



**UNIVERSITÀ DEGLI STUDI DI PADOVA**

**Dipartimento di Psicologia dello Sviluppo e della Socializzazione**

**Corso di laurea in Psicologia di Comunità, della Promozione del  
Benessere del Cambiamento Sociale**

**Tesi di laurea Magistrale**

**The impact of COVID-19 on perceptions, attitudes and behaviors  
towards minority group**

*Relatrice:*

Prof.ssa Luciana Carraro

*Correlatrice:*

Dott.ssa Matilde Tumino

*Laureanda:* Zhaoyue Ma

*Matricola:* 2055524

Anno Accademico 2023/2024

## INDEX

<b>Abstract</b> .....	1
<b>Chapter 1. Theoretical framework</b> .....	2
1.1 Introduction.....	2
1.2 The behavioral immune system and COVID-19.....	3
1.3 Minority groups and COVID-19.....	7
1.4 Purpose of the current study.....	10
<b>Chapter 2. Methods</b> .....	11
2.1 Search strategy and selection criteria.....	11
2.2 Results.....	12
<b>Chapter 3. Results</b> .....	15
3.1 All minorities.....	15
3.2 Asians.....	17
3.3 Black people.....	27
3.4 Other minorities.....	31
<b>Chapter 4. Discussion and conclusions</b> .....	37
4.1 Limitations.....	38
4.2 Directions for future researches.....	39
<b>References</b> .....	41
<b>Appendix</b> .....	57

## **Abstract**

On March 11, 2020, the World Health Organization (WHO) declared the new Corona virus disease (COVID-19) to be a pandemic. Globally, the onset of the COVID-19 pandemic has not only impacted rigorously economically but also has affected the public health socially. Especially, the issues on minority groups became more and more evident. Within this background and based on the available literature, this work aims to investigate how COVID-19 effects perceptions, attitudes and behaviors towards minority groups. Ethnic groups like Asians, Black people, and other minorities were targeted. The selected papers (n= 66), involving a variety of research approaches and methodologies, explored how COVID-19 might have increased the sense of threat, stigmatization and discriminatory attitudes. Moreover, the outcomes have been summarized on the connections between Behavioral immune system (BIS) and COVID-19 pandemic, and on the role of social media and political ideology.

*Keywords:* COVID-19 pandemic, Minority groups, Social perceptions, Discriminatory attitudes

# Chapter 1

## Theoretical framework

### 1.1 Introduction

The COVID-19 virus was first identified in Wuhan City, Hubei province, China in December 2019. The symptoms of severe respiratory disorders, fever, headache, throat pain and other symptoms were found in the infected patients (Wu et al., 2020). To control the spread of infection, the Chinese government took a series of mandatory actions in Wuhan City, such as locking down the city and mandating that everybody who left the city and moved to another province before Wuhan was shut down undertake nucleic acid testing (Jiang et al., 2021); China has adopted approach of integrating intercession into neighborhood arrangements, such as firstly identifying quickly tainted individuals, putting close associates in isolation, and then promoting necessary cleanliness measures to the public (Mishra et al., 2020). However, it has still rapidly spread throughout China and even all over the world and has caused millions of deaths. The World Health Organization (WHO) described COVID-19 as a pandemic on March 11, 2020, and also officially announced the outbreak of 2019-nCov was a public health emergency of international concern (PHEIC) on 30 January 2020. Until now, 7,034,255 confirmed deaths have been attributed to the pandemic (Mathieu et al., 2020). A significant number of deaths have been linked to the COVID-19 pandemic, which has primarily and heavily affected human health.

Moreover, the COVID-19 pandemic was considered as a global threat and caused public fear which has changed people's social life throughout the world (Mishra et al., 2020). To get rid of this terrible infection, people attempted many cautious measures, for example, the governments have enforced lifestyle restrictions, reducing physical contact between people, maintaining and counting toll, requiring for individuals who showing symptoms to self-isolate for 14 days (WHO, 2020). On the one hand these measures have served to protect lives, on the other hand have contributed to fear of Coronavirus Disease, stress and severe anxiety. Thus, this outbreak not only has a heavy and negative impacts on individual lives, but also has rigorously affected on the society at all levels.

## **1.2 The behavioral immune system and COVID-19**

The behavioral immune system (BIS) is a collection of cognitive, emotional, and behavioral mechanisms that help individuals to prevent the presence of infectious pathogens by identifying threat signs in the environment and activating responses, and tanking actions to avoid disease threats (Ackerman, Hill & Murray, 2018). The behaviors in the pandemic were supported by a primary evolved disgust response, with a collection of unconscious psychological responses that serve as the initial line of defense against dangerous infections (Bacon & Corr, 2020). Makhanova & Shepherd (2020) described that people differ from each other in their levels of pathogen avoidance, because of the differences in genetic, developmental, and

sociocultural variables, together with a person's childhood medical history. Moreover, pathogen avoidance procedures are impacted by elevated pathogen threat (Schaller et al., 2015). Trait pathogen avoidance was linked to a higher level of social distancing and a more serious evaluation of the COVID-19 threat (Makhanova & Shepherd, 2020).

There are two types of behavioral immune systems: proactive and reactive. When information indicates a possible infection risk, reactive reactions arise. These reactions usually manifest as preventive or avoidance behaviors. Meanwhile, proactive measures are intended to control the long-term risk of disease (Ackerman, Hill & Murray, 2018). Proactive processes facilitate alternately behavioral avoidance of infection than reactive processes (Makhanova & Shepherd, 2020).

Due to infectious disorders present a threat to psychological well-being, perceived vulnerability to disease (VPD) is essential for knowing social actions that promote the contraction of infectious diseases (Duncan et al., 2009). COVID-19 pandemic was a pathogenic threat and a disease. When the BIS is stimulated VPD, there is an increment in aversion and prejudice against those who don't really threaten (Bacon & Corr, 2020). Xenophobic and ethnocentric attitudes and attitudinal conformity, as well as avoidance of contact with foreigners by those with negative attitudes toward them were all exacerbated by an influential pathogenic threat (Fuochi et al., 2021; Murray & Schaller, 2016).

Germ aversion and perceived infectability are two factors of VPD. Although there was a high correlation between germ aversion and behavioral outcomes,

perceived infectability was more closely linked to intensified awareness of potential pathogen threats (Makhanova & Shepherd, 2020). Despite controlling for demographic, health, and psychosocial variables, these two terms showed the strongest correlation with COVID-19 concern and preventative health behaviors (Shook et al., 2020). The study of Karlsson et al. (2022) that looked into whether germ aversion and perceived infectability that were two aspects of the BIS predicted vaccination intentions against COVID-19 and influence during the pandemic. They suggested that the people with higher germ aversion thought vaccines were safer and intended to accept vaccination more than those with lower germ aversion. There was no correlation between germ aversion and plans to get vaccinated before the pandemic. Also, those who thought they were more likely to get sick were a little more open to getting vaccinated.

Disgust is a key indicator of behavioral immune system sensitivity (Oaten et al., 2009). In Bacon & Corr (2020), disgust can be triggered by abhorrent physical stimuli, as well as can be felt as an unpleasant feeling and intense dislike anything that indicates illness or possible contamination. For instance, wear a mask suitable when it is not possible to keep a distance physically; wash your hands often with alcohol-based hand sanitizer. According to Duncan et al. (2009), disgust sensitivity assessments evaluate how people feel about a wide range of situations that could make them feel disgusted. Thus, there are several researches about COVID-19 and disgust sensibility. For example, during the COVID-19 pandemic lockdown, the measures and significant modifications on individual and social levels increased

higher vigilance of disease cues, disgust sensibility and probably more germ aversion (Stevenson, Saluja & Case, 2021). The authors also claimed that greater disgust sensitivity may have a lot of practical benefits for safety behavior, such as hand washing, and that the threat of COVID-19 pandemic is implicitly responsible for this increase in sensitivity (Stevenson, Saluja & Case, 2021).

According to Shook et al. (2020), to promote behavior changes, the BIS offers a potential collection of psychological processes that may be aimed and possibly altered, and germ aversion and pathogen disgust sensitivity were two most consistently linked to concern about COVID-19 and preventive health behaviors. Furthermore, research on the relationships between the BIS, political ideology and disease avoidant attitudes has been made possible by COVID-19 pandemic (Kemphorne & Terrizzi, 2021). Karlsson et al. (2022) indicated that higher pathogen disgust sensitivity and germ aversion individuals respond more strongly to the pandemic threat by reporting higher compliance with recommendations, thinking that government measures are more necessary, and emphasizing the need of practicing preventive behaviors like handwashing and social distancing. However, Ackerman, Tybur & Blackwell (2021) claimed that it's necessary to be cautious when determining whether findings during the pandemic are good tests of behavioral immune hypotheses, because of still having a lot of empirical questions regarding earlier findings and models.



### **1.3 Minority groups and COVID-19**

During this pandemic, minorities who identify as ethno-racial or immigrant faced a greater proportion of the infection and experienced stressors to their already-existing disadvantages and social exclusions (Politi et al., 2021). Similarly, discrimination associated with COVID-19 is deeply rooted in continuing racism and is not limited to the infectious disease (Le et al., 2023).

Since COVID-19 has had significant negative effects on the economy, society and psychology, it mainly creates a generalized sense of threat which has been impacted heavily on attitudes and relationships between groups (Fuochi et al., 2021) and negative attitudes from ingroup to outgroups (Kubo & Okada, 2022). According to Bavel et al. (2020), the COVID-19 threat has the potential to cause or worsen animosity and tensions among groups, which could lead to disdain, mistrust, or resentment toward people who are seen as different. Owing to the pandemic, prejudice, racism, groupthink, discriminatory attitudes, and other negative attitudes have emerged as a result of the various forms of negative stigmatization of particular people and community groups (Kartono, Salahudin & Sihidi, 2022). For instance, the number of coronavirus-related tweets with anti-Asian keywords skyrocketed in the week following former President Donald J. Trump's tweet about the "Chinese virus" (Kurtzman, 2021). The correlation between Trump's statements, the increase in curiosity about the "Chinese Virus" and the subsequent upsurge in anti-Asian sentiment is highlighted by Google search data (Cao et al., 2023).

The perception of danger and fear affects a person's thoughts about themselves as well as how they feel and behave toward others, especially members of marginalized groups (Bavel et al., 2020). For example, Wuhan locals and COVID-19 patients experienced stigma on both an individual and a community level (Jiang et al., 2021); Asians in Western countries also experienced stabbed, beaten, bullied, spit on, pushed, harassed, and vilified based on the false assumption that they are to blame for the spread of COVID-19 (Lee & Yadav, 2020) and are perceived as the physical embodiment of the disease (Fan, Qian & Jin, 2021).

