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PUBLIC HEALTH & PRIMARY CARE | RESEARCH ARTICLE

“Wearing a mask or not” goes beyond a public health issue in the U.S.

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Abstract: Severe outbreaks of COVID-19 have changed America’s landscape substantially. What’s more astonishing is wearing a mask or not used to be a question for many Americans when this virus was exponentially spreading in the U.S. The present study conducted thematic analysis of mask-related news comments from six American mainstream media. The analysis indicated five major themes. These were: (1) Debates on mask effectiveness; (2) Care vs. not care about others; (3) Controversies over personal rights and freedom; (4) Masks are politicized; and (5) Mask-related anti-science phenomenon. Each theme was further discussed using relevant theoretical evidence (e.g., trust in public health measures; altruism in crises; autonomy; individualism/collectivism; trust in science) in the literary. Despite the observed selfish behaviors, divisions and increasing anti-science trends in the U.S., people should still hold deep belief in science, altruism and solidarity.

Subjects: American Studies; Health Psychology; Public Health Policy and Practice

Keywords: face masks; COVID-19; SARS-CoV-2; coronavirus; public health measures; pandemic; individualism; altruism; trust in science; U.S. media

1. Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that causes COVID-19 has been spreading rampantly in the United States. At the time of this writing, according to the Center for Disease Control and Prevention (CDC)’s website, the U.S. has over 33 million confirmed cases and over 590,000 deaths (Center for Disease Control and Prevention, 2021). Mask wearing, as an effective and low-cost preventive measure against the virus, is very common and voluntary in many places during this pandemic. The author is highly curious why wearing a mask has become such a controversial issue in the U.S. This introduction synthesizes relevant theoretical insights including trust in public health measures, altruism in crises, autonomy, individualism/collectivism, and trust in science.

Udow-Phillips and Lantz (2020) stressed that public commitments to the effective public health measures are important for getting the pandemic under control and saving more lives. The public’s trust in science and public health measures should be reinforced. Furthermore, as Barry et al. (2020)

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PUBLIC INTEREST STATEMENT

The present study is a thematic analysis of American mask-related news comments. The researcher wishes to contribute some novel and inspiring perspectives to mask studies. Relevant implications are also discussed from different perspectives for policy makers and researchers for the current and future public health pandemics.

pointed out that in the context of a chilling outlook of the COVID-19 pandemic, it is critical to communicate the fact that proven preventive public health measures help save lives to the public who distrust science.

An explanation for altruism and prosocial behavior in crises is an increasing sense of “shared identity and concern for others, which arises from the shared experience of being in a disaster” (Bavel et al., 2020, p. 462). In addition, “Empathy and compassion are very important motivations for prosocial behavior,” says Charlotte Grosse Wiesmann, a neuroscientist and developmental psychologist at the Max Planck Institute for Human Cognitive and Brain Sciences (Vergin, 2020).

Furthermore, according to self-determination theory (Ryan & Deci, 2008), autonomy is one of the basic psychological needs for wellbeing. When autonomy or personal freedom is infringed, people may show noncooperation and/or noncompliance. The mask requirements and mandates may make people feel like they do not have a choice about mask wearing and their autonomy is diminished. Therefore, they may decide not to wear one (Scheid et al., 2020).

In addition, individualism/collectivism is one of the classic comparative cultural factors. Individuals depend less on one another and tend to prioritize their own needs in more individualistic countries. On the contrary, individuals are more tightly bound and tend to prioritize collective needs in more collectivistic countries (Hofstede et al., 2010). Moreover, Huber et al. (2019) found a positive correlation between the role of social media and trust in science; namely, social media are more likely to bolster public trust in science in collectivistic countries.

As for trust in science, Nadelson and Hardy (2015) maintained that trust in science and scientists is possibly associated with acceptance of concepts such as genetically modified food, climate change, vaccines and biological evolution. Kenrick et al. (2018) expected a promising future for public’s trust in science once scientists could adopt the insights of certain psychological research. In context of the COVID-19 pandemic, Carter (2020) argued that the American public trust in science, whereas the federal leaders refused to listen to the science and scientists amidst the COVID-19 pandemic.

