

A
QUALITATIVE STUDY ON
BLACK STUDENTS' VACCINATION
DECISION USING THE HEALTH BELIEF MODEL

A Thesis
presented to
the Faculty of the Graduate School
at the University of Missouri-Columbia

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
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MAY 2023

The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

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ACKNOWLEDGEMENTS

Philippians 4:13 says, “I can do all things through Christ which strengtheneth me.” This verse is particularly important to me as a believer and student professional. The heartbeat of my life is my faith and I know that I would not be here today without God leading and guiding me every step of the way. I would like to firstly thank my church, Urban Empowerment Ministries, for their support while I completed my graduate studies. When I came to Missouri, it was important for me to find a church home and give back because ever since I could remember the church, for me, is an important institution, and has created a sense of calling, purpose, and service.

Secondly, I would like to thank Dr. Luisi for being a great support system for research advice since the start of my graduate degree journey. I greatly appreciate her enthusiasm for research surrounding Black populations and infectious diseases. To have a Black woman who is well versed in health communication and infectious diseases by my side, means a lot to me. I would also like to thank Professor Mr. Stemmler and Dr. Vetter Dreier for not only supporting me inside the classroom, but also their willingness to join my committee and offer their expertise, critiques, and guidance along the way. Lastly, I would also like to thank my family and significant other for providing insight on my research as well as listening to me discuss my excitement and findings as my research developed.

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ABSTRACT

Pandemics and vaccinations are nothing new, and the COVID-19 pandemic is one of the most recent to threaten millions of lives globally. The first widely distributed vaccine was created for smallpox (CDC, 2022) and since that world changing innovation, more vaccines have become available to combat a wide range of diseases. However, progress in science has not been without controversy. There has been a history of malevolent medical research conducted on and by using Black and other minority bodies in the United States (e.g., Henrietta Lack, Tuskegee). These abuses are tied to the rightfully just skepticism among Black Americans toward vaccinations (Green, et al., 2013). To understand this dynamic, specifically for Black college students during the COVID-19 pandemic, a qualitative analysis of 11 semi-structured interviews, sought recurring points of mediated, and non-mediated messages influence on receiving the COVID-19 vaccination. Findings, analyzed through the lens of the Health Belief Model (Jones, et al., 2014), reveal that most participants were influenced by non-mediated forms of communication (e.g., friends, family, and network) regarding their decision to vaccinate over mediated forms of communication. Overall, participants perceived that they were susceptible to contracting COVID-19 and saw the disease as severe. The participants mostly had a positive outlook on the vaccine and recognized its benefits to reduce threat in the future. Most of the

participants did not experience barriers to getting the vaccine, while those who did successfully navigated through them. Cues to action that reminded individuals to get vaccinated were received from social media, digital media, mainstream television, and more. Lastly, all participants increased their self-efficacy to get the vaccine on their own by talking to friends, family, and co-workers as well as understanding the circumstances of vulnerable individuals around them.

Participants elaborated on their lived experience with the COVID-19 disease, as well as obtaining the COVID-19 vaccine, explaining both positive and negative aspects. Individual explanations on influences on getting the COVID-19 vaccine ranged from vulnerable individuals within their family to trusted news sources such as the CDC and medical journals. This study attempts to fill the literature gap due to most prior research on the COVID-19 vaccination and Black populations mostly discussing hesitancy but do not include Black students within the narrative. The study focuses on these individuals' reasoning for obtaining the COVID-19 vaccine and to determine if mediated forms of communication or non-mediated forms of communication has a greater influence on Black students' decision-making process to receive the vaccine.

Keywords: COVID-19, vaccine hesitancy, health messages, Black students, Health Belief Model, interpersonal communication, mass media

Chapter 1: Introduction

Approximately 16 million undergraduate students are enrolled in U.S. colleges and universities (National Clearinghouse Research Center, 2022). In Fall of 2019, Black students accounted for 2.1 million (12.7%) of the undergraduate population (Postsecondary National Policy Institute, 2022). Studies about COVID-19 vaccination have shown that most college students perceive the COVID-19 vaccination as important, willing to vaccinate based on various reasons, or have already been vaccinated (Khubchandani, 2021; Geng, et al., 2022; Purnell, et al., 2022; Wotring, et al., 2021). Khubchandani et al. (2021) found that college students believed that everyone eligible should be vaccinated (92.6%), and most (67.9%) believe that the way to overcome the COVID-19 pandemic is through mass vaccination. At the same time, 22% (31,948) of college/university students have avoided the vaccine (Khubchandani, et al., 2021). Despite the roll out of more and more COVID-19 and COVID-19 vaccine-related literature, available research does not highlight vaccine uptake in Black college students. Black college students are often understudied within the Black community because the focus is usually on the working class (Kodish, et al., 2021).

Understanding how Black students interpret public health messages related to COVID-19 is an important idea to consider because oftentimes perception is a lived reality. According to Psychology Today, our perceptions influence how we focus on, process, remember, interpret, understand, synthesize, decide about, and act on reality (Taylor, 2019). For example, there were myths that spread during the start of the pandemic that melanin and genetic make-up of African Americans made them immune to the virus (Laurencin & McClinton, 2020). Black individuals started to believe this information and that perception became their reality. This type of misinformation was harmful and left Black communities in a place unable to protect themselves. The Black community in general has seen improvement in vaccine uptake. A JAMA study found

that U.S. Black individuals were cautious in their use of novel medical technologies for good reason, but they are willing to embrace vaccination once they are convinced that vaccines are safe, effective, and necessary (Padamsee, et al., 2022). Although this is a positive sentiment, more work needs to be done to increase vaccine uptake among Black individuals, with a focus on Black students specifically.

Research Problem

Discovered in 2019, COVID-19, or the novel coronavirus, is the disease caused by SARS-CoV-2 (John Hopkins Medicine, 2022). Researchers know that the coronavirus is spread through droplets and virus particles released into the air when an infected person breathes, talks, laughs, sings, coughs, or sneezes. Larger droplets may fall to the ground in a few seconds, but tiny infectious particles can linger in the air and accumulate in indoor places, especially where many people are gathered and there is poor ventilation. The outbreak of COVID-19 has severely affected the world with devastating consequences. As of September 12, 2022, there have been 605,912,418 confirmed cases and 12,589,972,108 vaccine doses have been administered (WHO, 2022).

Since the start of the pandemic, COVID-19 has arguably become one of the most lethal health threats of our time. To date, there are a total of 6,491,649 deaths (WHO, 2022). In the third year of the Pandemic, as *pandemic fatigue* overcomes us, vaccines have saved many lives. As of June of 2022, the Centers for Disease Control and Prevention (CDC) reported that 78% of the total population in the United States had received at least one dose of a COVID-19 vaccine. Black people make up 10% of people who recently received one vaccine dose, and 8% who have been boosted (Ndugga, et al., 2022). Many resources have been dedicated to vaccine promotion. According to USA TODAY, the largest U.S. Health and Human Services expenditure on

communication has been a \$40 million Office of Minority Health partnership initiative with Morehouse School of Medicine to deliver education and information on resources to help fight the pandemic, including vaccines, in racial and ethnic minority and vulnerable communities (Weise, 2020). However, research at the intersection of Black identity and vaccination usually focuses on why Black Americans are hesitant toward vaccinations (Audrey Kearney, et al., 2021; Kricorian & Turner, 2021; Dhanania & Franz, 2022). Vaccine hesitancy among Black Americans has been in the forefront of the news but there is hardly any research to support claims of those same types of individuals receiving the vaccine, Black students specifically. Understanding drivers of vaccine hesitancy remains important, but it is vital to understand the successful aspects of pro-COVID-19 vaccine public health messages among Black populations, including college students. In other words, what made 10% of Black people get vaccinated? This research is not only timely but will add value to the current research on COVID-19.

Goals of the Study

This study aims to investigate a) perceived mediated public health messages related to COVID-19 vaccinations; b) what role mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process; and c) how the influence of mediated public health messages related to COVID-19 vaccinations compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication), through the lens of the Health Belief Model (HBM) (RHI Hub, 2018), which predicts whether and why people will take action to prevent, detect, or control illness conditions (Glanz, et al., 2014). The constructs that are within the model include *perceived susceptibility*, *perceived severity*, *perceived benefits and barriers to engaging in a behavior*, *cues to action*, and *self-efficacy* (Glanz, et al., 2014). Perceived susceptibility refers to one's beliefs about their likelihood, or risk, of the threat, in this case, contracting COVID-19. Perceived severity refers to the belief about the

seriousness of effects of having the threat. Perceived benefits will look at the positive perceptions of performing the desired health action, getting the COVID-19 vaccine, to reduce the threat. Perceived barriers will look at the obstacles to performing the desired health action. Cues to action will look at external factors that remind individuals to engage in the desired health behavior. Lastly, self-efficacy will look at the confidence that one can perform the recommended health behavior on their own.

Chapter 2: Review of Literature

COVID-19 & Black America

U.S. Black Americans face inequity in health care and related research in all parts of the life course. In 2018, Serena Williams gave an exposé about how she almost lost her life during childbirth. She wrote in a CNN article that she “was lucky to have received excellent medical care but others are not so lucky” (Williams, 2018). Williams, a prominent Black female sports figure, could not escape the same issue which disproportionately affects Black women. In 2022, despite the steady growth and overall health outcomes of U.S. Americans, the COVID-19 pandemic reduced life expectancy at birth. That decline, 77.0 to 76.1 years, took U.S. life expectancy at birth to its lowest level since 1996 (CDC, 2022). Black Americans in particular have been the most grievously affected by the COVID-19 pandemic, resulting in a decline in life expectancy of 0.7 years, from 71.5 years in 2020 to 70.8 in 2021 (CDC, 2022). The overrepresentation of Black Americans among confirmed COVID-19 cases and fatalities underscores the fact that this pandemic does not equalize, but amplifies existing social inequalities tied to race, class, and access to the health care system (Reyes, 2020).

According to the CDC, novel coronavirus commonly known as COVID-19, is a respiratory disease caused by SARS-CoV-2, a coronavirus (CDC, 2021). The virus spreads mainly from person to person through respiratory droplets produced when an infected person coughs, sneezes, or talks. Some people who are infected may not have symptoms. For people who have symptoms, illness can range from mild to severe.

The COVID-19 virus was first identified in late 2019 in Wuhan, China (Laurencin & McClinton, 2020). During the outbreak, a young Cameroonian student who resided in China was infected and became the first African to contract the virus. He received treatment for the illness

in China, and within a few weeks, he recovered from the condition (Laurencin & McClinton, 2020). Subsequently, various unsubstantiated reports emerged declaring that the genetic makeup of Blacks or even the presence of melanin rendered Blacks immune to the virus (Glanton, 2020; Ross, 2020; Carter & Sanford, 2020). The news spread via social media and in social settings even as prominent Black figures reported that they contracted the virus. This type of information harms Black communities, as belief in ineffective prevention measures can result in false confidence of being protected against the disease, which likely aggravate the spread of disease.

To mitigate the spread of the disease, the CDC recommended that people engage in social distancing, and stay home from work when testing positive for COVID-19 and experiencing related symptoms (CDC, 2023). However, Black Americans are less likely to be able to work from home, so their risks of contracting and spreading the virus are higher (Laurencin, 2021). Black Americans also experience health care disparities and racism which may affect them from receiving treatment of any kind (Nelson, 2002; Vasquez, 2020; Laurencin & Walker, 2020). The pandemic has exposed the deficiencies of the American healthcare system, and perhaps this crisis has already begun to highlight the ingrained racial bias that may further disempower racial and ethnic minorities. Evidence of the vulnerability of the Black community is evident in COVID-19 data. Compared to the U.S. Black population of 13.4%, Black Americans are overrepresented in cities such as Boston (25.3%), Chicago (30.1%), Detroit (78.6%), New Orleans (59.7%), and Philadelphia (47.4%) as cited by Laurencin & McClinton, 2020. Black Americans have COVID-19 death rates 2.7 times the rate of White Americans (Laurencin, 2021). Although vaccine hesitancy is an understandable standpoint, especially given the history of abuses of Black Americans by those in power, that standpoint can hinder health promotion efforts from being successful within Black communities. If there are higher rates of COVID-19 cases within Black communities and other minority communities, it brings into question the efficacy of health

promotion campaigns that are currently within those communities. A contributing factor to medical mistrust in the Black community is the low numbers of Black physicians who can relate and understand the needs of members of their communities, affecting the quality of care of the patients (Laurencin & Walker, 2020). Sandra Lindsay, a Black medical professional, was the first person in the United States to receive the COVID-19 vaccine. She acknowledged the Black community's greater medical mistrust due to historical incidents and cited it as the primary reason she wanted to receive the vaccine publicly saying: "That was the goal today. . . Not to be the first one to take the vaccine, but to inspire people who look like me, who are skeptical in general about taking vaccines," (Laurencin & Walker, 2020). When it comes to public health campaigns there must be an understanding that minority communities are more hesitant than their white counterparts. Instead of comparing these minority communities to White Americans on vaccine hesitancy, it is important to examine specific groups and understand their concerns.