Despite social media's many advantages for spreading health information, research shows that using it significantly increases people's tendency to become panicked about the COVID-19 pandemic, which may have negative effects on their psychological and mental health (Lelisho, 2023). People who primarily achieved their news from social media or Fox News were more likely to support stigma (Grivel et al., 2021). Moreover, a lot of false information regarding COVID-19, conspiracy theories, and fake news have spread extensively on social media, possibly with harmful effects (Ellis, 2020; Frenkel, Alba & Zhong, 2020). According to Bavel et al. (2020), conspiracy theory belief has been connected to extreme political opinions, vaccine hesitancy, and prejudice. The intense feelings are largely used by social media and mainstream media to spread anger toward a specific community (Balabantaray, 2022). People may rely more heavily than other information on unfavorable information regarding COVID-19 when their negative emotions rise (Bavel et al., 2020). In Kartono et al. (2022), if the public's intellectual capacity is

still lacking, the spread of false and fake news becomes a major concern, in particular that which is disseminated via the Twitter platform and published by irresponsible individuals. Thus, social divergence may be influenced by media coverage, which contradicts the core concepts of inclusivity and integration (Mahabir et al., 2022).

As with most COVID-19-related issues, partisanship and media consumption patterns are likely to have an impact on these perceptions as well (Gollust & Haselswerdt, 2023). An increased tendency for political conservatism, right-wing authoritarianism, and prejudice against members of the outgroup may result from exposure to both objectively threatening situations and subjective feelings of threat, including pandemic diseases (Pacilli et al., 2022). The desire for national cohesion that led to the rejection of sexual dissenters was predicted by authoritarianism (Golec de Zavala, 2021). Republican discrimination against Chinese-born Americans was greater than that of non-Republican discrimination (Abascal, Makovi & Xu, 2023). Furthermore, across two national studies of Kerr, Panagopoulos & Van Der Linden (2021), they reported that there is a strong correlation between conservative political ideology and lower perceived risk of the virus, lower trust in scientists and the WHO, and higher confidence in government authorities to manage COVID-19. These ideological differences and behaviors have a strong correlation, such as mask-wearing and handwashing were mentioned by conservatives as protective measures.

The pandemic has increased social identity, strengthened ingroup boundaries, and widened group gaps (Dovidio et al., 2020). When intergroup competition

processes are activated, they can also directly cause people to perceive an increase in discrimination, mistrust, anxiety, and avoidance of intergroup interactions (Gordils et al., 2021). In Abrams, Lalot & Hogg (2021), other-blaming is one way for groups to protect and preserve a positive ingroup social identity while diminishing uncertainty about the causes of the situation, which has significant implications for prejudice and the treatment of minority groups. Besides, they have mentioned that changes in public discourse during this pandemic reflect the change from popular ingroup to intergroup definitions of identity. Public discourses that use media narratives have the potential to spread stereotypes about marginalized groups, which can be dangerous (Mahabir et al., 2022). As a result, outgroup members are now more susceptible to trauma and devaluation, which lowers their capacity to tolerate conflict (Marmarosh, 2022). Consequently, the pandemic may negatively impact intergroup relations.

#### **1.4 Purpose of the current study**

Based on the above-mentioned premises, we provided a systematic review of the studies aimed at investigating the impacts of COVID-19 on groups perceptions, attitudes and behaviors towards minority groups. During and after the pandemic, ethnic groups like Asians, Black Americans, and other national/ ethnic minorities were specially targeted. In the current review, we specially focused on the negative effects of COVID-19. In the following sections, we summarize the methodology and the relevant corresponding evidence.

## **Chapter 2**

### **Methods**

#### **2.1 Search strategy and selection criteria**

The aim of this study was the effects of COVID-19 on attitudes and perceptions towards minority groups, as well as their outcomes. To do so, this research was carried out following Arksey and O'Malley methodology (2005) and results were presented using the PRISMA standard (Preferred Reporting Items for Systematic Reviews Meta-Analyses; Moher et al., 2009).

Initially, two of the most widely used bibliographic databases, Web of Science and Scopus, were employed in the research at the end of June 2023. The areas of study focused on psychology, behavioral sciences, social sciences and social issues. Only English-language scientific journal articles and literature reviews published after 2020 were included in the search. COVID-19 has spread fastly to all over the world and caused immediately a global outbreak from early 2020. Then, to collect all related articles, three simple words were combined using the Boolean operator AND such as COVID-19, minority/ies (OR race OR ethnicity), attitudes (OR stereotypes OR evaluation or discrimination OR prejudice). We looked for studies with these keywords in the title, abstract, or text body.

## 2.2 Results

There were 1185 retrieved references, and two team members downloaded them from Scopus and Web of Sciences, and then uploaded them into Rayyan. This software is a web tool to assist researchers with systematic reviews and other data synthesis projects (<https://www.rayyan.ai>). Figure 1 shows the results of the study with PRISMA flow diagram.

After 389 duplicates were eliminated, 796 records were screened by Rayyan analysis. Then, we divided 796 articles among the three team members, and each of them evaluated deeply the abstracts of 265 articles. We classified the articles as “Included”, “Excluded” and “Maybe”, and noted our reasonings in Rayyan, so that other members could review them again. Overall, 730 articles were removed because the content was unrelated to the research question. The data from the eligible studies were extracted in a pre-defined Excel sheet, with following columns: (1) Author and Year, (2) Independent Variable, (3) Dependent Variables, (4) Other variables (if moderators/mediators were included in the study), (5) Target group, (6) Type of study, (7) Focus on age /gender/ minorities/ processes / Covid status, (8) Effects on stigmatized groups. Finally, we retained totally 66 articles, including 7 theoretical studies and 59 empirical articles.

Initially, two team members were in charge of downloading the articles from the data banks by entering the selected word strings for the research. Then, two more members joined in the analysis and we all independently read the abstracts and full texts to determine their relevance to our research question. Within the research group,

the findings were shared, discussed and concluded by ongoing communication. All the disagreement about studies, we conducted in discussion meetings together or with supervisor. Until we reached complete agreement, we moved on to the next stage of the procedure.

Of the articles screened, most of the articles focused on the conditions of racial minorities, while a small number of articles addressed other social minorities across a range of global cultural contexts. We divided in four main groups: All minorities, Asian minorities (including both Asian Americans and Western Asian), Black people (including African Americans and other worldwide Black minorities) and other minorities (including Romani, the elderly, Muslims etc.). All the papers selected were presented Table 1 in appendix.

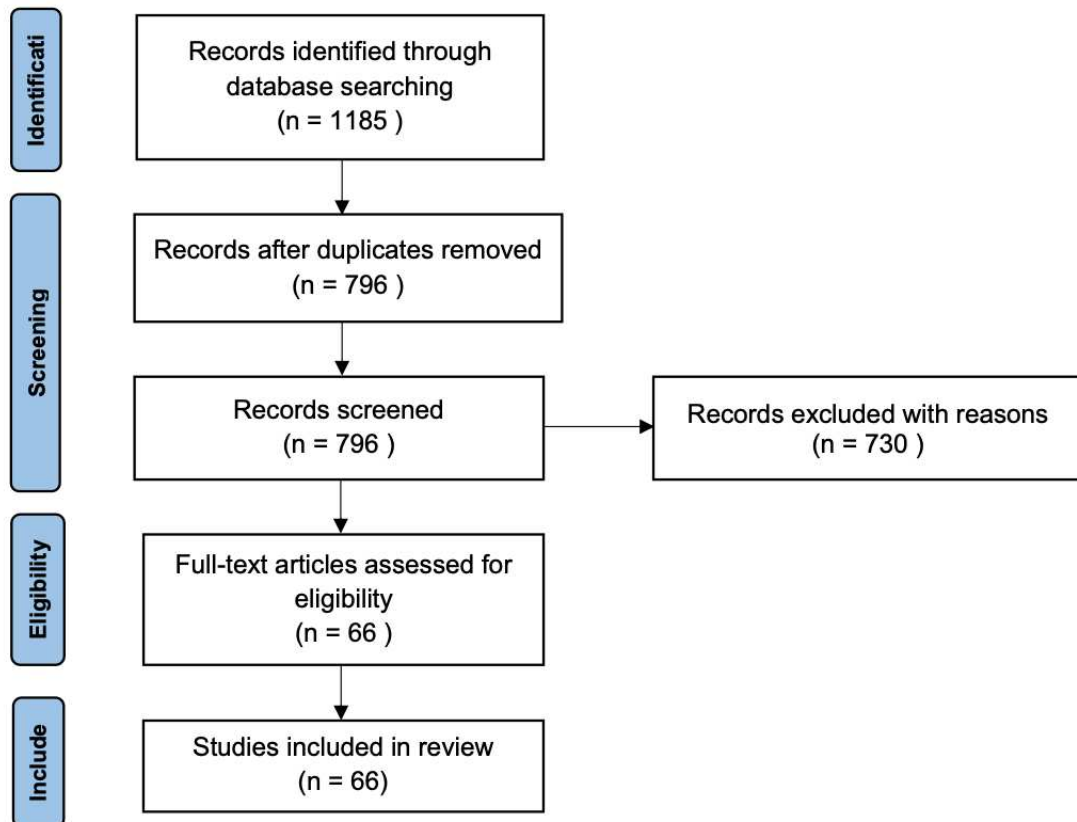


Fig.1. PRISMA Flow Diagram for Study Selection



## Chapter 3

### Results

#### 3.1 All minorities

Anyone could potentially contract the virus. However, the disease seemed to target some groups more than others, such as minorities (Crepaz, 2022). Similarly, minority groups are more vulnerable to COVID-19 related illnesses and deaths than the general population (Berchet, Bijlholt & Ando, 2023). For example, according to Boserup, McKenney & Elkbuli (2020), in numerous US states, ethnic minority groups had higher cumulative COVID-19 infection and death rates than white people; Berchet et al. (2023) found that Black and Hispanic individuals have a death rate from COVID-19 that is at least twice than White individuals in the few countries that provide ethnicity-specific mortality data. Also, from the study by Public Health England, the risk of dying from COVID-19 was more than four times higher for ethnic minority groups compared to British White individuals (Gray & Hansen, 2021).

As we know, COVID-19 has resulted in an adverse economic shock as well as a health crisis. In 2020, the world's gross domestic product (GDP) decreased by 3.4 percent to reach 84.9 trillion US dollars. It meant that more than two trillion dollars' worth of lost economic output results from a 3.4 percent decline in economic growth (Dyvik, 2024). On the other hand, the disease can be linked to health imbalances that

appear to be getting worse as a consequence of the pandemic and social determinants of health are the primary factors influencing a person's susceptibility to COVID-19 (Crepaz, 2022). Crepaz (2022) also mentioned that individual health was badly impacted by racism and discrimination, particularly in the social and mental areas. Hahm et al. (2021) found a significant correlation between discrimination related to COVID-19 and an elevated level of symptoms of posttraumatic stress disorder (PTSD), but not of anxiety or depression. Furthermore, based on a systematic review of Usher et al. (2020), the examined research showed a variety of psychological effects, including PTSD, anger, anxiety/worry, and emotional distress/mental distress. Depending on the condition, different psychological outcomes were more common.

