronavirus-Crisis.pdf

Michney, T. (2020). *Hough Riots*. Encyclopedia of Cleveland History | Case Western Reserve University. https://case.edu/ech/articles/h/hough-riots

Middleman, A. B., Klein, J., & Quinn, J. (2022). Vaccine Hesitancy in the Time of COVID-19: Attitudes and Intentions of Teens and Parents Regarding the COVID-19 Vaccine. *Vaccines*, *10*(1), 4. https://doi.org/10.3390/vaccines10010004

Mistlin, A. (2022, February 28). Being young has never been more difficult, and Covid is the least of our worries. *The Guardian*. https://www.theguardian.com/commentisfree/2022/feb/28/young-covid-rent-wages-end-pandemic

Momplaisir, F., Haynes, N., Nkwihoreze, H., Nelson, M., Werner, R. M., & Jemmott, J. (2021). Understanding Drivers of Coronavirus Disease 2019 Vaccine Hesitancy Among blacks. *Clinical Infectious Diseases*, *73*(10), 1784–1789. https://doi.org/10.1093/cid/ciab102

Moore, L. N. (2002). The School Desegregation Crisis of Cleveland, Ohio, 1963-1964: The Catalyst for black Political Power in a Northern City. *Journal of Urban History*, *28*(2), 135–157. https://doi.org/10.1177/009614420202800 2001

Nardone, A., Chiang, J., & Corburn, J. (2020). Historic Redlining and Urban Health Today in U.S. Cities. *Environmental Justice*, *13*(4), 109–119. https://doi.org/10.1089/env.2020.0011

Nemeth, J., & Padamsee, T. (2020). *Ohio's COVID-19 Populations Needs Assessment: Minimizing the Disparate Impact of the Pandemic and Building Foundations for Health Equity*. The Ohio State University. https://cph.osu.edu/sites/default/files/docs/covid19inequities/1-Full%20Report.pdf

*NEOCANDO*. (2021). https://neocando.case.edu/

Neumann, T. (2016). Remaking the Rust Belt: The Postindustrial Transformation of North America. In *Remaking the Rust Belt*. University of Pennsylvania Press. https://doi.org/10.9783/9780812292893

Nijjar, J. S. (2019). Southall: Symbol of resistance. *Race & Class*, *60*(4), 65–69. https://doi.org/10.1177/0306396819831578

Ohio History Central. (2019). *Cleveland, Ohio*. https://ohiohistorycentral.org/w/Cleveland,_Ohio

Ohio Minority Health Strike Force Blueprint. (2020). *COVID-19 Ohio Minority Health Strike Force Blueprint*. https://coronavirus.ohio.gov/static/MHSF/MHSF-Blueprint.pdf

ONS. (2021a). *Coronavirus and changing young people's labour market outcomes in the UK - Office for National Statistics*. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/labourmarketeconomicanalysisquarterly/march2021#the-distribution-of-young-people-across-industries-changed-during-the-pandemic

ONS. (2021b). *Labour Market Profile-Ealing* [Nomis Official Labour Statistics]. ONS. https://www.nomisweb.co.uk/reports/lmp/la/1946157266/report.aspx#tabempocc

Ozer, E. J., Abraczinskas, M., Duarte, C., Mathur, R., Ballard, P. J., Gibbs, L., Olivas, E. T., Bewa, M. J., & Afifi, R. (2020). Youth Participatory Approaches and Health Equity: Conceptualization and Integrative

Review. *American Journal of Community Psychology*, *66*(3–4), 267–278. https://doi.org/10.1002/ajcp.12451

Packard, R. (1989). *white Plague, black Labour: Tuberculosis and the Political Economy of Health and Disease in South Africa*. University of California Press.

Peretti-Watel, P., Larson, H. J., Ward, J. K., Schulz, W. S., & Verger, P. (2015). Vaccine Hesitancy: Clarifying a Theoretical Framework for an Ambiguous Notion. *PLoS Currents*, *7*. https://doi.org/10.1371/currents.outbreaks.6844c80ff9f5b273f34c91f71b7fc289

PHE. (n.d.). *Overcrowded households—Ealing*. Public Health England. Retrieved 10 June 2021, from https://fingertips.phe.org.uk/search/overcrowding#page/4/gid/1/pat/6/ati/101/are/E09000009/iid/90416/age/-1/sex/4/cid/4/tbm/1

PHE. (2019). *Ealing—Local Authority Health Profile 2019*. https://fingertips.phe.org.uk/static-reports/health-profiles/2019/E09000009.html?area-name=Ealing

Rosenman, E., & Walker, S. (2016). Tearing down the city to save it? 'Back-door regionalism' and the demolition coalition in Cleveland, Ohio. *Environment and Planning A: Economy and Space*, *48*(2), 273–291. https://doi.org/10.1177/0308518X15609741

RWJF. (2014). *Place Matters: Eliminating Health Disparities in Cuyahoga County, Ohio*. RWJF. http://www.rwjf.org/en/blogs/new-public-health/2014/05/place_matters_elimi1.html

SAGE. (2021). *Factors influencing COVID-19 vaccine uptake among minority ethnic groups* (p. 15). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/952716/s0979-factors-influencing-vaccine-uptake-minority-ethnic-groups.pdf

Scuzzarello, S. (2015). Narratives and Social Identity Formation Among Somalis and Post-Enlargement Poles: Narratives and Identity among Somalis and Poles. *Political Psychology*, *36*(2), 181–198. https://doi.org/10.1111/pops.12071

Sellers, B. G., & Arrigo, B. A. (2018). Zero tolerance, social control, and marginalized youth in U.S. schools: A critical reappraisal of neoliberalism's theoretical foundations and epistemological assumptions. *Contemporary Justice Review*, *21*(1), 60–79. https://doi.org/10.1080/10282580.2018.1415044

Shane, B., & Ruth, R. (2017). *Youth Marginality in Britain: Contemporary Studies of Austerity*. Policy Press.