COVID-19 Vaccination, Black American, and Higher Education

The World Health Organization (WHO, 2022) defines a vaccination as a simple, safe, and effective way of protecting one against harmful diseases before coming into contact with them. Vaccinations use the body's natural defenses to build resistance to specific infections and make the immune system stronger. Similarly, the CDC defines vaccination as the act of introducing a vaccine into the body to produce protection from a specific disease (CDC, 2022). A vaccine trains your immune system to create antibodies, just as it does when it is exposed to a disease (CDC, 2022; WHO, 2022). It is a preparation that is used to stimulate the body's immune response against diseases. Vaccines are usually administered through needle injections, but some can be administered by mouth or sprayed into the nose. The four vaccines authorized in the United States to prevent COVID-19 are Pfizer-BioNTech, Moderna, Novavax, and Johnson & Johnson's Janssen (J&J/Janssen) (CDC, 2023). The Moderna vaccine was the second vaccine

approved by the FDA and only vaccine whose lead scientist was a Black woman, Dr. Kizzmekia Corbett (ABC News 2020).

The Moderna and Pfizer-BioNTech COVID-19 vaccines are messenger RNA vaccines, also called mRNA vaccines. The CDC (2022) explains that these mRNA vaccines do not “put a weakened or inactivated germ into our bodies...instead, mRNA vaccines use mRNA created in a laboratory to teach our cells how to make a protein—or even just a piece of a protein—that triggers an immune response inside our bodies...which produces antibodies,” and “is what helps protect us from getting sick from that germ in the future,” with minimal side effects. As of June of 2022, the CDC reported that 78% of the total population in the United States have received at least one dose of a COVID-19 vaccine. As of September 12, 2022, 12,589,972,108 vaccine doses have been administered globally (WHO, 2022). Black people make up only 10% of people who recently received one vaccine dose, and 8% who have received a booster (Ndugga, et al., 2022). At the start of the pandemic, many Black Americans did not trust the vaccine using the “wait and see” tactics, seeing if there were side effects in others who were vaccinated. Additionally, many Black Americans expressed their thoughts that scientists who developed the vaccine did not take their needs into account (Kearney, et al., 2021). In contrast, Padamsee et al, (2022) found that, Black individuals in the United States were cautious in their use of novel medical technologies, but they are willing to embrace vaccination once they are convinced that vaccines are safe, effective, and necessary. A positive direction, more work needs to be done to understand what makes health messages successful for Black Americans.

Black American college and university students are specific to this study's interest, especially considering the close living quarters. To date, there is an estimated total of 16 million students enrolled in college within the U.S. (National Clearinghouse Research Center, 2022). Of

the 16 million total undergraduate students (NCES, 2022) enrolled in the Fall of 2019, Black students made up 2.1 million students (12.7%) of the undergraduate population (Postsecondary National Policy Institute, 2022). In Fall of 2020, 3.1 million postbaccalaureate (graduate) students attended postsecondary institutions in the U.S. with 31% being Black (NCES, 2022). Wotring (2021) conducted a study in which he found that most college students (90.5%) perceive the COVID-19 vaccination as important, that everyone eligible should be vaccinated (92.6%), and most (67.9%) believe that the way to overcome the COVID-19 pandemic is through mass vaccination (Wotring, 2021). However, when it comes to how COVID-19 has affected Black college students, research (including Wotring, 2021) often excluded them from the narrative. Only recently, a UCLA study found that Black and Latino students were more likely than others to cancel or postpone their higher education plans during the COVID-19 pandemic than their White peers (Ahn & Dominguez-Villegas, 2022). The survey showed signs that although the pandemic threatened to exacerbate educational inequities in higher education, the COVID-19 vaccine rollout has been successful in moderating some of those impacts. This highlights the economic and social constraints the pandemic has had on Black and brown students in the U.S. Although the vaccine was helpful, nearly 10% of Black students still decided not to attend postsecondary educational institutions in the Fall of 2021. A study conducted by Reyes-Portillo, et al., 2022 showcased that the pandemic affected the mental health of the entire sample, and self-reports showed students of color were disproportionately affected by financial stressors. Other stressors included fear of COVID-19 infection, stressful living conditions, lower grades due to remote learning, and loneliness emerged as correlates of deteriorating mental health. Other studies have generated the same recurrent theme of concerns about retention of Black and brown students in the education system and other physical, mental, and financial effects (Wang &

Goodman, 2022), but none focus on the decision-making process of Black students who have received the COVID-19 vaccine and the role the media had in that effort.

Black Bodies, Harm, and Hesitancy

Even among those attending colleges and universities, vaccination hesitancy is a concern (Jaffe, 2022). The SAGE Working Group on vaccine hesitancy concluded that vaccine hesitancy refers to delay in acceptance or refusal of vaccination despite availability of vaccination services (MacDonald, 2015). The CDC (CDC, 2020) and WHO (WHO, 2015) use similar definitions. The United States has a history of medical distrust and unlawful and unethical practices against Black Americans. Despite the pattern of medical racism and discrimination, Black people have increased their participation in medicine, science, and health promotion and have become significant voices advocating for change despite the very real history of medical racism and discrimination (Romero, et al., 2020). To understand some of the negative attitudes and mistrust of the COVID-19 vaccine, one should consider the long history of medical abuse, mistrust, and inequity. A notable example includes the Tuskegee Syphilis Experiment (TSE) (Green, et al., 2013) when the U.S. Public Health Service conducted a study from 1932 to 1972 in Tuskegee, Alabama involving over 400 African American farmers infected with syphilis. The experiment was designed to examine the development of the disease if left untreated, but this was not communicated to the participants. The men were told that they had syphilis but were not given the proper medical care. These men were under the impression that they were being treated for the disease. At the end of the experiment, over one hundred men had died from the disease or from complications related to the disease. Adequate medical care was withheld from the Black men participating in the study long after the discovery of new drugs to treat the disease. Many years later Black Americans, especially Black men, are still reluctant to be subjects for research studies and participate in health promotion and health education programs.

A 1994 study that investigated the effects of the TSE on participation in health promotion activities and research studies by African Americans used random digit dialing to interview 421 adults with telephones living in households in Jefferson County, Alabama (Green, et al., 2013). Out of the 421 adults interviewed, 203 were White Americans. African Americans were almost twice as likely to have felt unfairly treated because of their ethnicity while seeking help for a health problem. The findings also showed that African Americans are less likely to use health services, less likely to seek preventive health care, and are less likely to utilize services such as health information seminars, health screenings, and health promotion and health education activities compared to whites (Green, et al., 2013). The authors observed that, “African Americans underutilize health services, and reasons may point to their perceptions of how they might be treated” (p. 199). This statement, while true, is a surface overgeneralization of a group of Black America. More factors are at play than just distrust within the healthcare system. Communities where African Americans reside may have healthcare services, screenings, and seminars, but individuals may not know that those services exist, may not have transportation to receive the services, may not know if the service are free, may not have insurance, if necessary, and lastly may not have the education to know what it takes to get health insurance in order to access certain health services.

One study, *More Than Just Tuskegee* (Scharff, et al., 2010), highlights several barriers that affect the participation of African Americans in research studies. These barriers include elements of study design, logistical problems, low levels of health literacy, sociocultural factors, and specific attitudes that hinder research participation. Within this study the researchers found several barrier themes including mistrust of researchers and the health care system, fear related to research participation, inadequate information about research and opportunities to participate,

inconvenience, questionable reputation of the researcher or research institution, and logistical concerns. To address racial disparities, Congress asked the Institute of Medicine to assess the extent of racial and ethnic differences in the quality of health care received by patients, not attributable to known factors such as access to care, ability to pay, or insurance coverage; and to evaluate potential sources of these disparities, including the role of bias, discrimination, and stereotyping at the provider, patient, institutional, and health system levels (Nelson, et al., 2002). The study showed that there are more factors at play than skepticism in the healthcare system among Black Americans and that narrative of skepticism, although true to some extent, is not as relevant as the many other factors regarding health care information and disparities and current racism.

There are many steps that can be taken for more African Americans to participate in research studies: (1) creating community advisory boards (2) delivering culturally targeted education programs (3) partnering with community-based organizations serving the African American community and (4) improving access to clinical care and support services (Scharff, et al, 2010). The most important is to ensure participants have a full understanding of what their participation means. Respondents from Scharff, et al., 2010 study argued that researchers often target vulnerable individuals as study participants because they believe that these individuals are less likely to question them. For example, respondents talked about the fact that researchers often reach out to the homeless, prisoners, children, elderly, and impoverished when recruiting for studies. Using money as an incentive ensures that marginalized individuals will volunteer to participate in research studies (Scharff, et al, 2010). Making sure that researchers are completely transparent about what will happen with the data used is also important.

Vaccination against COVID-19, especially among college students, is a concern. Two years after the pandemic, the highest rates of hesitancy to receive the COVID-19 vaccine are

among young adults aged 18 to 25. A study on perceived social norms in college students, found that reasons for hesitancy were wanting to see how it affected others first (75.2%) and not believing it was necessary (Jaffe, 2022). However, another study noted that students who had been infected with COVID-19, saw relatives or friends infected with COVID-19, or had to get a compulsory vaccine (required by law or a rule) did not impact the intent for vaccination (Geng, 2022). After conducting a literature review of 27 studies from around the world, Khubchandani et al., 2022 found that global trends suggested that the overall rate of COVID-19 vaccination refusal among 31, 948 colleges/universities was 22%. These studies suggested that there are a few factors that play into vaccine hesitancy among college students.

Vaccine hesitancy among Black college students is rarely seen within research. The University of Maryland Eastern Shore, a Historically Black College and University, conducted a study and found that 87% of participants were non hesitant (received one dose or intended to be vaccinated), 54% had already received at least one dose of a COVID-19 vaccine, and only 13% of participants were hesitant and did not plan to receive the COVID-19 vaccine (Hui Geng, 2022). The most common rationale for vaccine hesitancy were mistrust of the health care system (19%), concerns about timeline/research related to vaccine approval (15%), and lack of information (15%) (Purnell, et al., 2021). This study is not inclusive of all Black students in the United States as only 210 students were surveyed in this study, however, this study is the start of many that can include Black students' perceptions and decisions making process in relation to the COVID-19 vaccine. Black students specifically are missing from literature in regard to what communication tactics work best when it comes to the COVID-19 vaccination.