When the COVID-19 broke out, politicians and common people looked for someone to blame. People from marginalized groups, such as immigrants and members of racial, ethnic, or religious minorities, were frequently the targets of blame (Dionne & Turkmen, 2020). Increased discrimination against ethnic minority groups due to COVID-19 confirms that racism is deeply ingrained in these experiences, and that the discrimination is not just a result of the virus (Le et al., 2023). Dionne & Turkmen (2020) mentioned that targeting marginalized groups is referred to as "othering." When a group of people—typically a majority group or an in-group—treats another group of people—typically a marginalized group or an out-group—as though there is something wrong with them, it is known as "othering." According to Perry, Whitehead & Grubbs (2021), White Christian nationalism in US, which made overt distinctions between "us" and "them" served as a foundation the for the diverse,

xenophobic, and racist interpretations of COVID-19. These interpretations are a part of a pervasive, politically-strategic ethnoreligious ideology. Therefore, it might be an especially strong predictor of racist and xenophobic COVID-19 interpretations.

Briefly, the pandemic has a negative impact on all minority groups.

### **3.2 Asians**

The first set of findings we presented in this work is about how the pandemic affected people's perceptions and attitudes toward the Asian community. According to WHO (2015b), terms that should be avoided in the names of diseases include names of people, places, animals or food species, cultural or occupational references, industry or occupation, and terms that cause unwarranted fear. Unfortunately, former US President Donald Trump has constantly called the ailment the "China virus," the "Wuhan virus" or even "Kung Flu", and he has also blamed Chinese people and Asians in general, either directly or indirectly (Crepaz, 2022; Lantz, Wenger & Mills, 2023; Perry et al., 2021), and numerous media have indicated that the rise in anti-Asian harassment can be attributed to this stigmatization (Zhao, Tinkler & Clayton, 2022). Additionally, reporting increased as a result of the media's focus on stigmatizing language, which also enhanced visibility and awareness (Zhao et al., 2022). A majority of Asian people were singled out by claims of racism of being virus spreaders during the COVID-19 pandemic. Because of this, we have included (n = 29)

papers in this section that discussed the rise in hate crimes, stigmatization and discrimination against Asians associated with the virus.

Hate crimes against Asians people have increased as a result of COVID-19. Center for the Study of Hate & Extremism (2021) found that officially recorded anti-Asian hate crimes in 16 major US cities had increased by 145% in 2020. In Italy, Dipoppa, Grossman & Zonszein (2023) showed that COVID-19 led to a sharp rise in the number of hate crimes committed against Asians. The increase was concentrated in cities where excess morality was not higher but expected unemployment was, and hate crimes are not strongly supported by the role of individual prejudice, but rather by a xenophobic national discourse and local far-right institutions. Moreover, according to Wenger & Lantz (2022), bias, bias crime, and discrimination have not only affected the Asian community but also other minority communities during the COVID-19 pandemic, like Black and Hispanic. Racism and xenophobia have a close relationship with fear and financial hardship.

One important finding about the relationship between COVID-19 and racism is that it altered attitudes toward Chinese people (Gray & Hansen, 2021). In the US, popular culture and news media depicted Asian Americans as the “Yellow Peril” during the late 19th and mid-20th centuries, signifying the fear that the West had of non-white, uncivilized Asian invasion and dominance (Tessler, Choi & Kao, 2020). Besides, Asians are frequently referred to as “model minorities” in both the US and the UK (Gray & Hansen, 2021; Ren & Feagin, 2021). However, when viewed through the perspective of white racial framing in society, this term’s perception of Asian

Americans may appear favorable, but it actually contains strong racist connotations (Ren & Feagin, 2021). The central idea of the white racial worldview is to emphasize the positive subframe of white virtue while characterizing the racialized “others” as anti-white and virtuous. This includes the use of false narratives, negative stereotypes, hostile feelings, and a propensity for discrimination (Ren & Feagin, 2021). When the COVID-19 pandemic attacked, it started in Asia and quickly spread to the racially divided US and political tensions. Crepaz (2022) mentioned that racializing minority groups made it possible to transform Asians from a well-integrated “model minority” into a group that was seen as dirty or even directly as a health risk. Minorities’ physical, mental, and social wellbeing suffered as a result of the discrimination and racist attacks triggered by these public images. The racialized foreignness of Chinese immigrants became an influential and useful scapegoat for social and economic injustices, constructed by white people. Likewise, to rebuild to control and decrease uncertainty during times of crisis, people respond to this vague threat by blaming specific scapegoats for the crisis. Thus, scapegoating happens when people feel threatened and assign “causal attribution” to particular groups for the unfavorable effects of such events (Drouhot et al., 2021). Closely, according to Fuochi and colleagues’ empirical research (2021), xenophobia and negative sentiments toward Asian Americans in the US were positively correlated with concerns about COVID-19. The COVID-19 threat has the potential to create or worsen animosity and tensions between groups, which can lead to disdain, mistrust, or resentment toward people who are seen as different.

According to Gary & Hansen (2021), ingroup prejudice and in extreme situations, violence was sparked by a particular event. Because in moments of fear or anxiety, people turn to stereotyped, xenophobic, or racist viewpoints. This may have contributed to the spread of prejudice that finally led to the rise in hate crimes that we have observed. Crucially, social judgments and stereotyping are applied to outgroups that are somehow perceived to be responsible for the incident rather than to individual members. This kind of collective blaming makes all group members easy targets for retributions and excuses any unfavorable behavior toward the group as a whole, that is now viewed as a form of legitimate or “vicarious retribution”. Similarly, Marmarosh (2022) mentioned that people were more likely to hold their group identities and susceptible to undervaluing outsiders, and minority groups were more likely to suffer traumatic reactions, which could affect their capacity to handle group conflict. Thus, the integration of different factors, such as economic hardship, the exposure of racial fault lines, heightened intolerance and diminished empathy of minority groups has resulted a risky environment for the emergence of bias and bias crime (Wenger & Lantz, 2022).

Furthermore, Ren & Feagin (2021) found 82 anti-Asian incidents after going through a lot of reports and looked at the hate crimes that Asian Americans experienced during the COVID-19 pandemic, specifically the numerous attacks on people who wore masks. They discovered that, in the US, white people were mostly responsible for attacks against Asian Americans. “Whiteness” is so closely linked to socio-political dominance in US history that white people impose a “non-white”

identity on immigrant groups those who consider to be inferior and foreign. Asian Americans, including those who were born in US, also have long been stigmatized as being immigrants and outsiders (Kahn & Money, 2022). This brings anti-Asian xenophobia in context. Moreover, the West negatively stigmatized those who were ill or weak. Asians were stereotyped as being sick, that Asians are necessarily foreign or socio-racially inferior, and that people who wear masks are funny. Meanwhile, the cultural symbol of face covering is also badly linked to long-standing American news and entertainment imagery of criminals wearing masks. Masks have a disproportionately negative impact on how minority people are perceived, and this negative impact is aggravated by preexisting negative perceptions about protective masks (Dudarev et al., 2022). Besides, the study of Lang, Erickson & Jing-Schmidt (2021) suggested that a clear polarization in rhetoric between pro- and anti-mask hashtags in terms of semantic hostility. Also, the data revealed an asymmetric participatory polarization, with a preponderance of pro-mask hashtags and an “echo chamber” effect in the pro-mask dominant group that ignored the subversive discourse of the minority that opposed masks.

When deciding whether to wear face masks to stop the virus from spreading or to risk infecting COVID-19, minority groups were faced with a dilemma. In the study of Kahn & Money (2022), wearing a face mask in public during COVID-19 framed a unique identity threat to Black and Asian people in the United States, according to two studies conducted three months apart (May 2020 and August 2020). When wearing a mask, they both reported feeling threatened based on their race, which had

an impact on their safety and health practices. The stereotype that Asian Americans are “perpetual foreigners” and possible “spreaders of COVID-19”, and that they frequently suffer verbal and physical abuse as a result, was brought to light by wearing a mask in public. Likewise, Daley, Gallagher & Bodenhausen (2022) discovered that White participants were more likely to stereotype Asian Americans as “perpetual foreigners” when they felt more threatened and blamed China for the pandemic. Kahn & Money (2022) also suggested that their “otherness” may have been accentuated by the mask, which primed the identity threat associated with COVID-19’s origins and spread. The race-based social identity threat posed by masks decreased their tendency to wear face masks when mask wearing was advised but not obliged. Additionally, with frequent use of photos of Asians wearing masks as the “face” of the pandemic, the media helped to maintain this stereotype. However, using face masks is less stigmatized and more common in Asian nations. In Asian cultures, masks are considered as a politeness to stop diseases from spreading to others as well as a sign of illness (Jennings, 2020). The application of face mask rules in reaction to the COVID-19 pandemic causes confusion in the emotion perception process, which makes it more difficult to accurately perceive emotions (Primbs et al., 2022). Similarly, according to Cooper and colleagues (2022), they demonstrated that emotion recognition was not significantly impacted by the perceiver’s and stimulus’s ethnic matching, but masks and negative attitudes toward them were linked to worse emotion recognition.



On a different prospective, social stigmatization of Asian Americans over COVID-19 has increased. The stigma associated with COVID-19 has a variety of harmful effects on the physical, emotional, and mental health of those who are affected, including social exclusion, labeling, avoidance, shame, and disgust (Grivel et al., 2021; Ponder, Uddin & Sun, 2023) and diminishes the behavior of seeking health, help and treatment (Bhano et al., 2021). The labels link individuals to negative traits that may develop into stereotypes of the “outgroup,” resulting in discrimination and loss of status (Grivel et al., 2021).

According to Dhanani & Franz (2021), they contributed an experimental design to evaluate the impact of stigmatized language used to characterize the virus on COVID-19 prejudice as well as the virus faces to one’s physical and financial well-being. Findings from 2x2x2 between-subjects analyses of covariance showed that highlighting the link between China and COVID-19 raised prejudice against Asian Americans, the idea that Americans should have attention on immigrants when it comes to resources, and generalized xenophobia. Stressing how serious the virus’s economic effects are also contributed to a rise in xenophobia and the idea that Asian Americans face a resource threat. Moreover, Johnson and colleagues (2023) aimed to examine whether perpetrator-directed punitive responding (support for criminal charges) to a COVID-19-related attack on a Chinese victim by a White male could be predicted by prejudice-related personality traits, such as right-wing authoritarianism (RWA) and COVID-19-driven psychological resource loss. They found that the COVID-19 pandemic can also cause feelings of resource loss, which can reduce the

egalitarian reactions that low RWA people typically report. People with high RWA typically report more outgroup-directed prejudice because of COVID-19-driven threat perceptions. Overall, even among low RWA participants, COVID-19 psychosocial resource loss can lessen supportive responses toward members of disadvantaged minority groups who have been victimized.