Most of the existing mask-related studies are survey studies (Capraro & Barcelo, 2020; Chan et al., 2020) or reviews (Howard et al., 2021). The present study investigates Americans’ attitude toward masks using a qualitative approach—thematic analysis (Braun & Clarke, 2006; Cunningham & Wells, 2017; Walsh et al., 2019) by analyzing news comments. This approach facilitates real-life observations and provides more detailed and delicate understanding of American’s controversies over masks. Masks here refer to any face covering that covers the nose and mouth and help contain the spread of COVID-19.

2. Methods

The present study adopted thematic analysis (Braun & Clarke, 2006; Cunningham & Wells, 2017; Walsh et al., 2019). According to Braun and Clarke, thematic analysis is “a method used for identifying, analyzing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). The analysis offers detailed insights and implications of what Americans think of mask wearing.

2.1. Data collection

Six mask-related news items were randomly selected from six American mainstream media (i.e., The New York Times; The Washington Post; Market Watch; NBC Nightly News; ABC News; CBS This Morning). Comments of the mask-related news were collected from the comment areas below the texts or the videos of the news items. The three TV stations’ data were collected from their YouTube channels, while for the other media, the data were collected from their websites. Data collection took between July and December 2020. Some news (e.g., the one from ABC News and the one from CBS This Morning) have near a thousand or thousands of comments. The latest comments with the amounts comparable to those of the other news were selected. Many people revealed their American identity by mentioning “for fellow Americans”, “as Americans”, “... makes me proud to be an American”, etc. The comments given by foreigners (e.g., “Cheers from Australia”) have been ruled out from the analysis. The comments on the

media websites analyzed in the present study are publicly available to anyone. In addition, no personal information of people who posted comments was collected and the anonymity was protected.

2.2. Analysis

Following coding stages of thematic analysis (Braun & Clarke, 2006; Cunningham & Wells, 2017; Walsh et al., 2019), firstly, the author and another near-native English speaker repeatedly read the comments and identified potential main themes. Secondly, the two researchers coded the comments according to the identified main themes separately. The consistency between our coding results was above 90%. Next up, for the inconsistent themes, the two researchers reviewed and discussed them and made the final decisions. Lastly, we reviewed all of the main themes and finalized them.

3. Results

A total of 1580 comments were analyzed in the present study (Table 1).

Table 1. Comment sources and amounts

News Title	Masks Become a Flash Point in the Virus Culture Wars	Will Americans wear masks to prevent coronavirus spread? Politics, history, race and crime factor into tough decision	Why do so many Americans refuse to wear face masks? Politics is part of it—but only part	Employees Become Enforcers Of Mask Requirements As Tensions Grow	Mask wearing leads to several violent confrontations	National COVID-19 outbreak accelerate as Walmart, Kroger implement mandatory mask rules
Media	The New York Times	The Washington Post	Market Watch	NBC Nightly News	ABC News	CBS This Morning
No. of Comments	277	203	279	188	278	355

3.1. Main themes

The analysis generated five main themes (Table 2). Such themes as “business mask mandate”, “police”, “violence”, etc. were also discussed a lot in the comments. However, they were fairly specific to some of the news in question (e.g., the news from NBC,¹ ABC, CBS) and hence have been ruled out. Only the themes commented commonly across the six news items were selected as main themes in the present study.

Table 2. Amount of main themes

Theme	Mask effectiveness	Respect, protection, care	Freedom, rights	Politicization, polarization	Anti-science, anti-intellectualism
Amount	105	237	133	166	272

Note: The total amount of themes will not sum to the amount of comments because some comments indicate multiple themes, while some comments are irrelevant to masks.

3.2. Descriptions and examples of each theme

3.2.1. Debates on mask effectiveness

There were fierce debates over the effectiveness of face masks.

“Wearing a mask is the simplest and most effective way to stop the spread of the virus.” (MW)

“Masks don’t help and can even make you sick.” (CBS)

3.2.2. *Care vs. not care about others*

Some see wearing a mask as a symbol of caring about family, friends, community, frontline workers and those around you during this pandemic.