Communication about Vaccination in the Black Community and General Public

According to USA TODAY, the largest Health and Human Services expenditure on communication has been a \$40 million Office of Minority Health partnership initiative with

Morehouse School of Medicine to deliver education and information on resources to help fight the pandemic, including vaccines, in racial and ethnic minority and vulnerable communities (Weise, 2020). The initiative is a three-year project designed to work with community-based organizations across the nation to deliver education and information on resources to help fight the pandemic (Morehouse School of Medicine, 2020). When it comes to communication tactics surrounding vaccinations, health communicators should recognize the historical mistrust that Black communities have within the health system and use that to inform how they communicate. A community organization, *We Got Us*, leads a charge to connect Black messengers with Black communities, delivering information about COVID-19 vaccines through the lens of these communities. Community members in groups can go to their website and request a holistic presentation from an education team on the history of medical racism, how the vaccines were developed, and the benefits of other vaccines recommended by the CDC (Lubell, 2021). These sorts of interventions and communication tactics have proven to be beneficial and have allowed Black communities to then make informed decisions about their health (We Got Us, 2021). In the same way, the Ad Council and the COVID Collaborative are currently leading a massive communication effort to educate the American public and build confidence around COVID-19 vaccines. They currently have a Black community education tool kit that addresses concerns and questions that Black families and individuals may have surrounding the COVID-19 vaccine (Ad Council & The COVID Collaborative, 2022). They provide resources so that Black individuals and organizations composed of Black individuals, can create the right message that is based on audience insights. They provide shareable videos, social graphics, email templates and PSA's all for free use. All resources were created from literature reviews, qualitative in-depth interviews,

nationwide surveys, insights from organization partners, and consultations with public health and health communication professionals.

A study of the effects of messaging strategies on vaccine acceptance among unvaccinated Black Americans assessed the effect of vaccine messaging on COVID-19 vaccine acceptance and hesitancy (Dhanania & Franz, 2022). The study found that standard language adopted by the CDC, emphasizing the safety and effectiveness of COVID-19 vaccines and vaccine messaging that provided information about the safety of COVID-19 vaccines did not reduce vaccine hesitancy. On the other hand, receiving messaging about ethical safeguards resulted in decreased vaccine hesitancy among Black Americans as compared to receiving no messaging. Public health messages geared towards Black Americans should emphasize unethical medical research history and continued reality of medical discrimination to improve vaccine acceptance. Based on the research discussed above, emphasizing disparities in the vaccine roll-out and encouraging vaccination as a measure of social responsibility to ensure that Black Americans are not more vulnerable to serious disease and death from COVID-19, should be used as a messaging strategy tactic.

When it comes to vaccines for the public, health authorities designing media campaigns benefit from the review of the delivery preferences of target populations to ensure messages are perceived well. Changes in vaccine uptake are mediated by psychological processes, and public health campaigns should formally consider variables such as intentions, beliefs, and gaps in understanding about vaccines and how they work. Campaigns also benefit when they consider the public's changing information needs during the various phases of a pandemic or epidemic as well as the needs of specific groups (Lawes-Wickwar, et al, 2021). The study described vaccine promotion campaigns for increasing uptake identified several successful strategies. These

included community or hospital-wide mixed media messages, text message prompts sent from local physician clinics to adults from high-risk groups, text prompts with information about virus prevention and addressing misunderstandings about vaccination, the inclusion of a map with vaccination clinic locations in an email. Furthermore, messages improving attitudes towards vaccination included “Loss framed messages with collectivist appeals when presented as text (rather than images), and gain framed messages including images,” (Lawes-Wickwar, et al, 2021, p.17). Lastly, evidence on information needs included messages found acceptable by target audiences include factual, risk-reducing messages, narrative messages, gain-framed messages, loss-framed messages, and risk-reducing messages (Lawes-Wickwar Eight, et al., 2021). However, there was no mention of the utilization of food delivery service apps like Uber and Lyft, major clothing brands, and grocery stores partnerships, which were key pillars in assisting with driving messages about vaccinations and testing. Although the type of message is important, the avenue through which that message is communicated, the channel, is important as well.

A sample of U.S., participants representative for age, sex and race/ethnicity viewed messages from either a leader or citizen containing deontological, virtue-based, utilitarian, or non-moral justifications for adopting social distancing behaviors during the COVID-19 pandemic (Everett, et al, 2020). The study measured the messages’ effects on participants’ self-reported intentions to wash hands, avoid social gatherings, self-isolate, share health messages, as well as their beliefs about others’ intentions, impressions of the messenger’s morality and trustworthiness, and beliefs about personal control and responsibility for preventing the spread of disease. Utilitarian messages which emphasize the concern for the wellbeing of all, had a lot of influence on the way people perceive public health messages about the COVID-19 pandemic. Public health messages focused on duty and responsibility towards family, loved ones, and

fellow citizens showcases that people take emotional decisions when it comes to following COVID-19 guidelines.

COVID-19 Vaccination in the Black Community & Black Students

Black Americans comprise approximately 13% of the U.S. population (Jones, 2022). As of August of 2022, 87.2 percent of Black Americans ages 18 and over have received at least one dose of COVID-19 vaccine and 83.9% are fully vaccinated (CDC, 2022). More work needs to be done to increase this number to 100%, however, even though trusted sources like the CDC have reported updated information on vaccine uptake, 2022 research studies are still discussing hesitancy when an alarming number of Black Americans are receiving the vaccine. A June 2022 study stated the current vaccination rate is approximately 1.5 times higher among White Americans than Black Americans (Dhanania & Franzb, 2022) with reasoning that historical media mistrust is the issue. Although this is true, this reasoning always seems like the go to for issues regarding vaccine uptake among Black Americans, without greater depth and sophistication. In the development of the Pfizer vaccine at least 10% of their study participants were Black or African American people recruited from the United States — about 4,000. In the Moderna vaccine group of over 30,000 participants, 10% of them were African Americans. For Johnson & Johnson's one-shot COVID-19 vaccine 13% Black/African American (Golden, 2022). Not only are Black Americans getting the vaccine, but there was intention on ensuring that Black individuals were represented in the vaccine clinical trials. More positive narratives need to be represented in the media and research that showcased how Black Americans are showing up in vaccinations.

On the other hand, Black college students are missing from the media and research in relation to vaccine uptake. Black college students are often understudied within the Black

community because the focus is usually on the working class. Studies like Jones, et al., 2022, highlight the effects of COVID-19 has on student mental health. With Black communities being affected at a much higher rate from COVID-19, Black college students are more likely to be connected to someone who has been affected by the pandemic. Therefore, students must think about health issues, stress, grief, and even financial burdens while in school. Additionally, changes in academic responsibilities like face-to-face courses to online learning and living in a dormitory to living with family, has increased the amount of stress within Black college students (Jones, et al, 2022). Another study that looked at mental health of HBCU college students found that students showed higher rates of depression and anxiety during the pandemic which was showcased within the students' academic and social economic success. Results stated that 49% of the students met the clinical cutoff for depression, 39% for anxiety, and 52% for depression and/or anxiety. There are other studies that predict that COVID-19 as a main cause of many financial, academic, and social changes in Black students' lives as relates to their education, but none investigate the role of media in their decision-making process to get the vaccine (Jaffe, et al., 2022; Reyes-Portillo, et al., 2022; Wang & Goodman, 2022).

There are some research studies that have included Black college students in relation to communication tactics for HIV/AIDS information which can help with understanding the current situation regarding the COVID-19 pandemic. When ethnic youth graduate from high school, they are more likely to attend one of the 105 Historically Black Colleges and Universities (HBCUs) located primarily in the U.S. southern and eastern geographic areas (LeBlanc, et al, 2014). A study was done by researchers at the National Center for HIV/AIDS to examine the geographic proximity of HBCUs to areas of high HIV and STI disease burden among college age people to assess infectivity of potential sex partners in the areas surrounding HBCUs. Environmental

injustice also plays a role in health disparities among Black communities. HBCUs are usually located in areas of great disparity, food deserts, oil plants, waste fields, etc. This is a link between HBCU locations and neighborhoods with high HIV and STI rates. This makes public health and health promotion campaigns even more important because they have specific cultural, physical, health and mental needs. Stroman (2005) found that African American college students process HIV/AIDS messages in different ways and discussed the types of messages they would most like to receive about AIDS such as messages with lots of facts and messages using stories of actual people's experiences are consistently ranked first and second among choices. College students also strongly desire new information and would like a mix of mediated messages, interpersonal messages, and messages through settings they often visit such as barbershops, churches, and block parties.

Approximately 65% of HBCUs are also located in the eastern and southern states are disproportionately affected by other social determinants of health (LeBlanc, et al, 2014). Findings suggest a high HIV and STI disease burden in the general population of persons ages 15–24 years in 10 states with 4 or more HBCUs. Sutton et al. 's (2011) survey of 1,051 students at 24 HBCUs reported that a majority of participants considered themselves both knowledgeable regarding HIV risk (82%) and at low risk for the disease (79%). At the same time, 64% of students surveyed reported 2 or more sex partners in the previous 12 months and among this group, 64% did not use a condom at the last sexual encounter. This means that students' perceptions of low risk may potentially lead to false assurance (LeBlanc, et al, 2014). If programs like The Health Career Academy and The Bigger Picture were implemented to minority young adults on the college level, I believe change will happen and more students will have a better understanding of health literacy and HIV/STI infections. In this same way, programs around COVID-19 specific information on HBCU campuses need to be disseminated

in a way that students understand are knowledgeable while also understanding the risk, so they are not being led by false assurance.

Stroman's article suggests that HIV/AIDS communication must be viewed as a key component of the implementation of a comprehensive HIV/AIDS prevention program as it is a major force in efforts to change HIV/AIDS risk behaviors (Stroman, 2005). According to McGuire's Communication/Persuasion model, when decimating health information to a specific demographic for the purpose of influence of behavior, five factors should be considered: *source*, *message*, *channel*, *receiver*, and *destination*. These factors provide a framework for understanding how health communication motivates people to pay attention and use preventive health information (Stroman, 2005). Using the results of this study as a guide, public health campaigns can test to see if these health promotion efforts are effective within Black communities. Research suggests that the best method of communicating health information to African Americans is through the use of health communication and research that focuses on sources, messages, and channels that are targeted to diverse African American audiences and communities. The information must also promote community, family, and individual empowerment since empowerment has been shown to lead to better health outcomes (Stroman, 2005).

The Health Belief Model

The Health Belief Model (HBM) (Boston University School of Public Health, 2022; Rosenstock, I. M., 1966) says that health related behaviors depend on various constructs if people do not want to contract a disease. HBM was developed in the 1950s by social psychologists in the U.S. Public Health Service to participate in programs to prevent and detect disease. At that time, researchers and health professionals were concerned because few people

were getting screened for tuberculosis (TB), even though mobile X-ray vans came to their neighborhoods (Glanz, et al., 2014). HBM has been successfully adapted to fit diverse cultural and topical contexts. There are six constructs within the model that are used to explain and predict health behavior (Jones, et al., 2014). Perceived susceptibility will assess one's beliefs about their likelihood, or risk, of getting a condition or disease. Perceived severity will look at the belief about the seriousness of contracting the condition or disease. Perceived benefits will look at the positive features of receiving the recommended health action to reduce threat. Perceived barriers will look at the obstacles to performing the positive behavior. Cues to action will look at external factors that remind individuals to engage in positive health behavior. Lastly, self-efficacy will look at the confidence that one can perform the recommended health behavior on their own.

HBM has been applied to explain and predict health behaviors in various studies. An HIV study, looked at understanding minority adolescents' beliefs, attitudes, and behaviors related to HIV testing and found that future interventions need to address adolescents' perceived barriers to HIV testing and increase access to and knowledge about HIV testing (Schnall, et al, 2014). More recently, a study examined the influence of HBM constructs on COVID-19 vaccine hesitancy. The study looked at 16 quantitative studies for the prevalence of COVID-19 vaccine hesitancy and found that perceived barriers and perceived benefits were the most common HBM constructs that influenced people not to get the vaccine (Limbu, et al., 2022). This suggests that individuals are less likely to get vaccinated when they do not see a benefit from such behaviors and perceive obstacles to getting the COVID-19 vaccination.

Zewdie, et al., 2022, used the HBM to predict why people did not follow COVID-19 preventive behavior using 1552 articles from all over the world. Results showcased that the majority (87.5%) of the studies HBM has a good predictive ability of COVID-19-related

behavior. The perceived benefit was the most frequently significant predictor; highest significance ratio (96.7%) followed by self-efficacy, cues to action perceived barrier, susceptibility, and severity in decreasing order (Zewdie, et al., 2022). The study can be a steppingstone to implementing interventions to prevent further infection for COVID-19. Lastly, a study using HBM and Theory of Planned Action (TPA), explored the intentions, motivators, and barriers of the general public to vaccinate against COVID-19 among Israeli adults (Shmueli, 2021). The findings from this study showed that participants were more likely to vaccinate if they reported higher levels of perceived benefits of COVID-19 vaccine, perceived severity of COVID-19 infection, and of cues to action. This means that participants saw benefit in participating in the preventative care (vaccination), believed that the virus was indeed serious and leaving it untreated would lead to various consequences, and many messages around them were beneficial in reminding them to get vaccinated.