Similarly, to understand why Asian Americans have been subjected to an increased number of hostilities throughout the pandemic, Abascal and colleagues (2023) record discriminatory behavior toward Chinese versus U.S.-born Americans using a give-or-take dictator game (DG) at time-points: May and October 2020. They reported that negative actions directed toward Asian Americans may have resulted from stigmatizing language that supported preexisting beliefs, from preexisting prejudices themselves, or from both. Hostility toward Asian Americans may have been sparked by fears of contagion resulting from a behavioral immune system (BIS), particularly among those Americans who are susceptible to COVID-19. Even after the objective connection between group membership and the stigmatized trait or after the link has been established, those Americans who were more susceptible to stigmatizing, right-wing rhetoric and who most likely harbored stronger anti-Asian sentiments persisted in their discrimination against Chinese-born citizens.

Furthermore, the research of Ponder and colleagues (2023) aimed to comprehend these lived experiences with stigmatization and the coping mechanisms that followed the pandemic through focus groups and participant interviews. They found that Asian Americans followed COVID-19-related health guidelines even through stigmatized

behavior and attitudes from others, probably because they felt there was a high risk to their own health. Asian Americans' buying habits have also rapidly shifted to include nearly everything online. Because of the pandemic and concerns about personal safety, social distancing can also be used as from a coping mechanism to avoid people of worry of being stigmatized in public places.

We have already discussed the role of disgust in the behavior immune system. On the other hand, Georgarakis provided an alternative viewpoint by examining anti-Asian sentiments relating the priming of incidental disgust. According to Georgarakis (2023), bias against racial minorities and immigrants can be sparked by disgust. Disgust sensitivity is the foundation of prejudice against minority groups and immigration, and it stems primarily from resistance to foreign norms rather than real health risks. Besides that, information exposure only had an impact on preferences for punitive regulations meant to stop the virus from spreading. The transition in attitudes toward Asian minorities, preventive measures, and policies related to or unrelated to the pandemic was caused by the stand-alone effect incidental disgust, as well as its joint effect with information exposure. At the same time, political elites strategically play on people's emotions in order to influence political engagement and enhance support or resistance for specific policies or candidates. For instance, the politics of disgust by President Trump when he referred to the coronavirus as a "Chinese" or "Wuhan" virus; the governor of Veneto and rising star of the anti-immigration Lega party, Luca Zaia, proposed that poor Chinese hygiene may be the cause of COVID-19 (Gray & Hansen, 2021). Zhao and colleagues (2022) demonstrated that regardless of

political party, white Americans were less giving to Asian Americans after learning that Asia was home to a new disease threat.

In addition, there have been more reports of xenophobic and racist incidents against Chinese Americans since the COVID-19 pandemic, and the media has been a major factor in these incidents. In accord with Haft & Zhou's research (2021) aimed to address mean differences in the perception of discrimination and anxiety, investigate potential media exposure that negatively mediated relations between COVID-19 and discrimination, and determine whether perceived discrimination and anxiety were mediated by COVID-19. The results showed that participants reported much higher levels of anxiety and perceived discrimination than those who did not participate prior to the pandemic, and a common response was hypervigilance, which added to the overall negativity bias present in self-reports. During the pandemic, the percentage of derogatory tweets about Asians rose by 68.4%, meanwhile the percentage of negative tweets that mentioned other ethnic minorities, stayed mostly unchanged (Nguyen et al., 2020). Moreover, there is a higher chance of encountering direct and indirect racial discrimination online when using social media in relation to COVID-19. Racism on social media raised awareness of real-world racism, which can cause unfavorable feelings and a low quality of life (Shin et al., 2023).

In conclusion, the COVID-19 pandemic had a negative impact on people's attitudes and perceptions of the Asian community, particularly Chinese people. Nonetheless, it is important to acknowledge the limitations of these results, primarily due to the excessive focus on the American context and the lack of research from

Europe and other contexts. Also, lack of research from Europe and other contexts highlighted the need of a complete, scientific, multidimensional researches in the future to investigate the pandemic's worldwide effects on Asian communities.

### **3.3 Black People**

According to White (2020), the US added 56 new billionaires between roughly mid-March and December; in the months since the pandemic started, the combined wealth of these few Americans has increased by more than \$1 trillion. As we know, COVID-19 has caused a severe health crisis and unfavorable economic shock worldwide, particularly in the United States, hundreds of thousands of people have been lost and the wealth gap has gotten wider. Even though, the COVID-19 pandemic's effects on the Asian population have received a lot of attention, but other racial and ethnic minorities have experienced serious consequences and have been vulnerable to victimization motivated by bias, like Black people.

According to Jaspal & Lopes (2021), suggested conducting a study to examine how the COVID-19 pandemic affected Black and South Asian individual's mental health outcomes in the UK, including the measures of life satisfaction, generalized anxiety, depression, fear of COVID-19, religiosity, identification with the British nationality, and perceived discrimination. Compared to South Asians, Black participants reported experiencing ethnic discrimination more frequently. Fear of the COVID-19 virus was directly impacted and life satisfaction and British national

identification were indirectly impacted. In turn, a fear of COVID-19 was linked to higher levels of anxiety and depression as well as lower levels of life satisfaction.

From a perspective, Wenger & Lantz (2022) used data from an opt-in web-based survey conducted in May 2020 to investigate the prevalence of discrimination, victimization from hate crimes, and fear of victimization among Black and Hispanic people during the pandemic. The present study's respondent characteristics encompass race/ethnicity, gender, and foreign-born status. Those of Spanish, Latino, or Hispanic descent were either born abroad or in the US. Initially, they found that both in criminal a non-criminal context, Black and Hispanic respondents experienced bias victimization during the COVID-19 pandemic. Secondly, there are significant gender disparities in the prevalence of bias victimization and regardless of the type of bias, men experienced victimization higher than women. And, particularly essential workers are more vulnerable to bias victimization, whereas people who practice more extreme social distancing are less likely to experience bias victimization. Finally, compared to those who were unemployed before the pandemic, those who lost their jobs during it were more likely to experience bias victimization, especially among Black respondents. Thus, black and Hispanic communities must deal with the risk of infection in addition to the risk of being victimized by prejudice and discrimination, which can result in physical harm, fear, and anxiety.

Furthermore, to demonstrate whether the victim's race and the participants' degree of stress related to crime (stress resulting from being the victim of a crime) would affect the participants' ability to empathize with the victim. The findings were

that when participants experienced high levels of stress, they showed less empathy for the Black victim in comparison to the White. Black victim-directed empathy was higher during times of low stress. The effects of race on empathy were mediated by increased high stress attribution of stereotypes about Black women to the Black victim and decreased low stress attribution. Even in workplace, little evidence of racial discrimination against Black job seekers has changed over time and Black women experience distinct and intricate forms of discrimination that are not experienced by Black men or White women (Chavez, Weisshaar & Cabello-Hutt, 2022).

From another point of view, to investigate if white Americans' perceptions of COVID-19 policies were influenced by learning about the unequal effects of the virus on Black people, Stephens-Dougan (2023) conducted a survey experiment involving a nationally representative sample of white Americans. The authors discovered that White Americans with racist views who were exposed to the treatment underplayed the significance of wearing a mask. Additionally, they became less likely to believe that African Americans adhere to social distancing guidelines and also more likely to see shelter-in-place orders as a threat to their personal freedoms and rights. White Americans who supported anti-Black stereotypes showed greater resistance to COVID-19 restrictions after learning about the racial disparities associated with the virus. Enhances, the pandemic is based on race. Similarly, in a study of potential effects of spreading information regarding racial differences in COVID-19-related mortality rates. Harell & Lieberman (2021) examined that those Black respondents

who without prior knowledge felt more risky after receiving this information. In contrast, White people who have less optimistic attitudes toward Black people also perceive less risk and are less likely to support a strong reaction.

Additionally, two studies of Franks, Xiao & Hesami (2022) explored the relationship between the COVID-19 pandemic and the ongoing struggle for racial justice. People with high levels of anti-Black bias report less support for welfare programs. It is frequently discovered that racial bias predicts these attitudes more strongly than political orientation. Additionally, research has shown that racial bias is associated with lower support for universal health care as well as a tendency to put blame for poverty on the poor themselves. It could be unnecessary to frame issues in terms of Black disadvantage and lessen recognition of racial injustices. In brief, the findings indicated that racial framing interacts with participants' racial bias through a variety of mechanisms to indirectly affect policy support.

Black people are more likely to be less wealthy, educated, or work in hazardous environments (Miller et al., 2023). Although wearing a mask might have been the best defense, it may also have increased their vulnerability to discrimination. According to Kahn & Money (2022), wearing racially charged apparel reinforces implicit racial stereotypes and influences decisions to fit the stereotype. For example, hoodies and bandanas have been “racialized” by association with gangs and criminality, feeding prejudices about Black people. During the pandemic, Black people who wore face masks, especially homemade masks or bandanas, ran the risk of “looking like a criminal” because of their race, as well as of being singled out for racial profiling,



surveillance, and attacks by the police and public. In the same way, Christiani and colleagues (2022) suggested that when a black male model wears a bandana or cloth mask, non-black respondents view him as less trustworthy and more menacing than when he does not. This is especially true for respondents who score higher than average on racial resentment, a common indicator of racial bias. This is a result of persistent and harmful stereotypes that link criminality to black men but not White men. One of the most recent contexts in which stereotypes of Black people are influenced by criminality is COVID-19.

In summary, the articles mentioned that have been presented highlight the disparate impacts on Black people all over the world, in particular in US. Besides worsening Black people's psychological and social well-being, the rapid spread of COVID-19 also increased victimization and discrimination driven by bias and hate crimes. Because of the historical and ingrained stereotype of Black communities, the pandemic highlighted the link between racial stereotype and criminality. As a result, just like with Asians, wearing masks in public presents a dilemma for them.

### **3.4 Other minorities**

In addition to Black and Asian people, who were the two ethnic minorities most severely affected by the pandemic, other ethnic groups in the society have also experienced severe injustices and negative effects across a range of global cultural contexts.

Firstly, the Romani people that have always been marginalized, abandoned, and subjected to persecution in the various nations where they have settled, particularly in Europe. Júnior & Gonçalves (2022) mentioned that the term “antigypsyism” or “Romaphobia” refers to the discrimination against the Romani populations, which includes the construction of Romani portrayals as the perpetual outsider and the disqualification through stereotypes, with their identities associated with poverty and marginalization. From the perspective of coloniality of knowledge, the Romani people are invisible in science because they are either excluded from studies or, in the case that they are, have their voices silenced in the official narratives. From a colonial point of view, racial demising, silencing, and stereotyping are examples of how invisibility is distorted. The media is crucial in shaping public discourse, influencing how people construct their identities, and influencing how the majority society and minorities interact. However, hegemonic media frequently creates dominant negative messages about minorities rather than refuting stereotypes about them. As a result of internalizing these stigmatized representations, minorities may develop low self-esteem or stereotypes. These strategies are employed in all symbolic products of the hegemonic media, and they have an impact on how various societies perceive themselves socially and feed racism and prejudice in public policy.