Siddique, H., & Elgot, J. (2021, March 8). black, young and poor people in UK most likely to report Covid vaccine hesitancy. *The Guardian*. https://www.theguardian.com/society/2021/mar/08/black-young-poor-people-uk-covid-vaccine-hesitancy

Skills for Care. (2020). *A summary of the adult social care sector and workforce in Ealing 2019/20*. Skills for Care. www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/Topics/COVID-19A summary of the adult social care sector and workforce in Ealing

Sobo, E. J. (2015). Social Cultivation of Vaccine Refusal and Delay among Waldorf (Steiner) School Parents. *Medical Anthropology Quarterly*, *29*(3), 381–399. https://doi.org/10.1111/maq.12214

Spohrer, K., Stahl, G., & Bowers-Brown, T. (2018). Constituting neoliberal subjects? 'Aspiration' as technology of government in UK policy discourse. *Journal of Education Policy*, *33*(3), 327–342. https://doi.org/10.1080/02680939.2017.1336573

Stuckler, D., Reeves, A., Loopstra, R., Karanikolos, M., & McKee, M. (2017). Austerity and health: The impact in the UK and Europe. *European Journal of Public Health*, *27*(suppl_4), 18–21. https://doi.org/10.1093/eurpub/ckx167

Sturgis, P., Macmillan, L., Anders, J., & Wyness, G. (2021). Almost two-thirds of black British young people would be reluctant to get a COVID vaccine. *LSE COVID-19*. https://blogs.lse.ac.uk/covid19/2021/03/17/almost-two-thirds-of-black-british-young-people-would-be-reluctant-to-get-a-covid-vaccine/

The British Academy and Society. (2020). *The COVID Decade: Understanding the long-term societal impacts of COVID-19*.

*The real Guardians of Cleveland: Meet the community leaders encouraging their neighbors to get vaccinated*. (n.d.). The Land. Retrieved 21 February 2022, from https://www.thelandcle.org/stories/the-real-guardians-of-cleveland-meet-the-community-leaders-encouraging-their-neighbors-to-get-vaccinated

The Royal Society. (2020). *COVID-19 vaccine deployment: Behaviour, ethics, misinformation and policy strategies* (p. 35).

The Royal Society, & The British Academy. (2020). *COVID-19 vaccine deployment: Behaviour, ethics, misinformation and policy strategies* [Preprint].

*The Vaccine Confidence Project*. (n.d.). The Vaccine Confidence Project. Retrieved 9 November 2020, from https://www.vaccineconfidence.org/vcp-mission

Tourse, R. W. C., Hamilton-Mason, J., & Wewiorski, N. J. (2018). *Systemic Racism in the United States*. Springer International Publishing. https://doi.org/10.1007/978-3-319-72233-7

Trade Unions Congress. (2017). *Insecure work and ethnicity*. https://www.tuc.org.uk/sites/default/files/Insecure%20work%20and%20ethnicity_0.pdf

US Census Bureau. (2020). *2020 Census*. Census.Gov. https://www.census.gov/2020census

US Department of Justice Civil Rights Division. (2014). *Investigation of the Cleveland Division of Police*.

Wahlström, Å. M. C. (2009). *Friends, Corporate Parents and Pentecostal Churches: Unaccompanied Asylum Seekers from the Democratic Republic of Congo in London* [Brunel University]. https://bura.brunel.ac.uk/bitstream/2438/4507/5/FulltextThesis.pdf.txt

Washington, H. (2008). *Medical Apartheid*. Penguin Random House. https://www.penguinrandomhouse.com/books/185986/medical-apartheid-by-harriet-a-washington/

Whyte, S. R., Geest, S. van der, & Hardon, A. (2002). *Social Lives of Medicines*. Cambridge University Press.

Wickline, M. (2019). Capitalist Reproduction in Schooling: The social control of marginalized students through zero tolerance policies. *Theses and Dissertations*. https://doi.org/10.25772/Z9EN-NK59

Widnall, E. C., Winstone, L., Mars, B., Haworth, C. M. A., & Kidger, J. L. (2020). *Young People's Mental Health during the COVID-19 Pandemic*. University of Bristol.

Willis, D. E., Andersen, J. A., Bryant-Moore, K., Selig, J. P., Long, C. R., Felix, H. C., Curran, G. M., & McElfish, P. A. (2021). COVID-19 vaccine hesitancy: Race/ethnicity, trust, and fear. *Clinical and Translational Science*, *n/a*(n/a). https://doi.org/10.1111/cts.13077

Wilson, S. L., & Wiysonge, C. (2020). Social media and vaccine hesitancy. *BMJ Global Health*, *5*(10), e004206. https://doi.org/10.1136/bmjgh-2020-004206

Yordanova, I. (2021). *A detailed study of unemployment in London*. Volterra Partners LLP for London Councils. https://www.londoncouncils.gov.uk/our-key-themes/economic-development/employment-support/detailed-study-unemployment-london

*YPAR Hub* | *YPAR Hub*. (n.d.). Retrieved 1 February 2022, from http://yparhub.berkeley.edu/

institute of development studies

Delivering world-class research, learning and teaching that transforms the knowledge, action and leadership needed for more equitable and sustainable development globally.

Institute of Development Studies
Library Road
Brighton, BN1 9RE
United Kingdom
+44 (0)1273 606261
**ids.ac.uk**

Charity Registration Number 306371
Charitable Company Number 877338