The HBM will be used in the current study to understand Black students' decision-making process to get vaccinated and how the six constructs play into that process. The purpose of the study will be to look at the role of media and assess its influence on COVID-19 vaccination decisions and how that influence compares to outside non-mediated forms of communication among Black college students. By examining how the media plays a role in Black students COVID-19 vaccine decision-making process, more tailored and effective messages can be developed to promote COVID-19 vaccination. It is important to focus on Black Americans who do decide to receive vaccinations, students specifically, to see what works, and not just what drives vaccine hesitancy. Although understanding drivers of vaccine hesitancy among Black college students is important, understanding what public health media messages Black students listen to that persuade them to receive the COVID-19 vaccine is something that has not been studied. This research is not only timely but will add value to the current research

on COVID-19. Overall, the information gathered highlights how public health campaigns should better tailor health promotion messaging toward Black communities in unique and creative ways so that the information is received and accepted.

The following study will examine this phenomenon through the lens of the Health Belief Model, which predicts whether and why people will take action to prevent, detect, or control illness conditions. The constructs that are within the model help explain health behavior: risk susceptibility, risk severity, benefits and barriers, self-efficacy, and cues to action (Jones, et al., 2014). The plan is to use the following constructs to explain students' decisions to vaccinate.

- **Perceived susceptibility:** Examine if Black college students perceive themselves at high risk of or more vulnerable to contracting COVID-19 before they are willing to get vaccinated.
- **Perceived severity:** Examine if Black college students perceive contracting COVID-19 as very serious. It will also look at the condition of leaving it untreated, including physical consequences (e.g., death, disability, and pain) and social consequences (e.g., maintaining relationships with others, or feeling stigmatized)
- **Perceived benefits:** Explore the variety of benefits Black college students have encountered after receiving the COVID-19 vaccine (e.g., keeping oneself, family, and friends safe)
- **Perceived barriers:** Examine if Black college students had potential barriers before receiving the COVID-19 vaccine. Obstacles may include pain/side effects, missing class/work, and conspiracy theories (e.g., changes to DNA)
- **Cues to action:** Examine external factors like social media advertisements, messages from the institutions, or jobs that promoted getting the vaccine.

- **Self-efficacy:** Examine the level of confidence Black college students had when getting the vaccine on their own. Positive verbal reinforcements, modeling of others (e.g., seeing others engaging and being successful in that behavior), and goal setting (e.g. receive vaccine in X number of months) can help increase a person's self-efficacy.

Based on the information available, and the lack thereof, this study aims to address the following research questions:

RQ1: How do U.S. Black college students perceive mediated public health messages related to COVID-19 vaccinations?

RQ2: What role do mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process for U.S. Black college students?

RQ3: How did the influence of mediated public health messages related to COVID-19 vaccination compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication)?

Chapter 3: Methodological Framework

There has been much research done examining hesitancy within the Black community as it relates to unethical medical practices against Black bodies, and more recently college students' hesitancy towards the COVID-19 vaccine. However, Black students in particular have been missing from this research on mediated public health messages influence in their decision-making process to obtain the COVID-19 vaccine.

The intended approach for this research was that it be conducted through a qualitative research lens and an interpretivist standpoint. Thus, objectivity is impossible, and it is important for me as a researcher to appreciate differences between people (Business Research Methodology, n.d). As an approach, this leads researchers to focus on gaining subjective knowledge through approaches where individuals, or smaller groups, are analyzed in depth through detailed observations and discussions. With this research study, numerical data is not the goal. Rather, I am interested in multiple subjective realities because the Black students that will be interviewed, each have different perspectives that influence their decision in obtaining the COVID-19 vaccine. To do this, conducting qualitative research, specifically semi-structured interviews (Fuel Cycle, 2022) that flow in conversation will discover perceptions to gain understanding of social and human activities of public health messages.

Qualitative semi-structured interviews are open, flexible, and will help gather the right information to fine-tune a research strategy (Fuel Cycle, 2022). Semi-structured interviews are optimal because it will allow room for probing questions and will give the participants room to answer freely without the pressure of trying to answer each question a certain way. Through qualitative semi-structured interviews, themes will be sought out through similarities, experiences, and opinions in relation to how mediated public health messages are perceived from

Black students. Qualitative research means that I, as a researcher, must understand the questions I want to ask, the process in which I want to go about obtaining my research to answer my questions, and what background research I must acquire to ground and support my actions. I am more interested in the qualitative method in research as I will figure out the answers to my questions based on multiple ideas and lived experiences. Understanding how I interpret truth and knowledge, what the nature of being is, and what my goals are for my research, I can better influence my research process and these perspectives will guide my research formula, how I collect qualitative data, and how I interpret and analyze that data.

The goal of inquiry for my research is to simply provide results to the field. My research is not only timely but will add value to the current findings on COVID-19 vaccinations because Black students are missing from this narrative. Through this research, I want to tell a story around the decision-making process, be it emotional or informed, of these students. Findings from this study will contribute to theory by using the Health Belief Model to explain the decision-making process of why Black students choose to vaccinate.

Recruitment and Participants

The Institutional Review Board of the University of Missouri approved the procedures used in the study (#629068). My sample was purposive, identifying and selecting individuals or groups of individuals that were especially knowledgeable about or experienced with a phenomenon of interest (Palinkas, et al., 2016). This meant that students had some knowledge about vaccination procedures and obtained the COVID-19 vaccination. I sought out only individuals who have received the vaccine because the research is looking at mediated public health messages influence on Black students who did receive the COVID-19 vaccine. The students that I wanted to select were required to identify as Black/African American or under the

African diaspora. I recruited students through GroupMe(s) composed of Black students at the University of Missouri, as well as sent emails through the graduate Journalism program and Black organizations on campus so that they may send to their members.

I sent a message through GroupMe and emails through the Journalism School and Black organizations. These emails included the informed consent document which discussed the purpose of the survey. If students were interested, there was a link to a pre-screening survey through Qualtrics that asked demographic information. The pre-screening survey gathered preliminary data from potential participants such as their enrollment classification (undergraduate or graduate) age, gender, which vaccine they received, and how many doses they have received. The purpose of the survey was to determine if participants met the qualifications of the study before the interview stage (ATYM, 2019). My goal was to interview at least 15 students who have received the COVID-19 vaccine, via Zoom. I decided that interviews were the best method for answering my questions because the interview would take it a step further by allowing me to probe and focus on specific responses and dissect responses in more detail.. I understood that the perceptions and responses of the participants that I will interview cannot be generalized; however, the responses received helped me to understand if mediated public health messages have a role in Black students' decision-making process to receive the COVID-19 vaccine.

Between the dates of January 24 and February 13, 2023, I reached out to 25 survey respondents who qualified based on my criteria (identify as Black/African American or under the African Diaspora, be fully vaccinated (receiving all doses), enrolled as a college student at the University of Missouri, between the ages of 18-35 years old, and a U.S. citizen) to participate in my interviews. A total of 110 people filled out the pre-screening survey. On February 13, 2023, I closed the survey and, out of those 110 people, 28 of them were Black students who fit my

criteria. Three of those students did not complete the survey in its entirety, leaving only 25 students to qualify for an interview. Out of the 25 students who qualified only 12 scheduled their interview. I sent follow up emails to the remaining participants to have them schedule their interview, but I received no response. One person who did schedule an interview did not show up and never rescheduled. The remaining 11 participants were sent to schedule an interview session via a Doodle poll.

Procedure

Participants were recruited to participate in semi-structured interviews. This method was the most appropriate, because I could prepare and use a consistent set of questions for all the participants, which I knew would provide the answers I needed to further my research study. (Fuel Cycle, 2019). The semi-structured format of the interviews allowed me and participants to have a focused topic of discussion, while also allowing for the flexibility to probe and steer the conversation to ensure that I was addressing each of the aspects of the Health Belief Model. Interviews took place January 30th through February 27, 2023. Although COVID-19 procedures surrounding the pandemic had been lifted on campus (University of Missouri - MU Alert, 2022), I still conducted interviews via Zoom, so that the interview may be recorded and transcribed through Zoom software. I believe this also worked better for student schedules as well as for me, so that I would not have to book rooms throughout campus for each interview. Before each interview, I attached an adult consent form approved by the Institutional Review Board for students to read over before their interview date. A signature was not required. Before being interviewed, all participants gave their virtual consent, and confirmed that they were between the ages of 18 and 35 years old, consented to participate in the study and be recorded, verified their race as Black or African American, confirmed their status at the University of Missouri, and stated their gender identity. Participants were asked questions (see Appendix E) developed based

on the Health Belief Model around their, susceptibility of contracting COVID-19 before getting vaccinated, severity of the COVID-19 disease, benefits of the vaccine, barriers to getting the vaccine, external messages that reminded them to get the vaccine, and level of confidence on getting the vaccine on their own (Jones, et al., 2014).

The audio and video components of Zoom were used during the Interviews; however, participants were not required to be on camera if they did not want to be. I used the Zoom recorder to record the audio and video components of the interview, and the transcription software provided by Zoom. By allowing Zoom to record the audio and transcribe the conversation, I did relieve myself of the note-taking burden during the conversational interviews, allowing me to give my full attention. All audio, video, and transcription files were stored on my computer, a 2020 MacBook Pro as well as my Google Drive, both passwords protected, for extra precaution. The interviewees were assured that the data in the study were to stay anonymous and only be accessible by myself and my committee chair (Surmiak, 2018). To keep the anonymity of all participants, their first and last names removed from the study, along with any personal identifiers in their interviews. Their identifiers are replaced with the first letter of their name and the number order in which they interviewed. (e.g., A1) (Saunders, J., Kitzinger, C. Kitzinger, 2015). All de-identified data is available for review, upon request.

Data Analysis

Once the data was collected, I conducted a thematic analysis perspective, specifically with a deductive approach (Jones, 2022). I did not use data analysis software, but instead manually coded my data set. They were predetermined themes based on the Health Belief Model which looked at perceived susceptibility, perceived severity, perceived benefits and barriers, cues to action, and self-efficacy. A theme in my research is a statement header with one of the six themes of the Health Belief Model simply stated. Under each main theme will be subheadings

that speak to each theme. For example, under perceived susceptibility will be the subheading “living conditions.” The thematic analysis consisted of reading through the zoom transcriptions and taking notes in Google Docs to find patterns that fit within the six constructs of the Health Belief Model. After each interview, I went back through the transcriptions while listening to the video recording to ensure the words matched up to what the participant was saying. While doing this, I kept mental notes of the language that was used that could fall under each of the themes. Additionally, I copied and pasted quotes from participants that fit within each theme. Once all interviews took place, I went back through my Google Docs form, where all quotes were, and I found similarities in the language that each participant used to make conclusions. For example, consistent phrases like “I believe it's dangerous,” fell under perceived severity and phrases like “I was concerned,” fell under perceived susceptibility. I started a new Google Doc that then separated all quotes and themes based on the Health Belief Model. Having predetermined themes based on the Health Belief Model made the coding process much easier as well as to help me put my research questions within the six constructs of the HBM. Non-mediated forms of communication were also analyzed in comparison with mediated messages' role in Black students' decision-making process on receiving the COVID-19 vaccine. To compare which had a greater influence, I would simply ask participants where they receive their media information from, and which had a greater influence. This brought a variety of different answers, but overall participants' answers fell into three categories: 1) the media had a greater influence on their decision to get vaccinated, 2) non-mediated forms of communication had a greater influence on getting vaccinated, or 3) both the media and the non-mediated forms of communication had an influence on getting vaccinated. Lastly, within my data analysis, I considered unexpected emerging themes that may be of value to.