The study of León (2022), seek to examine the prevalence of Covid-19 among the Eastern European Roma community living in Spain and to investigate multifaceted effects that the pandemic has had on housing, work, education, and fundamental rights. The author found that anti-Roma sentiments have been grown in

the general public as a result of the encouraged ethnization of the pandemic. Stigmatization has violated the fundamental rights of the Roma population in the European context and served only to heighten levels of racism, xenophobia, and structural discrimination. In the same way, Platt & Warwick (2020) suggested that certain groups may be more susceptible to disease development, death, and transmission in their communities due to their living conditions. The ethnic minority background has an impact on these living conditions. The Roma minority is more likely to experience social exclusion within Europe, which increases their risk of morbidity, mortality, and the psychological, social, and economic effects of the pandemic.

In India, according to Balabantaray (2022), hate crimes against Muslims have affected them more than any other ethnic or religious group. Islamophobia against Muslims has become more extreme as a result of violent and ideological attacks, including riots and murders. Polarization and discrimination against minorities result from the mainstream media and social media's heavy reliance on these intense feelings to fan anti-Muslim sentiment. The Muslim community has experienced a wide range of mistreatment, threats, and denials of access to medical care. Similarly, Pervasive and harmful cultural stereotypes about already marginalized urban communities were reinforced by media coverage of the pandemic in Jamaica (Mahabir et al., 2022).

In Brazil, Bragato, Rios & Bernardi (2021) found that Brazil's indigenous peoples have a long history of discrimination against them in public life, including

denials of rights to life, health, education, and water, as well as a lack of representation in the major decision-making processes. Further, the government has been taking steps to undermine indigenous protection organizations and public policies, avoid drawing boundaries and validating discriminatory speeches. These policies put indigenous people at serious risk of poisoning and death by encouraging groups interested in land and natural resources to invade and attack their territories. The COVID-19 pandemic enhanced discriminatory practices that had previously been combined even more severe.

In Poland, in reaction to the pandemic, Poland's average level of authoritarianism rose along with the awaited desire for national cohesion. Following this rise, there was a greater focus placed on maintaining national unity, which led to the rejection of those who disagreed with traditional sexual norms. Consequently, sexual dissidents faced rejection (Golec de Zavala et al., 2021). Likewise, in Italy, Right-wing authoritarianism's negative impact on dislike for immigrants and sexual minorities was heightened by COVID-19 anxiety, but not for obese or disabled people (Pacilli et al., 2022). However, the study of Markina, Bilbao & Castillo (2023) examined how obesity was covered by the Spanish media in the first year of the COVID-19 pandemic. Consequently, in the media, the narrative that links personal responsibility for obesity's cause should be avoided because it increases social stigma and pushes prejudices based on weight.

In China, Jiang et al., (2021) found that Wuhan locals and COVID-19 patients have experienced stigma on both an individual and a community level. Early in the

pandemic, people who belonged to ethnic minorities, had low health literacy, and lived in areas where there were a lot of COVID-19 cases were more likely to stigmatize other people. Moreover, the stories from Nigerians in Guangzhou exposed a pandemic control strategy whereby Africans face discrimination, including racialized forms that accentuate the danger of African bodies, and are barred from specific areas (Adebayo, 2023).

COVID-19 had a negative impact on many ethnic groups worldwide, but it also negatively and heavily affected the elderly. Nearly 95% of COVID-19 deaths occurred in adults over 60, and over 50% of all deaths involved individuals 80 years of age or older, even the problem of elderly abuse and abandonment has been made more dominant by the pandemic (Wang, 2021). People of all ages have both favorable and unfavorable stereotypes about the elderly (Reissmann et al., 2021). Negative stereotypes that are frequently applied to older people include their poor physical and mental abilities, loneliness, lack of productivity, and unattractive appearance (Reissmann et al., 2021). Ageist attitudes toward older and younger people during the COVID-19 crisis have been largely shaped by unfavorable age-related stereotypes (Werner, AboJabel & Tur-Sinai, 2022). Findings from Lagacé et al. (2021) indicated that the media aging and older adults appears to be one way that COVID-19 pandemic has aggravated collective expressions of ageism. Besides that, the media primarily highlighted the “problems” raised by an aging population, implicitly, by older people. It was uncommon to represent older people as a source of strength and

encouragement. In the media discourse, the viewpoint of older adults was essentially ignored. In the same way,

In summary, the mentioned studies showed that, within a different social, economic, cultural and geographical context, every one of these marginalized communities were considered as a potential threat, a “perfect” scapegoat and a target of widespread hostility and discrimination.

## **Chapter 4**

### **General discussion**

Initial studies suggested that human behavior may be influenced by pathogen-avoidance mechanisms, high pathogen threat (e.g., COVID-19 threat) influences pathogen avoidance mechanism (Makhanova & Shepherd, 2020; Schaller et al., 2015). Disgust is not only a key indicator of Behavioral immune system (BIS), but also could lead to increase prejudice against immigrants and racial minorities (Georgarakis, 2023; Oaten et al., 2009). So that we connected the BIS to the COVID-19 pandemic. Further, several researches showed that minorities as ethno-racial or immigrants, had a higher proportion of infections and deaths during the COVID-19 pandemic, and discrimination associated with COVID-19. Overall, this systematic review of the literature sought to explore how the onset of COVID-19 pandemic may have affected group perceptions, attitudes and behaviors towards minorities.

To do so, we identified the articles related by employing Arksey and O'Malley's (2005) methodology and presented the findings by the PRISMA standard (Moher et al., 2009). The ethnic minorities were divided into three main groups: Asians, Black people and other minorities across the globe.

In the Asian context, we found that "Othering" is a term used to commonly describe targeting marginalized groups. Such as labeling minority groups as "non-white" and viewing them as inferior and outsider (Ren & Feagin, 2021). The Asian

community serves as a convenient scapegoat to blame when negative outcomes occur. Moreover, COVID-19 threat, fear of contagion and anxiety worsen hostility and tensions between groups, which can lead to stereotype, xenophobic, racist perspectives, a propensity for discrimination and even, the violence. Politicians and social media both use social stigmatization, either directly or indirectly, to aggravate conflict between groups. Due to the pandemic, stigmatization of specific individuals and community groups has resulted in the emergence of prejudice, racism, groupthink, discriminatory attitudes, and other negative attitudes (Kartono, Salahudin & Sihidi, 2022). Additionally, the research demonstrated that Black people were the targets of bias victimization and hate crimes, which could cause physical harm, fear and anxiety. White Americans became less likely to believe that African Americans follow social distancing rules and also more likely to see shelter-in-place orders as a threat to their personal freedoms and rights (Stephens-Dougan, 2023).

#### **4.1 Limitations**

Although there are some useful outcomes revealed by these studies, it's important to acknowledge several limitations. First, the excessive focus on the American context and the lack of research from Europe and other contexts. More researched from worldwide contexts should be integrated to understand the pandemic's effects on minority communities. Second, most studies were conducted during the pandemic, current knowledge is insufficient to handle the wide range of



negative consequences linked to the COVID-19 disease outbreak. As is well known, the pandemic has a significant and persistent effect on the lives of minorities. But, after the pandemic has passed, responses to COVID-19 related discrimination should take into account the long-term effects on ethnic minority groups. At last, the bulk of studies that targeted minority groups as a whole ignored to consider from various factors, like how the pandemic affected minority groups with varying employment or socioeconomic status.

#### **4.2 Directions for future researches**

In the past, minority health has not been a primary concern. However, the COVID-19 pandemic has brought attention to these problems with health inequality. One possible strategy for offering possible opportunities for reducing health disparities is to address the social determinants of health. Therefore, discussing appropriate policy measures through efforts from all societal sectors is one future direction may take.

Moreover, the social media plays a big role in the spread of intergroup conflicts, racial stigmatization, anxiety, COVID-19 related panic and threat, and false and fake news. The government and relevant organizations should work together to provide and publicize citizens with trustable advice and implement measures to control misinformation.

Having good relationships with immigrants and being acceptable of different culture can foster a sense of community among individuals and social groups (Fuochi et al., 2021). This review may provide a new approach to develop an open and empathic communication style, especially politicians. Thus, contact interventions could be a helpful method to decrease misunderstanding and animosity toward outgroups.

## References

- Abascal, M., Makovi, K., & Xu, Y. (2023). Politics, not Vulnerability: Republicans Discriminated against Chinese-born Americans throughout the COVID-19 Pandemic. *Journal of Race, Ethnicity, and Politics*, 8(1), 83-104.
- Abrams, D., Lalot, F., & Hogg, M. A. (2021). Intergroup and intragroup dimensions of COVID-19: A social identity perspective on social fragmentation and unity. *Group Processes & Intergroup Relations*, 24(2), 201-209.
- Ackerman, J. M., Hill, S. E., & Murray, D. R. (2018). The behavioral immune system: Current concerns and future directions. *Social and Personality Psychology Compass*, 12(2), e12371.
- Ackerman, J. M., Tybur, J. M., & Blackwell, A. D. (2021). What role does pathogen-avoidance psychology play in pandemics?. *Trends in cognitive sciences*, 25(3), 177-186.
- Adebayo, K. O. (2023). Pandemics and management of “dangerous communities”: Ebola, COVID-19, and Africans in China. *The Professional Geographer*, 75(1), 164-174.
- Arksey, H., & O'malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, 8(1), 19-32.
- Bacon, A. M., & Corr, P. J. (2020). Behavioral immune system responses to coronavirus: A reinforcement sensitivity theory explanation of conformity, warmth toward others and attitudes toward lockdown. *Frontiers in Psychology*, 11, 566237.

Balabantaray, S. R. (2022). Coronavirus Pandemic and Construction of False Narratives: Politics of Health (Hate) and Religious Hatred/Hate Crimes in India. *Sociología y tecnociencia*, 12(2), 307-322.

Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., ... & Willer, R. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature human behaviour*, 4(5), 460-471.

Berchet, C., Bijlholt, J., & Ando, M. (2023). Socio-economic and ethnic health inequalities in COVID-19 outcomes across OECD countries.

Bhanot, D., Singh, T., Verma, S. K., & Sharad, S. (2021). Stigma and discrimination during COVID-19 pandemic. *Frontiers in public health*, 8, 577018.

Bor, A., Jørgensen, F., & Petersen, M. B. (2023). The COVID-19 pandemic eroded system support but not social solidarity. *Plos one*, 18(8), e0288644.

Boserup, B., McKenney, M., & Elkbuli, A. (2020). Disproportionate impact of COVID-19 pandemic on racial and ethnic minorities. *The American Surgeon*, 86(12), 1615-1622.