“Wearing a mask shows caring and respect for others, caring about family.” (NYT)

“For the safety of you, your loved ones, and everyone in your community please stay home unless absolutely necessary, wear a mask in public and wash your hands.” (WP)

“Wear a mask like your mom depended on it.” (CBS)

“People who understand the danger such contagion represents and care about the safety of others, including our heroes on the front lines (hospitals, grocery stores) risking their lives for us, will gladly wear masks in public and take proper precautions ...” (WP)

“Bare faces are sending a message: I don’t care about you.” (NYT)

“Not wearing a mask when you are in the presence of others and when social distancing may not be consistent, is both arrogant and foolhardy.” (NYT)

“The customers who didn’t wear masks are smugly, stubborn, narcissistic brats.” (NYT)

On the other hand, some stated “I don’t care! Masks should not be mandatory.” (CBS). “I rarely wear one simply because I find them uncomfortable.” (MW).

3.2.3. *Controversies over personal rights and freedom*

Wearing a mask or not has stimulated considerable controversy over freedom and personal rights in the U.S.

“Because having to wear a mask is the biggest violation of your freedom in America right? Can’t think of anything else huh?” (ABC)

“Your unreasonable demands for your freedom and liberty put all of us at risk.” (WP)

“There is no personal ‘freedom’ that has the right to take the freedom away from another individual, in this case “not wearing a mask” would basically take away the other persons freedom of being safe. So what is true freedom? Doesn’t it have boundaries?” (NBC)

3.2.4. *Mask is now so politicized*

To a certain extent, mask wearing becomes a political issue.

“Unfortunately the mask is becoming a political statement.” (NYT)

“Apart from whether actual effectiveness it might have, it is a gesture of solidarity with my fellow citizens.” (NYT)

“America is the only place in the world where people are turning wearing a mask into a political debate. We’re also the only country still producing high numbers of new cases everyday.” (CBS)

3.2.5. *Science or lies*

Despite the worldwide proven masks efficacy and the horrific case statistics, some Americans still cast doubts on masks and hold that the whole COVID-19 pandemic is a conspiracy.

“... the virus is just a hoax and masks are bad hombres.” (CBS)

“We are being lied too, Covid 19 is a hoax.” (NBC)

“Not wearing masks goes hand in hand with the anti-vaxxer movement. Those who don’t believe in science think they know better.” (MW)

“They lie to us to scare us and make us comply to their (mask mandate) rules. Do you see anyone around sick? Do you personally know anyone sick? NO!” (NBC)

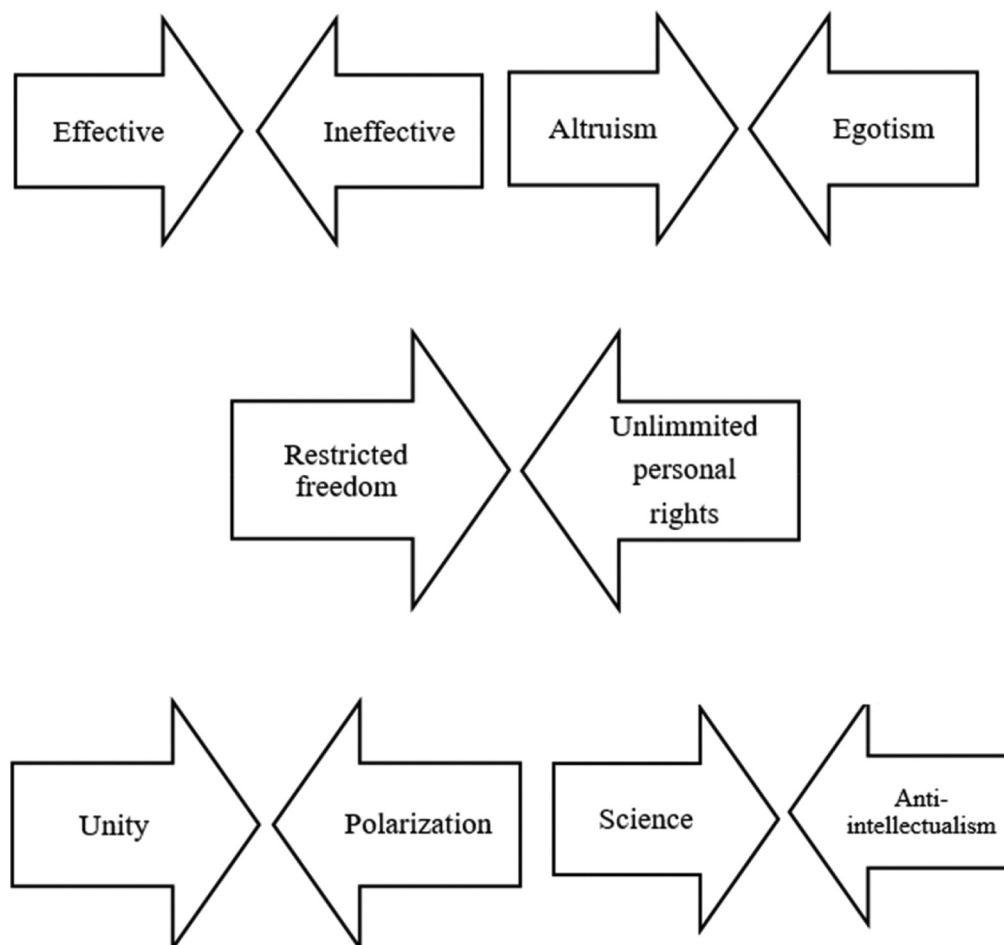
“The crazies won’t accept rules even before Covid. Another fact that the majority of worldwide flat earthers are Americans with conspiracy theories.” (NBC)