Chapter 4: Results

The study's design was intended to look at what forms of communication, mediated and non-mediated, had a greater influence COVID-19 vaccination decisions among Black students at the University of Missouri - Columbia. The study also utilized the Health Belief Model to explain health behavior through the following constructs: perceived susceptibility, perceived severity, perceived benefits and barriers, self-efficacy, and cues to action.

Participants

Participants were classified as graduate and undergraduate students at the University of Missouri. They all identified as Black/African American women (See Appendix A). The interviews lasted between 25-45 minutes.

Perceived Susceptibility

Susceptibility examined if Black college students perceived themselves at high risk of or more vulnerable to contracting COVID-19 before they were willing to get vaccinated. It was important to start the conversation asking participants what their experience was with COVID-19 over the past few years. This led to an array of answers that dealt with mental health, physical and social constraints, changes in work life, school transitions, and home environments during the pandemic. Seven out of the eleven participants contracted the disease, and this likely affected how they answered the questions. Most participants did not have the medical vocabulary or knowledge to explain the COVID-19 disease or vaccine. For example, T6 stated, "I mean not a lot, just because I'm not a virologist," and B8 stated, "I mean I don't know too much medically." Participants did however have general knowledge of how COVID-19 is contracted and spreads from one person to the next. Additionally, participants went into detail about some of the symptoms regarding the disease. In terms of the vaccine, participants briefly explained the types

of vaccines, conversations the public had about them, how many shots one needed to get, booster shots that are developing, and potential side effects after the shot. They expressed how this pandemic was unlike something they had never seen before and deaths from it would be something that would have a lasting impact on their life. For example, T6 stated, “Everything that was going on around – just psychosocial well-being, the isolation, and how there was an immense spike in anxiety and depression, and it was overwhelming for me.” S10 stated, “I’d say it’s been kind of a burden on my life.” The concerns around COVID-19 were similar. Many participants were very concerned when it first emerged, but after a few months they were not as concerned as they succumbed to their environment around them — if people around them wore masks, then they did as well or if people did not wear masks, then they did not wear them. Some were very concerned after they contracted the virus and became a germaphobe and started mask collections. Some were not as concerned because they took all necessary precautions such as staying at home, masking, social distancing, and getting the vaccine or they were around the same people, so they had nothing to worry about.

Living Conditions. A couple of participants mentioned that their living conditions at home and school made them feel at risk of contracting COVID-19 because the bathrooms were community style and they had to share sinks, toilets, and showers. R1 stated, “I would walk around or like walking back home in the hallway, and everybody has their mask off like going in the bathroom when people are just coughing and stuff so I was kind of concerned that I might contract it like in my living space. I was in Gillette when I came back, but we all shared the same bathroom and stuff like that.” J3 stated, “Also, like I’m from a poor like Black household, so that was another factor of like when it came to my family.” S10 stated, “I was living in the dorms and not everybody complied with the COVID guidelines of masking everywhere. So, I was just kinda

worried just in that shared living space like, especially in the bathrooms in the dorms, I was worried about it there.”

Student Life on Campus. Coming back to campus left many participants uneasy. Students came from different places around the country and had differing opinions on COVID-19, masking, and the vaccine. Six of the eleven of the participants stated that just being a student was a risk factor when it came to potentially contracting the virus. R1 stated, “That was when I started kind of stressing about it, because I was just around a lot of people who had kind of different opinions about how to go about protecting themselves, or just the concept of needing to protect themselves in general.” J3 stated, “I do a lot of things on campus related to org meetings, diversity – I’m always doing outreach. Because of all the things that I do, I keep my mask on because I never know who I’m interacting with, and you never know what someone is carrying. So, it’s kind of better to be safe than sorry.” J4 stated, “Well, I’m a TA here, and so I’m around a lot of students all the time. That was something that made me nervous after having the pulmonary emblem, and then coming to such a big school. I just felt like I would always be at risk, because I was surrounded by so many people.” M5 stated, “I would say, just being a college student, you know. I actually went to a small school compared to Mizzou, so I don’t think it was as big of a risk, but I definitely know that there were people in my classes who did not believe in COVID, and so they wouldn’t wear their mask.” T6 stated, “I think the risk factors are me being a graduate student in a very hands-on program where we have to do practicum and things like that. I was teaching, interacting with students, and mentoring. I think the risk factor for me was being around so many different people, not only wanting to protect them, but also wanting to protect myself, because you know some people didn’t want to wear masks and get vaccinated. So, I was like I don’t know what ya’ll got going on, I’m gonna protect myself. I’m gonna do what

I can control.” B8 stated, “I think the only reason I thought I was gonna catch COVID was because I was nervous about coming back to Mizzou. During my freshman year was when COVID kind of ramped up again. I just had it, so I was feeling like I was immune to it but to catch it again was very scary to me. I think that because I was around all these people who weren't wearing masks, it just kind of had me feeling like these people don't care about something that's so serious going on in our world that's literally killing people.” S10 stated, “Yeah, the only risk factor was just being a student.”

These testimonies emphasize that while college campuses bring together an array of people, cultures, and customs to produce a positive diverse working atmosphere, it also brings together differences in how people understand public health information and what positive health behaviors they want to participate in. Those differences left students uneasy about coming back to campus.

Work Environment. A few participants were considered first responders, which made them at risk of contracting COVID-19 and others had jobs that were considered a risk because of touching items. J3 stated, “Yeah, I work at a biochemistry lab and so there's a lot of labs all over this building, and I go back and forth in between multiple labs. So, I constantly interact with all types of liquids and germs.” K9 stated, “Yes, I would say, being a first responder at the time was what caused me to feel like that was a risk factor that was going to be kinda what led me to getting it. At that time, I was working with the government agency in mental health care, and so we were still seeing patients, we still had patients coming in and I actually worked in a homeless program...so we were very much still seeing people.” D11 stated, “Yeah, I think my job would probably be my biggest one, just because the kids I work with, they face challenges with new things, so trying to help them wear a mask – that was very challenging.”

Traveling. A couple of participants mentioned traveling as a concern to contracting COVID. One participant thought it was a concern because she was considering the health of her mother. C2 stated:

“The travel. My mom was in the heat of her cancer procedures, and I was with her the entire time. We had to get a secondary house because my mom was first diagnosed with this cancer in New Orleans, however, the doctor’s kind of watched the situation. The top two cancer centers in America are MD Anderson and Sloan Kettering, and that’s in Texas and New York. So basically, for the entire summer, we were flying. Me, my mom, and my sister were flying between New Orleans, Texas, New York, because she had cancer teams in two different parts of the nation. I think that was mainly the fear I had, for, like I was definitely going to get COVID because we were in the airports for so many weeks.”

Another participant knew travel was a risk but did not care as much because it was something she wanted to do. D11 stated, “I went to Nashville to see a friend and we went out to bars and clubs – I don’t wear a mask, but if I went to the grocery store, I wore a mask, or if I went to the art gallery. It was like I was cool with getting it if I went and did something I really wanted to do, but I wasn’t cool with getting it at the grocery store, so I was wearing a mask and stuff there.”

COVID Is Killing More Black Americans. Ten out of eleven participants felt as though COVID-19 is killing more Black Americans than any other race, making them susceptible to contracting the disease. R1 stated, “My inclination is to say more. I have zero proof, but just based on how our country operates, I feel like there’s always disparities in health care so it’s like that’s not gonna change, especially with COVID-19. I feel like, if anything, that’s heightened because it’s new. I feel like people are not rushing to look out for how this is helping Black

people. If there are a lot of Black people who are already facing disparities like, it's just piled on top of that." C2 stated, "I feel like Black people are more at risk to die from COVID-19 should they experience the trajectory of the really dangerous symptoms that were seen when getting the virus. I feel like there's a stigma in medicine where Black people, especially when you consider intersectionality, Black women are less likely to be believed when they say something's happening to me; I can't breathe, and I really need help. I feel like compared to other demographics Black people are often less likely to be believed in that light, and because of that, when they contract COVID, it does get pretty bad like they're more likely to die." J3 stated, "I think I would say it's probably killing more than most. Black Americans in general, are definitely being hit the hardest because of again, like lack of resources and lack of funding. If you can't afford to get food on the table, you definitely can't afford to go to the hospital. Hospitals don't even have enough beds for COVID in general so, of course Black people are going to be left out the loop. They're gonna take care of certain people first, because they have the money, they have the resources, they have connections." J4 stated, "I don't remember what the podcast was called, but there was a talk with a lot of Black providers and educators, and they were saying that we are getting affected more, and we're dying more than any other population." M5 stated, "I guess if you just like, ask me on a whim, I would be like, yeah, probably it is. I feel like more Black Americans wouldn't get the vaccine, not just because, like they don't want to, but I think it's because, you know, some people, maybe they don't even have the time to. There are single mothers who are working three jobs and taking care of kids, so I think that there are more people who are having a struggle similar to that, that have implications getting the vaccine. They're around people, and maybe they don't have access to things like masks or what they would need." T6 stated, "If you take it by proportion, I think proportionally, Black people are dying at higher

rates. I would guess that yes, it's higher than other communities across the board, simply because Black people are more entranced in poverty and poverty has health implications.” M7 stated, “I'll say more, because back to the environment aspect and also just like there's the fear of getting the vaccines and to some of the Black community as well because of our medical background with being tested and not knowing and our ability to take more pain than other groups.” B8 stated, “I would say that it is killing more Black people honestly, because as an African American unit, we already don't like to go to hospitals, or get the care that we need due to maybe we're scared of the answer that they're gonna give us or we don't have the proper insurance or health care funds in order to pay for what we need to have done. There wasn't as much knowledge at the time in order to be able to save like the people so technically like yes, we did end up dying in more numbers.” S10 stated, “I'd probably say more just because of the health problems in our community, and then misinformation that spread around so less people get vaccinated and more people get it, and it's more dangerous to them because of that. I feel like more Black people have definitely died from COVID than other races.” D11 stated, “I'm sure more. I think about access. I think about who might be required to work so that ties into that economic piece of it too and how economics and race a lot of times overlap. But I just think about people who probably were working at the time and that was an issue risk.”

From the perspectives of the participants, Black Americans lack access, resources, time, and knowledge when it comes to taking charge of their health which can leave them at a disadvantage. This, along with Black Americans not receiving adequate healthcare especially if they had pre-existing health conditions, left them vulnerable to COVID-19 infection.

More Likely To Contract COVID as a Person of Color. Four participants felt that they were more likely to contract COVID as a person of color. J3 stated, “I do believe that I'm more

likely to get COVID-19 as a person of color because I think it's purely just how a lot of people of color are more commonly in more working spaces or in the like working class, poor class job spaces. We don't have the funds to take care of our areas like we want to, we don't have the funds to like get health care and all that stuff that does make it a lot more difficult to receive care. Even now, my chest to those things after COVID, and I'm still like getting that checked out. I'm trying to figure out like, can I get this checked out at the hospital? Does it cost? Can I afford this? Can I afford that?" M5 stated, "I don't remember if I read this, or if it was a news article or newscast, but it was talking about how people of color are more likely to get COVID just because of their biology. Also, I think it was because of certain settings and locations, like people who lived in low-income neighborhoods, or weren't able to get the vaccine due to where it was and the cost and stuff like that." M7 stated, "I would say yes. I guess, like, historically, back to the environmental situation. I live in an urban community in Memphis, and it's not like the best community. We don't have the best culture and the foods you eat, and that environment surrounds you, affects your immune system, and how your body is able to react to things like COVID. I think when the majority of Black live in the urban city communities that will affect their health more than someone who lives in the suburbs." K9 stated, "I would say yes, if I'm thinking about the statistics and the research out there, and then, if I'm thinking about; just everything overall, I would say, yes, that's how I would feel based on the information out there."