Bragato, F. F., Rios, R. R., & Bernardi, B. B. (2021). COVID-19 and Brazilian Indigenous: Racial Anti-Discrimination and Minorities Rights. *Veredas do Direito*, 18, 113.

Cao, A., Lindo, J. M., & Zhong, J. (2023). Can social media rhetoric incite hate incidents? Evidence from Trump's "Chinese Virus" tweets. *Journal of Urban Economics*, 137, 103590.

Chavez, K., Weisshaar, K., & Cabello-Hutt, T. (2022). Gender and racial discrimination in hiring before and during the COVID-19 pandemic: Evidence from a field experiment of accountants, 2018–2020. *Work and Occupations*, 49(3), 275-315.

Chen, Y., Wang, Z., Zhang, Q., Dong, W., Xu, J. H. C., Wu, S. J., ... & Chen, C. (2022). Compassion, discrimination, and prosocial behaviors: young diasporic chinese during the COVID-19 pandemic. *Frontiers in psychology*, 13, 814869.

Cheng, H. L., Wong, Y. J., Li, P. J., & McDermott, R. C. (2022). COVID-19 racism, anxiety, and racial/ethnic attitudes among Asian American college students. *Counselling Psychology Quarterly*, 35(4), 897-920.

Christiani, L., Clark, C. J., Greene, S., Hetherington, M. J., & Wager, E. M. (2022). Masks and racial stereotypes in a pandemic: The case for surgical masks. *Journal of Race, Ethnicity, and Politics*, 7(2), 185-202.

Chromik, B., Maryniak, J., & Olko, J. (2022). Ethnic Minorities in Poland in the Face of the COVID-19 Pandemic: Threats, Stigma and Forms of (In) visibility. In *COVID-19 and a World of Ad Hoc Geographies* (pp. 1157-1174). Cham: Springer International Publishing.

Cooper, H., Brar, A., Beyaztas, H., Jennings, B. J., & Bennetts, R. J. (2022). The effects of face coverings, own-ethnicity biases, and attitudes on emotion recognition. *Cognitive Research: Principles and Implications*, 7(1), 57.

Crepaz, K. (2022). Minorities and Health during the Covid-19 Pandemic: Health Inequalities and Discrimination. *European Yearbook of Minority Issues Online*, 19(1), 81-106.

CSU Center for the Study of Hate & Extremism. (2021). Anti-Asian Prejudice, March 2021. <https://www.csusb.edu/sites/default/files/FACT%20SHEET-%20Anti-Asian%20Hate%202020%20rev%203.21.21.pdf>.

Daley, J. S., Gallagher, N. M., & Bodenhausen, G. V. (2022). The pandemic and the “perpetual foreigner”: How threats posed by the COVID-19 pandemic relate to stereotyping of Asian Americans. *Frontiers in Psychology, 13*, 821891.

Dhanani, L. Y., & Franz, B. (2021). Attitudes toward and experiences working with patients who misuse opioids among board certified physicians in Ohio. *Substance Abuse, 42*(4), 466-470.

Dionne, K. Y., & Turkmen, F. F. (2020). The politics of pandemic othering: Putting COVID-19 in global and historical context. *International Organization, 74*(S1), E213-E230.

Dipoppa, G., Grossman, G., & Zonszein, S. (2023). Locked Down, Lashing Out: COVID-19 Effects on Asian Hate Crimes in Italy. *The Journal of Politics, 85*(2), 389-404.

Dovidio, J. F., Ikizer, E. G., Kunst, J. R., & Levy, A. (2020). *Common identity and humanity* (Vol. 13, pp. 142-6). London: Sage.

Drouhot, L. G., Petermann, S., Schönwälder, K., & Vertovec, S. (2021). Has the Covid-19 pandemic undermined public support for a diverse society? Evidence from a natural experiment in Germany. *Ethnic and Racial Studies, 44*(5), 877-892.

Dudarev, V., Kamatani, M., Miyazaki, Y., Enns, J. T., & Kawahara, J. I. (2022). The attractiveness of masked faces is influenced by race and mask attitudes. *Frontiers in Psychology, 13*, 864936.

Duncan, L. A., Schaller, M., & Park, J. H. (2009). Perceived vulnerability to disease: Development and validation of a 15-item self-report instrument. *Personality and Individual Differences, 47*(6), 541-546.

Edouard Mathieu, Hannah Ritchie, Lucas Rodés-Guirao, Cameron Appel, Charlie Giattino, Joe Hasell, Bobbie Macdonald, Saloni Dattani, Diana Beltekian, Esteban Ortiz-Ospina and Max Roser (2020) – “Coronavirus Pandemic (COVID-19)”. Published online at OurWorldInData.org. Retrieved from: ‘<https://ourworldindata.org/coronavirus>’ [Online Resource]. Retrieved 5 March 2024.

Einar H. Dyvik (2024, Jan 10). Impact of the coronavirus pandemic on the global economy - Statistics & Facts. Available at: <https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/#topicOverview>. Accessed 2 March 2024.

Ellis, E.G. (2020). The coronavirus outbreak is a petri dish for conspiracy theories. *Wired* <https://www.wired.com/story/coronavirus-conspiracy-theories/>

Fan, W., Qian, Y., & Jin, Y. (2021). Stigma, perceived discrimination, and mental health during China’s COVID-19 outbreak: a mixed-methods investigation. *Journal of health and social behavior, 62*(4), 562-581.

Franks, A., Xiao, Y. J., & Hesami, F. (2022). Racial framing of pandemic outcomes has conditional indirect effects on support for COVID-19 mitigation

policies: Examining moral and threat-based mediating mechanisms. *Analyses of Social Issues and Public Policy*, 22(1), 130-149.

Frenkel, S., Alba, D. & Zhong, R. (2020). Surge of virus misinformation stumps Facebook and Twitter. The New York Times <https://www.nytimes.com/2020/03/08/technology/coronavirus-misinformation-social-media.html>.

Fuochi, G., Boin, J., Voci, A., & Hewstone, M. (2021). COVID-19 threat and perceptions of common belonging with outgroups: The roles of prejudice-related individual differences and intergroup contact. *Personality and Individual Differences*, 175, 110700.

Georgarakis, G. N. (2023). Yikes! The Effect of Incidental Disgust and Information on Public Attitudes During the COVID-19 Pandemic. *Political Psychology*, 44(3), 493-513.

Golec de Zavala, A., Bierwiazzonek, K., Baran, T., Keenan, O., & Hase, A. (2021). The COVID-19 pandemic, authoritarianism, and rejection of sexual dissenters in Poland. *Psychology of Sexual Orientation and Gender Diversity*, 8(2), 250.

Gollust, S. E., & Haselswerdt, J. (2023). Who does COVID-19 hurt most? Perceptions of unequal impact and political implications. *Social Science & Medicine*, 323, 115825.

Gordils, J., Elliot, A. J., Toprakkiran, S., & Jamieson, J. P. (2021). The effects of COVID-19 on perceived intergroup competition and negative intergroup outcomes. *The Journal of Social Psychology*, 161(4), 419-434.



Gray, C., & Hansen, K. (2021). Did COVID-19 lead to an increase in hate crimes toward Chinese people in London?. *Journal of Contemporary Criminal Justice*, 37(4), 569-588.

Grivel, M. M., Lieff, S. A., Meltzer, G. Y., Chang, V. W., Yang, L. H., & Des Jarlais, D. C. (2021). Sociodemographic and behavioral factors associated with COVID-19 stigmatizing attitudes in the US. *Stigma and Health*, 6(4), 371.

Haft, S. L., & Zhou, Q. (2021). An outbreak of xenophobia: Perceived discrimination and anxiety in Chinese American college students before and during the COVID-19 pandemic. *International Journal of Psychology*, 56(4), 522-531.

Hahm, H. C., Ha, Y., Scott, J. C., Wongchai, V., Chen, J. A., & Liu, C. H. (2021). Perceived COVID-19-related anti-Asian discrimination predicts post traumatic stress disorder symptoms among Asian and Asian American young adults. *Psychiatry Research*, 303, 114084.

Harell, A., & Lieberman, E. (2021). How information about race-based health disparities affects policy preferences: Evidence from a survey experiment about the COVID-19 pandemic in the United States. *Social Science & Medicine*, 277, 113884.

Jaspal, R., & Lopes, B. (2021). Discrimination and mental health outcomes in British Black and South Asian people during the COVID-19 outbreak in the UK. *Mental health, religion & culture*, 24(1), 80-96.

Jennings, R. (2020, March 11). *Not just coronavirus: Asians have worn face masks for decades*. Voice of America. <https://www.voanews.com/science->

health/coronavirus-outbreak/not-just-coronavirus-asians- have-worn-face-masks-  
decades.

Jiang, T., Zhou, X., Lin, L., Pan, Y., Zhong, Y., Wang, X., & Zhu, H. (2021).  
COVID-19-related stigma and its influencing factors: a nationwide cross-sectional  
study during the early stage of the pandemic in China. *BMJ open*, *11*(8), e048983.

Johnson, J., Sattler, D., Van Hiel, A., Dierckx, K., Luo, S., & Vezzali, L. (2023).  
Violent assault on a Chinese man: COVID-19 psychosocial resource loss diminishes  
right wing authoritarianism variability in societal reactions. *Journal of interpersonal  
violence*, *38*(7-8), 5542-5563.

Júnior, A. D. A. S., & Gonçalves, G. M. (2022). COVID-19 Pandemic and the  
Raising of Inequality: The Romani Communities and the Media. *Comunicação e  
sociedade*, (42), 259-273.

Kahn, K. B., & Money, E. E. (2022). (Un) masking threat: Racial minorities  
experience race-based social identity threat wearing face masks during COVID-  
19. *Group processes & intergroup relations*, *25*(4), 871-891.

Karlsson, L. C., Soveri, A., Lewandowsky, S., Karlsson, L., Karlsson, H., Nolvi,  
S., ... & Antfolk, J. (2022). The behavioral immune system and vaccination intentions  
during the coronavirus pandemic. *Personality and individual differences*, *185*,  
111295.

Kartono, R., Salahudin, & Sihidi, I. T. (2022). Covid-19 stigmatization: A  
systematic literature review. *Journal of Public Health Research*, *11*(3),  
22799036221115780.

Kaushal, N., Lu, Y., & Huang, X. (2022). Pandemic and prejudice: Results from a national survey experiment. *Plos one*, *17*(4), e0265437.

Kemphorne, J. C., & Terrizzi Jr, J. A. (2021). The behavioral immune system and conservatism as predictors of disease-avoidant attitudes during the COVID-19 pandemic. *Personality and individual differences*, *178*, 110857.

Kerr, J., Panagopoulos, C., & Van Der Linden, S. (2021). Political polarization on COVID-19 pandemic response in the United States. *Personality and individual differences*, *179*, 110892.

Kubo, Y., & Okada, I. (2022). COVID-19 health certification reduces outgroup bias: evidence from a conjoint experiment in Japan. *Humanities and Social Sciences Communications*, *9*(1), 1-11.