“Not listen to science. How many times do you have to be told that wearing a mask is very effective at reducing the spread to others? Or are you just not listening?” (MW)

4. Discussion

Figure 1 illustrates some of the inner contrasts of main themes (Figure 1).

Figure 1. Inner contrasts of main themes.



4.1. Mask effectiveness

A growing body of evidence shows that face masks help curb the spread of COVID-19 (Anfinrud, 2020; Chu et al., 2020; Greenhalgh et al., 2020; Lerner et al., 2020). Universal masking in medical and community settings can help prevent transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that causes COVID-19 (Lyu & Wehby, 2020; Wang et al., 2020). In the comments some argued that “Protect other people, not the wearer.” (NYT). Nevertheless, this argument does not scientifically make sense. Although mask use for source control (to protect others from infection) is a widely accepted idea (Aiello et al., 2012; Leung et al., 2020), there is also evidence on how masks protect the wearer from infection (Gandhi et al., 2020; Chu et al., 2020). Masking achieves both personal protection and altruism. Some thought that “Only N95 mask works.” (WP). Researchers found that the use of cloth masks can potentially play a significant protective role in reducing “the transmission of particles in the aerosol size range” (Konda et al., 2020). Moreover, Dr. Anthony Fauci, the Director of the National Institute of Allergy and Infectious Diseases, said that to get back to normal gradually, the public will still have to adhere to fundamental public health measures such as mask wearing and social distancing even when most of the public get vaccinated (CNN, 2020). In the times of public health crisis, it is crucial to communicate the proven effective protective measures like mask use to the public (Barry et al., 2020).

4.2. Altruism vs. Egotism

In this crisis, some people refuse to wear masks for their convenience. By contrast, some people keep masking up to protect families, neighbors, health care workers, other frontline workers, etc., fulfilling their civic duties. They make sacrifice for the country and everyone. Comparing the small inconvenience caused by masks with previous generations’ hardship and sacrifice, they are willing to do their parts. “(Wearing a mask is) a sacrifice I am willing to make for the safety of everyone.” (WP). “I’m sure wearing a 3 ply masks while in public is less uncomfortable than putting our country at risks for more deaths and economic hardship.” (MW). “It’s (wearing a mask) such a small ask in comparison to the sacrifices of previous generations.” (NYT)

Although some people behave selfishly during the current public health disaster, there are still many altruistic acts (Bavel et al., 2020). Some evidence suggested that promotion of altruism and prosocial behavior during this global pandemic may be a contributing factor to voluntary physical distancing and isolation (Jordan et al., 2020) as well as voluntary mask wearing (Bir & Widmar, 2020).