On the other hand, there were five participants who did not feel like they were more likely to get COVID-19 as a person of color but did recognize how people of color are often affected by health outcomes at a disproportionate rate. C2 stated, "Not in particular. I think race is a big matter in regard to the community as a whole – COVID-19 was definitely difficult. I think a lot of times people who were in a position where they did not have access to protect

themselves from COVID, or they did not have the proper channels to give them accurate information about COVID. I don't think that being Black particularly affected whether or not I got Covid, but I was well aware of how COVID was difficult for people of color, and especially difficult for people of color who came from I guess a lower socioeconomic status." T6 stated, "I think for me, based on my lifestyle no, I don't believe that I was more likely to get COVID-19 as a person of color. I understand why people are saying that people of color were more likely to get COVID-19 and more likely to have more severe impacts from COVID 19 due to poverty situations being so conflated with race in this country, and limited access to healthcare. Even when it comes to the cultural foods that we eat being higher in like sodium and that contributing to heart problems like diabetes. I think it's because of those more social, cultural, and political things that contribute to people of color, being more likely to contract COVID. I mean also being more likely to be around other people in the type of jobs that we work and having households with more people in them typically." B8 stated, "I don't necessarily think that I was more inclined to get COVID because I was a person of color, only because I think it depends on your health factors. Now, I'm not going to say that African American people don't have maybe more underlying conditions. I feel with the way that I'm experiencing good health is – an African American female, that's pretty active, I felt like I was pretty okay and combative against it, due to my immune health." S10 stated, "No as far as I'm aware, I thought it came to everybody equally. I know people of color seem like we're less likely to get vaccinated, but I don't think COVID, like the disease itself, would target people of color if that makes sense." D11 stated, "If I'm thinking about myself, I would say no, just because I do think I have access to a lot of economic resources that put me in the place where it was never a concern. If I didn't get it from my job, I

have a mom that's in healthcare. I just feel like there were places that I would have had access to because of my economic means that would have superseded my race during COVID.”

These participants recognized their advantage as college students and being employed, which inherently leave them in a better position because of the access to resources and knowledge. They did not deem themselves as more likely to catch COVID just by identifying as a person of color, however they understood the circumstances of people of color when the pandemic began.

COVID Affected the Health of the Community. All participants agreed that COVID-19 affected the health of their community in various ways. Community was perceived as the Black community, the community where they were from, family community, and college community. R1 stated, “I feel like, to a great extent, cause I'm in journalism as well and so I feel like we're always we're always talking about the adverse effects COVID-19 had on Black people and people of color in general, just like in terms of losing jobs, and like the access to health care, or barriers being in place where a lot of Black people can't necessarily even afford to get the vaccine. I was mentioning earlier vaccine hesitancy, and not necessarily trusting doctors and all those factors so I feel that just really set Black people behind and kind of like the recovery aspect of everything. I feel like COVID-19 had a very negative effect, both economically and socially.” C2 stated, “I would say greatly. A lot of people around us were very apprehensive to get it. When the vaccine first came out there was absolutely no line to go get it, because nobody really believed. I actually had one best friend that caught three times and still didn't get a vaccine, because they were just like well, I caught this many times, and I must have you know my immune system must know how to fight it by now.” J3 stated, “So the extent that I believe COVID-19 affects the health of Black people is that a lot of them consume a lot of

misinformation. I think that's how it affects our community, too, because we're trying to find remedies for it with no scientific backing. I know it was this one man that was telling people to grind up goat meat and like oranges and drink it to make sure COVID doesn't come to you. People who didn't want to put a mask on your face and say that's just government control. It's a frustrating sense that people are dying because of miscommunication, and other people are just being selfish and giving out that information to illness so they can kind of justify their thought process.” J4 stated, “Oh, a lot, because Black people already have a lot of underlying health conditions and so that's also something that makes you more vulnerable to contracting COVID and so if you're not getting the vaccine, you're already putting yourself at jeopardy. Since a lot of people are already skeptical, there's a lot of mistrust in the Black community with medical providers and vaccines so I feel like we definitely were impacted a lot.” M5 stated, “For the most part, we're all pretty much a community, and so I think it had a negative effect on the community because of the social aspect, we weren't allowed to see each other and go out socially. There was no bonding, there were no activities, there were no parties. Everything was really just your five to ten friends inside a dorm, apartment or house.” T6 stated, “It definitely threatened the health of my community. Keeping up with the statistics of people of color, and particularly Black folks who were dying, or seriously being impacted by COVID-19 broke my heart. A lot of it has to do with not being willing to get the vaccine, some people not wearing masks, but then also those underlying health conditions. A lot has to do with trauma and health issues being passed down through our bloodlines. So, a lot of that stuff is genetic and inherited and we don't even realize it.” M7 stated, “I think it extremely affected the health of my community. I guess just for at home, like having a lot of older people in the family. I just kinda think about life expectancy even though they might be older if they have something else going on but, like when COVID

came they could ultimately end someone's life.” B8 stated, “I feel like it was a visual effect. We kept seeing all these people dying, and I remember it was one lady that was really close to me - our debutante cotillion coordinator. When I found out that she had passed, it really hit me and just the fact that something like a pandemic just took her out like that, and she couldn't bounce back.” K9 stated, “I think that the misinformation about COVID-19, and how and its seriousness is what threatened my community because the majority of people in my community, which in this case I'm referring to my family, my immediate family, got the vaccine. The issue wasn't necessarily accessibility to getting it, the issue was the misinformation about who should get it, and I think that in and of itself is what sort of threatened the community.” S10 stated, “I think it definitely threatened it strongly, because, just looking at the deaths. I mentioned how my great grandma passed away after she caught COVID and I think because of a lot of the health issues that are prevalent in my community that makes us more susceptible, like with diabetes, because that runs in my family and heart problems. Having stuff like that kind of makes it seem more risky for us.” D11 stated, “So when I think about my kids who have severe, challenging behavior, aggressive and self-interest, behavior. If that school would have shut down, my kids would have been hospitalized. It was very real, like we can't mess around because we can't have all of our kids in hospital with people who don't know how to care for kids with autism and behavioral challenges. I think that it was a threat in that sense to their mental health, because I didn't have the skills per say, to support students who couldn't communicate their thoughts in a way that was connected to their feelings and their behaviors.”

These testimonies reflect how participants believed that COVID-19 threatened community health. Participants witnessed countless COVID-19-related deaths exacerbated by pre-existing health conditions, the failure or lack of desire to adhere to COVID-19 protocols

(e.g., vaccinate, mask, and social distance), and the spread of misinformation. These factors likely increased the harm to and socioeconomic disparity for communities of color.

Perceived Severity

The next set of questions focused on COVID-19's perceived severity and many participants had various opinions on this topic. Severity questions examined if Black college students perceived contracting COVID-19 as very serious and looked at the condition of leaving it untreated, including physical consequences (e.g., death, disability, and pain) and social consequences (e.g., maintaining relationships with others, or feeling stigmatized).

COVID Killed People. COVID-19 has many visual effects and one of those was seeing the deaths across the country. Seven participants expressed that COVID-19 was dangerous from their point of view because of how many people the virus killed from a direct and indirect perspective. For example, R1 stated, "I believe it's dangerous, just because of the fact that it will, and it did have the potential to kill people. My great uncle had a lot of health problems and so he ended up dying from COVID because I think he contracted it from someone in his household." J3 stated, "Even now if you look at compared to 2019 with the top causes of death and now, COVID is number 2 or number 3 in deaths as of recently." M5 stated, "Yes, I do, because it's killed so many people, and it's so contagious that even if somebody didn't even know they had it they could unknowingly be passing it." B8 stated, "Absolutely, I definitely think it's dangerous because many people lost their lives when it first came out as a pandemic, and it's just kind of crazy because if there wasn't the pandemic, I wonder would our loved ones still be living?" K9 stated, "I think that it's dangerous, because it is something that we've never seen before. We've seen that it kills, we've seen that it kills in high numbers, vulnerable communities, Black and brown communities, elderly communities, those who are differently abled to so, yeah, I do think

that it is a deadly disease.” S10 stated, “I lost my great grandma to it so I feel like I took it pretty seriously when it first came out, probably not so much now as I should, but I definitely think the disease was pretty dangerous and kind of scary.” D11 stated, “I think it's dangerous – so many people have died. I haven't been personally impacted by it but just to hear, like some of my parents are like 60, their coworkers, who have passed away, or just hearing different people talk about different things related to it.”

COVID Is Dangerous for Those With Pre-Existing Conditions. Seven out of the eleven participants expressed that family members had pre-existing conditions, or some participants mentioned that COVID-19 can be detrimental to the Black community and other vulnerable populations. C2 stated, “Personally, it was especially dangerous, because my mother, when COVID hit, was diagnosed with Osteosarcoma, which is a bone cancer. Because it's such a violent one, she has to go through a lot of treatments. I remember one time a doctor just said, "straight up, you have zero white blood cells in your body right now,” so because of that we had to be especially careful with COVID because if she was surrounded by it at all, she was just going to get it, there was no defense.” J4 stated, “...it's because we have these underlying health conditions so when we do get COVID is worse.” J3 stated, “When it comes to disabled people, it affects them harder, because a lot of people do not take it into account what's the best procedure to actually lower the amount of cases and the amount of deaths going on.” M5 stated, “I think that it is very dangerous, and people who have immune systems that are already compromised are also at a danger. I literally remember when I got exposed to COVID in undergrad, and I was so terrified that I had it because I had just hung out with one of my friends, who's like extremely immunocompromised, and I like was freaking out I was crying and I'm thinking I'm a murderer because of COVID.” M7 stated, “I believe that is dangerous to those who have the pre-existing

issues, and then those of minority communities, because of the environment that we live in – they affect our health. So, if we contract COVID, we'll have more dairying effects than a normal person in a high quality environment.” B8 stated, “I just think that it definitely had a detrimental effect on our world, especially as a Black people, because I just feel like a lot of times like we don't get the attention that we deserve within the medical field. I think that because we tend to have underlying preconditions – so you can't mix up a world pandemic with the underlying condition.” S10 stated, “My great grandma, because she had diabetes and she had something else they said she didn't die from COVID, but she died three days after she caught COVID.”

The participants' feedback highlighted that pre-existing health conditions and other disabilities exacerbated the severity of COVID-19 infection.

Contracting COVID Would Affect One's Life. The most common response in relation to the disease itself was how it would indeed affect the participants life, physically, socially, and academically. The participants who contracted the disease responded to this question from lived experience. The participants who have not contracted the disease responded to this question in a “what if” sense and from experiences of others around them. Nine out of the eleven stated that either getting COVID affected their life physically or if they were to contract COVID, it would affect them negatively. For example, C2 stated, “Personally I'm not really good with getting sick because ever since I was young, I've never been – me and my lungs have not been always been the best of friends, so if I get a cough, or if I get a sore throat or anything that's going to impede my breathing, it's going to be pretty bad. I also had recurring bronchitis, so COVID was definitely not going to be fun if I ever got it.” J3 stated, “It was harder to breathe, and for the first 2 weeks after I finally stopped quarantining, when I would wear my mask in public, I would literally have struggles breathing. Also, I was eating kind of weird, because when I had COVID I

was eating everything in my mom's fridge but when I got back on campus, I wouldn't eat as much as I usually would." J4 stated, "I got COVID I think October 2020 and when I came home for Thanksgiving break, I ended up having a pulmonary embolism and so I was hospitalized for six days, and they said it was a direct link of COVID." M5 stated, "Physically, obviously, if I get sick, I literally can't leave my bed, so that would suck." T6 stated, "So I have had COVID before and I mean, physically, it was challenging." M7 stated, "I think it would affect me because I'm overweight and there's different factors with that as well and a mild cold for some people could end up in hospitalization for me." B8 stated, "So when I had COVID, it made me really weak. After having COVID it took me a moment to get back to myself." K9 stated, "If I were to get it – of course, physically it would be very hard. From what I'm hearing from other people who have got it – it is very hard on the body. I feel like it'd be extremely difficult for me, because I'm not someone who is constantly like every season, I have a flu or a cold or something like that so it would be really hard for me." S10 stated, "I definitely feel like it would be hard, just because I don't get sick very often so when I get sick it's usually pretty bad." D11 was the only one who didn't express having much physical problems and stated, "But physically, I felt fine. I was just tired for a couple of days, and then it was kind of back to normal for me. So, I was really lucky in that aspect."