Kurtzman, L. (2021). "Trump's 'Chinese Virus' Tweet Linked to Rise of Anti-Asian Hashtags on Twitter| UC San Francisco." Available at:

<https://www.ucsf.edu/news/2021/03/420081/trumps-chinese-virus-tweet-linked-rise-anti-asian-hashtags-twitter>.

Lagacé, M., Doucet, A., Dangoisse, P., & Bergeron, C. D. (2021). The "vulnerability" discourse in times of Covid-19: Between abandonment and protection of Canadian francophone older adults. *Frontiers in Public Health*, *9*, 662231.

Lang, J., Erickson, W. W., & Jing-Schmidt, Z. (2021). # MaskOn!# MaskOff! Digital polarization of mask-wearing in the United States during COVID-19. *PloS one*, *16*(4), e0250817.

Lantz, B., Wenger, M. R., & Mills, J. M. (2023). Fear, political legitimization, and racism: Examining anti-Asian xenophobia during the COVID-19 pandemic. *Race and Justice, 13*(1), 80-104.

Le, P. D., Misra, S., Hagen, D., Wang, S. M., Li, T., Brenneke, S. G., ... & Goldmann, E. (2023). Coronavirus disease (COVID-19) related discrimination and mental health in five US Southern cities. *Stigma and Health, 8*(1), 133.

Lee, Jennifer, and Monika Yadav. (2020). "The Nativist Fault Line and Precariousness of Race in the Time of Coronavirus (Asia and Asian America)." *Footnotes: A Publication of the American Sociological Association 48*(3):17.

Lelisho, M. E., Pandey, D., Alemu, B. D., Pandey, B. K., & Tareke, S. A. (2023). The negative impact of social media during COVID-19 pandemic. *Trends in Psychology, 31*(1), 123-142.

León, A. M. (2022). Impact of the Pandemic on the Eastern European Roma Population in Spain. *Migration Letters, 19*(4), 509-522.

Lu, H., Chu, H., & Ma, Y. (2021). Mask on while Asian: How media use, hostile media perceptions, and alienation influence US-dwelling Chinese's protective behaviors during the COVID-19 pandemic. *The Social Science Journal, 1*-15.

Lu, Y., Kaushal, N., Huang, X., & Gaddis, S. M. (2021). Priming COVID-19 salience increases prejudice and discriminatory intent against Asians and Hispanics. *Proceedings of the National Academy of Sciences, 118*(36), e2105125118.

Lui, P. P., Parikh, K., Katedia, S., & Jouriles, E. N. (2022). Anti-Asian discrimination and antiracist bystander behaviors amid the COVID-19 outbreak. *Asian American Journal of Psychology, 13*(3), 295.

Mahabir, A., Anderson, R., Kinlocke, R., Smith, R. A., Dougherty, K., & Madho, C. (2022). Discourse, Difference, and Divergence: Exploring Media Representations and Online Public Sentiments toward Marginalized Urban Communities in Jamaica during the COVID-19 Pandemic. *Social Sciences, 11*(6), 240.

Makhanova, A., & Shepherd, M. A. (2020). Behavioral immune system linked to responses to the threat of COVID-19. *Personality and Individual Differences, 167*, 110221.

Markina, I. C., Bilbao, U. G., & Castillo, I. M. (2023). Social stigmatization in the news coverage of obesity in the Spanish press during the pandemic. *Revista Latina de Comunicación Social, (81)*, 250-273.

Marmarosh, C. L. (2022). Attachments, trauma, and COVID-19: Implications for leaders, groups, and social justice. *Group Dynamics: Theory, Research, and Practice, 26*(2), 85.

Miller, C. A., Wilkins, C. L., de Paula Couto, C., Farias, J., & Lisnek, J. A. (2023). Anti-Black attitudes predict decreased concern about COVID-19 among Whites in the US and Brazil. *Social Science & Medicine, 320*, 115712.

Ming, X., & De Jong, M. D. (2021). Mental well-being of Chinese immigrants in the Netherlands during the COVID-19 pandemic: a survey investigating personal and societal antecedents. *Sustainability*, *13*(8), 4198.

Mishra, N. P., Das, S. S., Yadav, S., Khan, W., Afzal, M., Alarifi, A., ... & Nayak, A. K. (2020). Global impacts of pre-and post-COVID-19 pandemic: Focus on socio-economic consequences. *Sensors International*, *1*, 100042.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2010). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *International journal of surgery*, *8*(5), 336-341.

Murray, D. R., & Schaller, M. (2016). The behavioral immune system: Implications for social cognition, social interaction, and social influence. In *Advances in experimental social psychology* (Vol. 53, pp. 75-129). Academic Press.

Nguyen, T. T., Criss, S., Dwivedi, P., Huang, D., Keralis, J., Hsu, E., ... & Nguyen, Q. C. (2020). Exploring US shifts in anti-Asian sentiment with the emergence of COVID-19. *International journal of environmental research and public health*, *17*(19), 7032.

Oaten, M., Stevenson, R. J., & Case, T. I. (2009). Disgust as a disease-avoidance mechanism. *Psychological bulletin*, *135*(2), 303.

Pacilli, M. G., Pagliaro, S., Bochicchio, V., Scandurra, C., & Jost, J. T. (2022). Right-wing authoritarianism and antipathy toward immigrants and sexual minorities in the early days of the coronavirus pandemic in Italy. *Frontiers in Political Science*, *4*.

Pahl, K., Wang, J., Sanichar, N., Williams, S., Nick, G. A., Wang, L., & Lekas, H. M. (2023). Anti-Asian attitudes in the context of the COVID-19 pandemic: an exploratory study. *Journal of Racial and Ethnic Health Disparities*, 10(4), 1947-1954.

Perry, S. L., Whitehead, A. L., & Grubbs, J. B. (2021). Prejudice and pandemic in the promised land: how white Christian nationalism shapes Americans' racist and xenophobic views of COVID-19. In *Race and Ethnicity in Pandemic Times* (pp. 41-54). Routledge.

Platt, L., & Warwick, R. (2020). Are some ethnic groups more vulnerable to COVID-19 than others. *the Institute for fiscal studies*, 3.

Politi, E., Lüders, A., Sankaran, S., Anderson, J., Van Assche, J., Spiritus-Beerden, E., ... & Green, E. G. (2022). The impact of COVID-19 on the majority population, ethno-racial minorities, and immigrants. *European Psychologist*.

Ponder, M. L., Uddin, J., & Sun, W. (2023). Asian Americans' lived experiences with and perceptions of social stigma during COVID-19. *Howard Journal of Communications*, 34(2), 151-169.

Primbs, M. A., Rinck, M., Holland, R., Knol, W., Nies, A., & Bijlstra, G. (2022). The effect of face masks on the stereotype effect in emotion perception. *Journal of Experimental Social Psychology*, 103, 104394.

Reissmann, M., Geithner, L., Storms, A., & Woopen, C. (2021). Stereotypes about very old people and perceived societal appreciation in very old age. *Zeitschrift für Gerontologie und Geriatrie*, 54(Suppl 2), 93.

- Ren, J., & Feagin, J. (2021). Face mask symbolism in anti-Asian hate crimes. *Ethnic and Racial Studies*, *44*(5), 746-758.
- Schaller, M., Murray, D. R., & Bangerter, A. (2015). Implications of the behavioural immune system for social behaviour and human health in the modern world. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *370*(1669), 20140105.
- Shin, W., Wang, W. Y., & Song, J. (2023). COVID-racism on social media and its impact on young Asians in Australia. *Asian journal of communication*, *33*(3), 228-245.
- Shook, N. J., Sevi, B., Lee, J., Oosterhoff, B., & Fitzgerald, H. N. (2020). Disease avoidance in the time of COVID-19: The behavioral immune system is associated with concern and preventative health behaviors. *PloS one*, *15*(8), e0238015.
- Siu, J. Y. M., Cao, Y., & Shum, D. H. (2023). Stigma and health inequality experienced by ethnic minorities during the COVID-19 pandemic in a Chinese community: an implication to health policymakers. *Frontiers in Public Health*, *11*, 1184209.
- Stephens-Dougan, L. (2023). White Americans' reactions to racial disparities in COVID-19. *American Political Science Review*, *117*(2), 773-780.
- Stevenson, R. J., Saluja, S., & Case, T. I. (2021). The impact of the Covid-19 pandemic on disgust sensitivity. *Frontiers in psychology*, *11*, 600761.



Tessler, H., Choi, M., & Kao, G. (2020). The anxiety of being Asian American: Hate crimes and negative biases during the COVID-19 pandemic. *American Journal of Criminal Justice*, 45, 636-646.

Usher, K., Jackson, D., Durkin, J., Gyamfi, N., & Bhullar, N. (2020). Pandemic-related behaviours and psychological outcomes; A rapid literature review to explain COVID-19 behaviours. *International Journal of Mental Health Nursing*, 29(6), 1018-1034.

Walker, D., & Daniel Anders, A. (2022). “China Virus” and “Kung-Flu”: a critical race case study of Asian American journalists’ experiences during COVID-19. *Cultural Studies ↔ Critical Methodologies*, 22(1), 76-88.

Wang, P. (2020). Struggle with multiple pandemics: Women, the elderly and asian ethnic minorities during the covid-19 pandemic. *Portal: Journal of Multidisciplinary International Studies*, 17(1/2), 14-22.

Wenger, M. R., & Lantz, B. (2022). Generalized hate: Bias victimization against non-Asian racial/ethnic minorities during the COVID-19 pandemic. *Victims & Offenders*, 17(6), 848-871.

Werner, P., AboJabel, H., & Tur-Sinai, A. (2022). Ageism towards older and younger people in the wake of the COVID-19 outbreak. *Maturitas*, 157, 1-6.

White, M. (2020, December 30). Wall Street minted 56 new billionaires since the pandemic began—but many families are left behind. Retrieved February 24, 2024 from <https://www.nbcnews.com/business/business-news/wall-street-s-best-year-ever-why-pandemic-has-been-n1252512>.

World Health Organization (2020). Coronavirus Disease (COVID- 19) Advice for the Public. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>. Accessed 31 January 2024.

World Health Organization (WHO), 11 March 2020. WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. Available at: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>. Accessed 30 January 2024.

World Health Organization (WHO). 30 January 2020. *Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)*. Available at: [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)). Accessed 30 January 2024.

World Health Organization. (2015b). WHO issues best practices for naming new human infectious diseases [Media Note]. World Health Organization. <https://www.who.int/mediacentre/news/notes/2015/naming-new-diseases/en/>

Wu, Y. C., Chen, C. S., & Chan, Y. J. (2020). The outbreak of COVID-19: An overview. *Journal of the Chinese medical association*, 83(3), 217-220.

Zhao, J., Tinkler, J. E., & Clayton, K. A. (2022). Assessing the causal link between the COVID-19 pandemic and racial discrimination. *Socius*, 8, 23780231221095343.