4.3. Freedom vs. constraint

People who enjoy instant gratification are not pursuing real freedom; “they are displaying, as one commentator has noted, the weakness of a people who lack both the stoicism to endure the pandemic and the fortitude to defeat it.” (Davis, 2020). Some people do strongly feel about not wearing masks. “Don’t make me wear a mask” (WP). Some have even argued “wearing a mask is a violation of their Constitutional rights.”, while others refuted: “Nowhere in the Constitution are we granted the ‘freedom’ to endanger others’ lives ... Wear a mask. Now, that’s freedom!” (NYT). “I still don’t understand why Americans think wearing a mask is a violation of their constitutional rights. Is it just because of pride? Or arrogance?” (NBC).

Researchers showed possible psychological explanations for mask resistance. “People naturally rebel when they’re told what to do, even if the measures could protect them.”, said Steven Taylor, a clinical psychologist and author of “The Psychology of Pandemics” (Andrew, 2020). “They don’t want to be told what to do.” Dr. Fauci held the same view (CNN, 2020). Furthermore, the basic psychological need of autonomy may be impacted when people feel like they are forced to wear a mask, which in turn, may lead to noncompliance (Scheid et al., 2020).

In addition, “Not wearing a mask becomes a symbol of individualism.” (Block, 2020). In terms of cultural identity, according to Hofstede’s classification, U.S. belongs to individualistic cultures where more individual liberty may lead to lower compliance with public health measures or policies (e.g., mass masking) against COVID-19 compared to collectivistic cultures (e.g., China, Japan, South Korea) (Germani et al., 2020; Guan et al., 2020; Hofstede, 1980; Minkov et al., 2017). Thus, government should adjust policies to keep balance between individual liberty and social control to combat COVID-19.

4.4. Politicized, polarization

Everything has been so politically polarized lately amidst the pandemic in the U.S. Masking wearing is no exception. “Unfortunately the mask is becoming a political statement ...” (NYT).

Some people hold belief in the misinformation that masks are dangerous. “My choice is not to wear a mask since I am in more danger with it than without it.” (MW). Additionally, many people think that the COVID-19 pandemic is a political issue and it will end once the election is over. “This whole thing (pandemic) will disappear after 2020 elections.” (CBS).

Given that the U.S. is now hit by the virus so badly and is divided politically, to unify and heal the country, mask wearing, as a fundamental public health measure, should become a universal act as well as “a symbol of social solidarity” (Cheng et al., 2020).

4.5. Anti-science, anti-intellectualism

It is difficult to figure out the mentality of some Americans who still think COVID-19 is not real, given that the U.S. has the highest figures of both confirmed COVID-19 cases and deaths in the world (World Health Organization, 2021). Mask skepticism, anti-vaccination movement along with “the earth is flat” statement, American people show distrust in science. This might have something to do with the education system. Plus, as Kenrick and his colleagues put it, when making a decision about science, we should consider perspectives different from our own and put aside the group to which we belong (D’Ardenne, 2020; Kenrick et al., 2018). In particular, in this critical and dangerous time, everyone should respect science and facts to combat the virus and save lives.

5. Conclusions

In conclusion, some of the takeaway messages from this qualitative mask study include: 1. Some Americans still cast doubt on masks, despite multiple lines of evidence supporting masks can help prevent the spread of COVID-19. 2. When struggling with this pandemic, some people do show some selfish and individualistic behaviors, while altruism and solidarity are the guidelines that can help people get real freedom that everyone can go out whenever. Keeping masking up even if you get the vaccine will be an effective way to speed the return to normal life. 3. Mask skepticism is a part of the anti-science phenomenon in the U.S. It might be the time for the U.S. to reflect on what to do about it. The researcher has limited access to other U.S. media from China, and thus the inclusion criteria of the selected media may not be representative and balanced enough. Future studies may adopt both qualitative and quantitative approaches to identify more factors and variables regarding mask issues. Further, cross-cultural comparisons on this issue may also be interesting.

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Note

1. Hereafter, NYT (The New York Times), WP (The Washington Post), MW (MarketWatch), NBC (NBC Nightly News), ABC (ABC News), CBS (CBS This Morning).

Conflicts of Interest

The author declares no conflict of interest.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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