Five participants stated that socially it would affect their life because people would not want to be around them, or they would be stigmatized for contracting the disease because others believed they were being unsafe. R1 stated, "Back in the day I felt like it was the stigma type of thing where I felt like people would have judged me for not being safe enough." C2 stated, "So, I know, like with my family while they care about me, and they always love and take care of me, it's always like some sort of like social thing about like, don't catch COVID because you don't

want to break it to your mother, because, you know, she needs to take care of herself, and that was the biggest thing.” M5 stated “I would say a year ago, you know, if I was still an undergrad, and I got COVID like it was embarrassing. I was in a sorority, so my sorority sisters were very judgy.” M7 stated, “I guess socially it is kinda seen as a negative thing, because, like it's kinda like, oh, this person got COVID. They weren't being safe blah blah blah.” S10 stated, “Socially, some of my friends, they definitely would want to stay away because they don't wanna get it.”

Additionally, five other participants stated that they either didn't have social effects because others around them were supportive and also had contracted it once before or if they were to contract COVID-19, others would understand their situation because they had also contracted it. J3 stated, “Socially, it didn't really affect me. My friends will check up on me and be like, hey, how are you doing? I'd be like, I'm good, I don't feel sick. I just feel exhausted, and I guess that was really about it.” J4 stated, “Actually, like a lot of my line sisters at the time, wouldn't let me do anything. They were really protective of me just because they knew how severe my condition was, so it wasn't really going out a lot, and if I did go out they were like, are you okay? So, like just feeling with that – I don't wanna say helpless, but just feeling very just overprotected.” T6 stated, “I think in terms of stigma, at that point, by the time I got it, almost everybody that I had known had it as well, so it really wasn't a thing, but it was just like, "Oh, it's your turn.” K9 stated, “I don't feel that I'd be stigmatized only because I've known so many people who have had it. If anything, I feel like I would receive more sympathy and empathy.” D11 stated, “When I got it, I think, because I got it so late in the game, it was just like, Oh, you got it! I think it was hard, though, because it was the summer, and everyone was kind of getting it in stag, so I didn't get to see a lot of people. I've never really been sick before so not having anyone else that you like, support me there for me.”

Only four participants mentioned academic effects and used language that contracting COVID-19 affected their academic life or if they were to contract COVID-19, it would affect their academic life. R1 stated, “I felt like it would have affected my life academically too, because then I would have to not be in class physically. I feel like if I got it now, it would definitely slow me down even more, socially and academically, because everything is basically back in person again so I would like to step away from stuff that might not have virtual accommodation.” C2 stated, “At that time I was like a senior. In my senior year of undergrad, I was trying to get into the doctoral program that I am in right now and in order to keep my life going, I wanted to take care of myself.” S10 stated, “I definitely feel like it would be hard, just because, like, I don't get sick very often so when I get sick it's usually pretty bad, which would be hard like with schoolwork, and then just feeling bad as a whole.” T6 stated, “It was inconvenient, because as a grad student, I have so much to do all the time and with COVID you can't do nothing.” Only J4 stated that she had no academic issues when she contracted the disease stating, “No, it was very accommodating. I was able to like – if I needed to miss class for a doctor's appointment, I was able to just do that. My professor understood what was going on and I had a lot of outreach for my school as well.”

COVID Attacks the Body. There was one participant who had an extreme case of COVID-19 and communicated that it was dangerous. J4 stated, “Absolutely a dangerous disease, just seeing myself being affected by it, and as a 21-year-old at the time in the hospital, like literally facing life or death that was really just – it was life transformative. A few participants pointed out how COVID affects the body, thus making it a dangerous disease. C2 stated, “A lot of people were going in and out of the intensive care unit, especially, you know, people who are a little older. It can really derail your life when you get it sometimes.” J3 stated, “Oh, my gosh,

yes, COVID-19 is a dangerous virus in multiple ways because of how it attacks your respiratory system and attacks your stomach.” T6 stated, “I do believe it's dangerous. Frontline health care, workers, went through a lot because I have a lot of friends who are trained to be doctors, a lot of friends who are already nurses, and they were like on the ground when everything was happening, and they would tell me about how they saw people on ventilators and they saw people you know, dying in hospitals and things like that.”

Perceived Benefits

In order to understand perceived benefits, this line of questioning asked participants their opinion on the vaccine, if they deemed the vaccine as important for people of color, and if they believed the vaccine was safe and worked. Additionally, these questions focused on the variety of benefits Black college students have encountered after receiving the COVID-19 vaccine (e.g., keeping oneself, family, and friends safe).

The Vaccine Is Positive. Most participants had a fairly positive outlook on the vaccine as it relates to society while understanding the history of vaccinations in the Black community as something that was not always positive as well as the fear around vaccines in general. R1 stated, “Overall, I think that it's something that people should get if they can, and I have a very positive outlook on it, simply because I feel like anything we can do as a society to take precautions against COVID is a good idea. As a society there's like this whole sense of individualism and so everyone's kind of stubborn and wanting to do what they want. So, I feel like the vaccine is a good equalizer in that, like you get this, and you can still kind of do what you want to do, but it's a protective factor.” C2 stated, “I definitely think that it benefits society in the long run, but I think sometimes it's difficult for people to see that, especially if they don't really have an understanding of what a vaccine is supposed to do. My mom is a very big advocate for health,

and even she just didn't understand how my sister could possibly get COVID if she was vaccinated. It's just a lot of this information about what the vaccine was supposed to do for you.”

J3 stated, “My opinion on the vaccine was that I will wait first because with Black people and our history, we're always kind of nervous when it comes to vaccines and they are like, “take this” and you're like, but it did you make sure that this works for everybody like we're not the test subjects. I talked to my cousin, and at the time she worked at the Mayo clinic in Minnesota, and she got hers earlier than everybody else did. She was saying her effects and how she felt, and how people have different reactions.” J4 stated, “I think you should get it. I mean most of us get vaccines to go to school anyways so I don't really know what the difference would be for this.”

M5 stated, “I think that the vaccine is beneficial. I think that if you can have it, you should have it. I don't think it's my job, or responsibility, or anything to make other people have it, but I personally do feel comfortable when I'm with people, and they are vaccinated.” T6 stated, “I hold space for both sides of the coin. I believe in the efficacy of vaccines, and I understand why there are so many Black people who are hesitant to take vaccines. On the other side of that, I took the vaccine. I got the booster because I do believe that vaccines are effective, and I also think about all the other vaccines that I've already had to take anyway, to be in school, both public school and in college.” M7 stated, “I think the overall opinion about the vaccine is that it is helpful, and it has the ability to save lives.” B8 stated, “So I have mixed emotions about the vaccine, and I'm all for getting vaccinated, but I truly think that when I got that third booster that that was why I got COVID because as soon as I got that third booster within a week, I caught COVID. I'm becoming a little shaken by it. I mean they're doing a lot of research and stuff behind the stuff, so I feel like you just gotta really read up before you just go and get a vaccine.” K9 stated, “I think that the vaccine is something that people should get if they want it. If they feel that their immune

system is compromised, if they feel that they may not recover from it as well as someone who is totally healthy, I think that they should get it. I do think that the vaccine is something that is needed that I do think that people should get if they choose to do so.” S10 stated, “I think it's good, like it's positive. I'm glad that people who got it did because the people I know didn't get the vaccine and they got COVID, and it was much worse. I have a positive view on the vaccine, more so than like my family members, because I know some of my family members refused to get it because they thought it was dangerous, but I'm cool with it.” D11 stated, “I guess I'm a more trusting person. So, it was easy for me to be like, “let me go get it.” I can see where people might have concerns about it and want to learn more about it. Also, we didn't know a lot about it at the time, so I can see how that could be a challenge for someone who was trying to navigate all this new information.”

Understanding the cultural context of vaccinations and its intersection with the Black community is essential to comprehend why Black populations use wait and see tactics and are hesitant. However, participants expressed a sense of utilitarianism when it came to their ideas on the vaccine as they believe that it is a benefit to the whole of society. Additionally, participants agreed that researching the vaccine to make a more informed decision is a must, and that getting the vaccine is a decision that should be an individual choice.

The Vaccine is Important for People of Color. Eight of the eleven participants agreed that getting vaccinated against COVID-19 was especially important for people of color. Participants spoke to the fact that as Black Americans, it is important to take charge of your own health because they oftentimes are left out of larger health conversations which can be a disadvantage. COVID-19 revealed the already known inequalities within the healthcare system and was added to pre-existing conditions in the Black community. R1 stated, “I feel like if

people of color are the people who are having this need and having this seriously need to get helped more and are already at a disadvantage, then I do believe that that's something that I think there should be greater access made so that people of color, Black people, can get the vaccine more." C2 stated, "I feel like it's definitely more important. I'm also considering the aspect of economic status and depending on where you are or what walk of life you come from, you should put more effort into getting a vaccine, especially if you're a person of color. Oftentimes, I know, the history with the medical field and the Black community has not been all that healthy, but honestly, nobody may protect you more than you will protect yourself." J3 stated, "A lot of people were more likely to die from heart disease, we have a lot of post-traumatic stress, we have a lot of things that are like passed down from generation to generation that we're still like unraveling to this day because of how often like we're left out of conversations when it comes to health and because of how our signs specifically are not really seen as much or they're not really as well researched. If we get the vaccine early, I think that it would prevent the amount of harm and damage that's happening to people and also it would lower the amount of COVID related complications deaths." J4 stated, "It's more important for us because we're being affected more by the virus; we should do something to protect ourselves more, even if we do contract it after getting the vaccine – They never said that you wouldn't get it after getting it they just said that your symptoms to be more manageable." M5 stated, "I think it's more important for people of color. I think all people of color should have the vaccine." M7 stated, "I think it's more important because I think that it's more deadly to our community than others." K9 stated, "I think that it's more important for people of color, because I do think that just despite the all of the inequalities in health care – I do think that because this vaccine is what's recommended by health professionals, this has been proven to make the symptoms less severe of COVID-19. I do think

that we should get it, because a lot of times we're left out of everything. I think that we should take charge of our care and if we feel that that's something that we want, we should definitely get it." S10 stated, "I think it's more important just again, because of our health risk issues so yeah, I'd say, it's definitely more important."

There were a few participants who had mixed feelings about these questions as they realized everyone has their own reasoning for not wanting the vaccine, regardless of race. They recognized the importance of getting the vaccine for people of color, but also understood past history as well as the importance of conducting your own research to ensure you are making the right decision on which vaccine to get. T6 stated, "It's hard, because being in the profession that I am, I hold space for different people – the reasons why people do different things and think the way that they think, so for me as a person, I think that it is my moral obligation as a person in general. Even if I was white, I think that to protect myself and other people around me I would want to get the vaccine, however, being a personal color, having shared history and shared trauma with other people of color and other Black people, I can also understand why you can't generalize what you deem as your moral responsibility to other people, because people have valid reasons for being afraid or refusing to get the vaccine." B8 stated, "I think it's more important for us to get a vaccine but on the flip side, I feel like we need to do our research and figure out what vaccine might be best for us, because you can get a vaccine, but that doesn't mean that it's gonna be beneficial for your health. Get the vaccine and know that it's gonna help you and be a good proponent of your health. Yes, African American people as a unit and minorities in general need to go and get the vaccine." D11 stated, I think it's hard for me to think of an answer, because I also have to acknowledge, like the history of America, and how medical systems have screwed over Black people. Someone who thinks the vaccine can help you be

healthy or stay away from getting it, I would say, yes, it's beneficial, but I'll also just have to think about the history. I think I could be empathetic to the fact that people's experiences, especially to which generation you're coming from, really have an impact on how you think about these institutions.”