**APPENDIX:** Summary of key characteristics of the included articles (Table 1)

<b>Study</b>	<b>Type of Study</b>	<b>Participants</b>	<b>Country</b>	<b>Target</b>
Abascal, M., Makovi, K., & Xu, Y. (2023)	Empirical	$n = 2142$	US	Asian Americans
Adebayo, K. O. (2023)	Empirical	$n = 16$ Ebola Report; $n = 4$ COVID-19 Report	China	Africans
Balabantaray, S. R. (2022)	Theoretical	Secondary sources included newspapers, journals, research articles, the internet, blogs, news channels, and debates	India	Muslims
Bor, A., Jorgensen, F., & Petersen, M. B. (2023)	Empirical	$n = 15233$ Vaccinated and Unvaccinated People	Multiple Countries	Unvaccinated People
Bragato, F. F., Rios, R. R., & Bernardi, B. B. (2021)	Theoretical	The paper does not provide specific information about the number of data points collected for the study	Brazil	Indigenous People
Camacho, M. I., Goikoetxea Bilbao, U., & Marauri Castillo, I. (2023)	Empirical	$n = 434$	Spain	Obese People
Chavez, K., Weisshaar, K., & Cabello-Hutt, T. (2022)	Empirical	The paper does not provide specific information about the number of data points collected for the study	US	Females and Black Job-seekers
Chen, J. A., Zhang, E., & Liu, C. H. (2020)	Theoretical	The paper does not provide specific information about the number of data points collected for the study	US	Asian Americans
Chen, Y., Wang, Z., Zhang, Q., Dong, W., Xu, J. H. C., Wu, S. J., Zhang, X., & Chen, C. (2022)	Empirical	$n = 360$	US	Chinese Youth

Cheng, H. L., Wong, Y. J., Li, P. F. J., & McDermott, R.C. (2022)	Empirical	$n = 133$	US	Asians Americans College Students
Christiani, L., Clark, C. J., Greene, S., Hetherington, M. J., & Wager, E. M. (2022)	Empirical	$n = 2400$	US	Black People
Chromik, B., Maryniak, J., & Olko, J. (2022)	Empirical	$n = 2763$	Poland	Linguistic Minorities (Kashubs and Silesians)
Cooper, H., Brar, A., Beyaztas, H., Jennings, B. J., & Bennets, R. J. (2022)	Empirical	$n = 131$	UK	Different Ethnicities
Crepaz, K. (2022)	Theoretical	The paper does not provide specific information about the number of data points collected for the study	Multiple Countries	All Minorities
Daley, J. S., Gallagher, N. M., & Bodenhausen, G. V. (2022)	Empirical	$n = 1323$	US	Asian Americans
de Azevedo Silva, A., & Gonçalves, G. M. (2022)	Theoretical	The paper does not provide specific information about the number of data points collected for the study	Multiple Countries	Romani
Dhanani, L. Y., & Franz, B. (2021)	Empirical	$n = 1580$	US	Asian Americans
Dipoppa, G., Grossman, G., & Zonszein, S. (2023)	Empirical	4670 hate crimes	Italy	Asians
Dollmann, J., & Kogan, I. (2021)	Empirical	$n = 3517$	Germany	Students with and without immigrant background
Drouhot, L. G., Petermann, S., Schönwälder, K., & Vertovec, S. (2021)	Empirical	$n = 2917$	Germany	Asians

Dudarev, V., Kamatani, M., Miyazaki, Y., Enns, J. T., & Kawahara, J. I. (2022)	Empirical	$n = 97$	Data Collected through MTurk, no indication about the Nationality	Asians
Franks, A., Xiao, Y. J., & Hesami, F. (2022)	Empirical	$n = 1326$	US	African Americans
Fuochi, G., Boin, J., Voci, A., & Hewstone, M. (2021)	Empirical	$n = 685$	Italy	Asians
Georgarakis, G. N. (2023)	Empirical	$n = 2458$	US	Asians
Golec de Zavala, A.; Bierwiazzonek, K.; Baran, T.; Keenan, O.; Hase, A. (2021)	Empirical	$n = 889$	Poland	Sexual Minorities
Gollust, S. E., & Haselswerdt, J. (2023)	Empirical	$n = 1000$	US	Elderly and Racial Minorities
Gray, C., & Hansen, K. (2021)	Empirical	4825 hate crimes	UK	Asians
Grivel, M. M., Lieff, S. A., Meltzer, G. Y., Chang, V. W., Yang, L. H., & Jarlais, D. C. D. (2021)	Empirical	$n = 498$	US	Asians
Haft, S. L., & Zhou, Q. (2021)	Empirical	$n = 198$ Chinese American College Students	US	Chinese Americans
Hahm, H. C., Ha, Y., Scott, J. C., Wongchai, V., Chen, J. A., & Liu, C. H. (2021)	Empirical	$n = 1002$ Asians and Asian Americans	US	Asians and Asian Americans
Harell, A., & Lieberman, E. (2021)	Empirical	$n = 3861$	US	Black People
Jaspal, R., & Lopes, B. (2021)	Empirical	$n = 226$ Black People and South Asians	UK	Black People and South Asians

Jiang, T., Zhou, X., Lin, L., Pan, Y., Zhong, Y., Wang, X., & Zhu, H. (2021)	Empirical	$n = 5039$	China	Patients with COVID-19 and People from Wuhan
Johnson, J., Sattler, D., Van Hiel, A., Dierckx, K., Luo, S., & Vezzali, L. (2023)	Empirical	$n = 143$ Study 1 $n = 250$ Study 2	US	Black People and Hispanics
Kahn, K. B., Money, E. E. L. (2022)	Empirical	$n = 853$ Study 1 $n = 570$ Study 2 White, Black and Asian Americans	US	Asian Americans and Black People
Kaushal, N., Lu, Y., & Huang, X. (2022)	Empirical	$n = 5000$	US	East Asians and Hispanics
Lagace, M., Doucet, A., Dangoisse, P., & Bergeron, C. D. (2021)	Empirical	85 op-eds and comment pieces	Canada	Elderly
Lang, J., Erickson, W. W., & Jing-Schmidt, Z. (2021)	Empirical	923167 tokens of hashtags	US	Anti-masks People
Lantz, B., Wenger, M. R., & Mills, J. M. (2023)	Empirical	$n = 4188$	US	Asians
Le, P. T. D., Misra, S., Hagen, D., Wang, S. M., Li, T., Brenneke, S. G., Yang, L. H., & Goldmann, E. (2022)	Empirical	$n = 1688$ Americans from the Southern US	US	All Minorities
León, A. M. (2022)	Theoretical	The paper does not provide specific information about the number of data points collected for the study	Spain	Romani
Lin, J., & Wang, Y. (2023)	Theoretical	35 papers	Multiple Countries	COVID-19 survivors
Lu, H., Chu, H., & Ma, Y. (2021)	Empirical	$n = 1256$	US	Chinese Americans
Lu, Y., Kaushal, N., Huang, X., & Gaddis, S. M. (2021)	Empirical	$n = 5000$	US	Asian Americans and Hispanics

Lui, P. P., Parikh, K., Katedia, S., & Jouriles, E. N. (2021)	Empirical	$n = 831$	US	Asians Americans
Marmarosh, C. L. (2022)	Theoretical	The paper does not provide specific information about the number of data points collected for the study	Multiple Countries	Multiple Outgroups
Mahabir, A., Anderson, R., Kinlocke, R., Smith, R. A., Dougherty, K., & Madho, C. (2022)	Empirical	The paper does not provide specific information about the number of data points collected for the study	Jamaica	Marginalized Urban Communities
Meng, Q.; (2023)	Empirical	The paper does not provide specific information about the number of data points collected for the study	US	Minorities across the United States
Miller, C. A., Wilkins, C. L., de Paula Couto, C., Farias, J., & Lisnek, J. A. (2023)	Empirical	$n = 204$ Study 1 $n = 302$ Study 2 $n = 1293$ Study 3 $n = 1804$ Study 4	US, Brazil	Black People, Indigenous People and Mixed-Race Individuals
Ming, X., & De Jong, M. D. T. (2021)	Empirical	$n = 268$ Chinese Immigrants	The Netherlands	Chinese Immigrants
Nguyen, T. T., Criss, S., Dwivedi, P., Huang, D., Keralis, J., Hsu, E., Phan, L., Nguyen, L. H., Yardi, I., Glymour, M. M., Allen, A. M., Chae, D. H., Gee, G. C., & Nguyen, Q. C. (2020)	Empirical	3 377 295 race-related tweets	US	Asian Americans, Black People and Hispanics
Pacilli, M. G., Pagliaro, S., Bochicchio, V., Scandurra, C., & Jost, J.T. (2022)	Empirical	$n = 757$	Italy	Immigrants and Sexual Minorities
Pahl, K., Wang, J., Sanichar, N., Williams, S., Nick, G.A., Wang, L., & Lekas, H. M. (2022)	Empirical	$n = 1060$	US	Asians
Perry, S. L., Whitehead, A.L., & Grubbs, J. B. (2021)	Empirical	$n = 1252$	US	All Minorities
Politi, E., Luders, A., Sankaran, S., Anderson, J., Van Assche, J., Spiritus-Beerden, E., Roblain, A., Phalet, K., Derluyn, I., Verelst, A., & Green, E. G. T. (2021)	Theoretical	468 studies	Multiple Countries	All Minorities

Ponder, M. L., Uddin, J., & Sun, W. (2023)	Empirical	n = 17 Asian Americans	US	Asian Americans
Primbs, M. A., Rinck, M., Holland, R., Knol, W., Nies, A., & Bijlstra, G. (2022)	Empirical	n = 262 Study 1 n = 203 Study 2	UK	Moroccan-Dutchs and Females Mask-wearers
Ren, J., & Feagin, J. (2021)	Empirical	82 reports of Anti-Asian incidents between March and May 2020	US	Asian Americans
Shin, W., Wang, W. Y., & Song, J. (2023)	Empirical	n = 413 Asian social media users	Australia	Asians and Asian Australians
Siu, J. Y., Cao, Y., & Shum, D. H. K (2023)	Empirical	n = 25 South-East Asians and Africans	Hong Kong	South-East Asians and Africans
Stephens-Dougan, L. (2023)	Empirical	n = 591	US	Black People
Walker, D., & Daniel Anders, A. (2022)	Theoretical	n = 5 journalists	US	Asian Americans
Wang, P. (2020)	Empirical	The paper does not provide specific information about the number of data points collected for the study		Asians, Elderly and Females
Wenger, M. R., & Lantz, B. (2022)	Empirical	n = 1400 Black People and Hispanics	US	Black People and Hispanics
Werner, P., AboJabel, H., & Tur-Sinai, A. (2022)	Empirical	n = 503	Israel	Elderly
Zhao, J., Tinkler, J. E., & Clayton, K. A. (2022)	Empirical	n = 907	US	Asians Americans