The Vaccine Is Safe and Works. The next set of questions analyzed if participants saw the vaccine as a benefit and if they believed it worked and was safe. For the most part, participants agreed that the vaccine was safe and worked, however, they acknowledged that people within their inner circle were allergic to the vaccine or still contracted COVID-19 while vaccinated. R1 stated, “For the most part, yes, I believe the vaccine is safe to get but I also know people who can't get it, because they're allergic to it. So, in a general sense yes, but not for everybody. I want to say yes, the vaccine works, because again, I haven't gotten COVID, but I feel like I also do know people who have gotten vaccinated, who have gotten COVID like my brother. But also, I feel like he got COVID like many months after he got vaccinated. So again, it's the thing of like, how long does the vaccine even last or kind of work forward to prevent?” C2 stated, “It sucks, but I think overall, it's really safe, but I think the most major thing is not having it. You'd rather just bite the bullet for three days then go without it. I still believe that it works. I'm definitely a big defender of vaccines, and how important it is for herd immunity, and how some people may not see the benefit as right now, but over time when we start thinking of like the Coronavirus like a long long long-lost memory, then you really see what the vaccine did for them the community. And we're not just doing it for ourselves we're doing it for you know our next generation and our previous generations – definitely think it works.” J3 stated, “I do believe that the vaccine is safe to get. I just think that a lot of people are confused on how vaccines work but I also think that unfortunately, not everyone has the proper education, or the

opportunity to receive proper education. I do believe that the vaccine works, because for me, personally, I got really lucky, and I got my first shot, and I was fine. Then I got my booster in December right before I had got COVID last year and I think that's part of why I did so well when I got it, because I already had two of my shots from Pfizer. J4 stated, "Yeah, because I think after – because I know, they said they were some things with Johnson & Johnson so that's why I went ahead and got Pfizer. So, I've actually had COVID twice and so when I had Pfizer, my symptoms were really minute, and I recovered very quickly." M5 stated, "Yes, to both." T6 stated, "I personally believe that vaccines are safe, but when I say safe, I also recognize that nothing is 100% foolproof without any type of consequence. I'd rather have that additional line of defense, and trust in the vaccine and trust in people who are specialists. I really trust the people who have been trained to understand how viruses work, understand how vaccines work, and trust their scientific judgment about the efficacy of the vaccine. I think any potential risk is worth the reward and protection that you get from the vaccine." M7 stated, "Yes and yes. I believe it works because growing up I never really questioned vaccines so like I don't really have any doubts about it. I'm not as informed as I should be honestly, but I don't distrust vaccines and I haven't gotten COVID in the past 2 years that I know of." B8 stated, "You know, I think it depends on which one you like. They had the whole Johnson and Johnson shot, which a lot of people were talking about had negative effects, but I had Pfizer. I kept hearing Pfizer this Pfizer that so, of course, I thought that they had more credentials as to what it was doing. You really just need to do your research, because these shots have different effects on different people. I remember, I had a friend who was allergic to eggs, and one of the shots had eggs in it so I mean it's literally the stuff that you don't think about that you need to go in and check, because what might affect me, might not affect somebody else, so I think it's just on a case-by-case basis, and

the individual.” K9 stated, “I think it is safe. I can understand why people would feel that it's not. I think that anytime you're talking about medicine and things that have never been done before, I think there's always a risk involved. I do think that the fears that people have are warranted too, because medicine is not always something that has been equitable; it's still not equitable. There are still inequalities in medicine and there's still medical racism and so I think that is something that should be considered as well for those who have chosen not to get it or have hesitations about it. I got the vaccine, and I never got it. But then again, I know people who have gotten the vaccine and have gotten boosters and they've got it. They quarantined, stayed at home, and were ready to return to work within a week, so I would say that it does work.” S10 stated, “Yeah, I mean, I know they said they developed it quickly, but I also saw something that said when they were researching, they used SARS or something. They use that research they've been working on for years to build it, and that's why they got it so fast. The big doctors and the CDC and Dr. Fauci said it was fine. I definitely think it works. I don't know if it prevented me from getting it but I haven't got COVID, and I got vaccinated, so I think it worked for me.” D11 stated, “Yes. I mean, I didn't feel sick when I had it, and I feel like it works cause I'm around snotty nose children all day and I didn't get it so I feel like in some ways that was beneficial.”

Perceived Barriers

These sets of questions examined if Black college students had potential barriers before receiving the COVID-19 vaccine. Seven of the participants experienced barriers with scheduling, transportation, potential costs and family concerns, but that did not deter them from getting the vaccine as they navigated through it. R1 stated, “Transportation is one. At the time, I didn't have a car, and I was living on campus, and so thankfully they were offering it for free at the football stadium and so I just walked over there.” C2 stated, “The main one is scheduling. Especially

when I started grad school because getting a vaccine meant I was out of commission for three days due to all the symptoms I would get, and it also meant that I would have no one to take care of me. During my first year and a half of grad school, I spent alone so definitely getting the vaccine sucks because I would have to work around everyone else's schedule and around the schedule of the doctors and when they can give me an appointment to actually give me a shot. I have to work around my schedule so I can be sick for that period of time, and then I would hope someone comes and they can just take care of me in the process, and that was probably most difficult to think about.” J3 stated, “I think when it came to trying to get the vaccine, I can't drive, so that was one thing I had to take into account. Where can I get my vaccine? Then the other thing was can I afford it so like talking to my mom about insurance and trying to see like, what can I do? Luckily for me, I live really close to Mizzou Stadium. I just went exactly to that spot to get my COVID vaccine. I walked both times, actually to get my vaccine, because even when I got the booster the hospital was also right across from me so I just walked to the hospital to get my second shot. My insurance covered both of them.” M5 stated, “So when I got the vaccine, I did not have a car, and so that was difficult. I had to go to get my second one too and then I also got two boosters, so I didn't have a vehicle at all for those. I had to go with a friend, and if I didn't have a friend then literally, I didn't go. I also have a very busy schedule, so I was trying to be fast with it. When you go to Walgreens, they tell you to sit there after 15 minutes, and you can go. Well, I walked out of the thing, and I got in the car with my friend.” M7 stated, “Well first trying to get the first vaccine, it was more time consuming then it was when trying to get it now. Having to go in, extra early, in order to get in line and have to wait.” B8 stated, “I think the only thing I ran into – you kept having to make these crazy appointments. It would be certain times where you have to go, and this is really inconvenient. You will go somewhere, and

they would say they didn't have any more shots for the day, and it's like I really want to get this shot right now, but you have to keep waiting. I remember myself having to go on these different databases to try and find who has this shot? I never would have thought I had to do that but that's what it all came down to." S10 stated, "There weren't many obstacles. I know when I first decided to get it, because it was my freshman year in April, and I know my mom was kind of worried about it. She's like, "I don't think you should get it," but she let me do what I wanted because I was 18, and it was really up to me, but she was worried about it."

Four participants did not experience any barriers to getting the vaccine as the university or their job made the process very accessible and accommodating. J4 stated, "So when I was an undergrad, my school pretty much provided – it was free and so they had all these clinics we could go to get it, and if you didn't have transportation, they also had buses to bring you. I was at a school in rural Alabama, so they had buses to take you and then, when I came home and got the Pfizer, I had transportation, and it was also free, and there were a lot of places where I could make an appointment." T6 stated, "No, actually it was quite the opposite. Working in like mental health care, pretty much everybody around me at the time had already gotten the vaccine. It was very easy. It was free. They made it easy for me to know which location to go to get it. The process of getting it was very easy. I have my own transportation, so that wasn't a problem." K9 stated, "I personally did not." D11 stated, "No, I didn't. I think Massachusetts did a good job of rolling it out. I was able to go to my job and get it done both times. It was already set up for me so I didn't have to really think about it was just me emailing someone to be like hey, I want it, here's the time that I can show up. I think I definitely had a much easier time navigating it, especially as early as I was able to get it."

Cues To Action

These sets of questions explored forms of communication regarding the vaccine. Here examined external factors like social media advertisements, messages from the institutions, or jobs that promoted getting the vaccine. Cues to action tied perfectly into helping me answer my research questions as this construct speaks to mediated forms of communication.

Reminders To Get Vaccinated. The first questions asked participants what forms of communication, mediated and non-mediated, reminded them to get the vaccine. Participants were either reminded through family, social media, digital media, or their family. R1 stated, “My mom, honestly texting me and my brothers all the time. She would send us news articles about these kids who died and stuff and so she was like you all need it. Definitely hearing from my mom, that was the biggest factor. Also, I would say, emails, cause like the school was sending out emails about the services they were offering. Then social media too like getting on Twitter and TikTok and just seeing people kind of have discourse about it.” C2 stated, “Mainly my mom. I know a lot of things like shows that were ongoing and some Instagram stories would let you know that the vaccine was free, and that you should get it here, here and here. I know the news definitely kept me updated on which one to get, or which one I thought would be best for me, but ultimately when it can to reminding myself to get it, the card because you know, whenever you leave the clinic they always give you a card because it's okay, here's how long this is gonna last you come back at this date.” J3 stated, “Twitter.” J4 stated, “Well, anytime you post something or see something about COVID, there's always that thing on Instagram that has the link to actually talk about the facts so that you're not getting this misinformation. Then, I saw a lot of Black women on Facebook so they're always posting something about going to the doctor or checking your health, so I do see a lot of that stuff in my inner circle.” M5 stated, “Yeah,

definitely emails, you know, like, they send our little school updates, or whatever like the newsletter and so that's always saying if you didn't get your vaccine, here's an opportunity. Also, commercials on TV. I was watching a lot of Hulu, and there were a lot of vaccine commercials.”

T6 stated, “Everywhere. If it wasn't from my phone, like my family, my friends. It was from social media, like Instagram, Facebook and stuff like that. The CDC started dropping little ads, and anytime somebody would post about getting a vaccine or covid, or even being sick, the CDC would pop up the little message about finding more information about COVID-19 vaccines. Even when I did Google searches and saw stuff on TV and watching ads on my streaming platforms.”

M7 stated, “I was there mostly on TV commercials.”

B8 stated, “Hearing Dr. Fauci. This was the most trusted man at the moment, and every time my mom would say Dr. Fauci said this, I feel like I was more inclined to listen. I also had other social media that would always prompt you to click this, if you want to hear if you wanna see more. So, it was kind of a mixture of both.”

K9 stated, “I would say the news of course, I think everyone just was glued to the news at that time, and for me personally, also emails and just things from work about we're gonna start asking everybody for proof this and you need this COVID-19 record proof of your immunization in order to remain employed.”

S10 stated, “I'd say the emails from the school, like with the vaccine clinics. Then also, on Twitter, I saw a lot of people, but they were kind of urging everybody to get the vaccine and like on the news they were saying it was good. Dr. Fauci was saying they were urging Americans to see the vaccine and they're also giving out incentives to get it.”

D11 stated, “I think it was just kinda in my face, because it was provided at my job. So, you're seeing a lot of people getting it around you. It's being prioritized like, hey, instead of having a team meeting today, we're gonna go get vaccinated.”

Preferred Ways of Communication. These questions examined the preferred ways of receiving information surrounding the COVID-19 vaccine. Responses ranged from social media, digital media, and mainstream television. R1 stated, “I feel like I got most of my information from social media. I would see a lot of stuff on Instagram like when people put together those slideshow things with like blurbs of information. Also, Tiktok like some legit accounts would make posts about like COVID-19, and preventable ways to not get it but also you kind of just have people like getting their opinions. But if it was stuff I kind of aligned with, or I felt like they were well researched I would kind of trust them too.” C2 stated, “I would say my Gmail. I look at that every day.” J3 stated, “I started using social media, but like trusted sources of social media because I realized that a lot of the media was like purposely lying about the amount of deaths and how it was affecting people.” J4 stated, “Probably in Instagram, that's what I'm on most or through Facebook, just because the people that I follow on Facebook like the information they're giving is more reliable so if I see something that they post that I would probably do it.” M5 stated, “I think a text is a nice way to be like, hey, this is important. I think that the most beneficial way would be social media, because people mindlessly go on social media and if you have an AD there it's a reminder. But also, I got mine through the email.” T6 stated, “My preferred methods would be going to the CDC website. So, I did that a lot, and also read journal articles from virologists and other scientists who are talking about the efficacy, the potential risk and benefits of the vaccine and just COVID-19 in general. I feel like you need to get the information from the experts who actually have the certified knowledge about the vaccines.” M7 stated, “I guess email.” B8 stated, “My preferred method of course, is like an Instagram post, or a Tweet, or something like that, but I could understand how the age gap, you know, in generations like they will want to see those headlines that were just flashing on the

news every single time.” K9 stated, “I would say the news, and then, also looking at different websites like looking at NIH, looking at CDC and then also just local news.” S10 stated, “I definitely say, social media. Probably the most like Instagram and Twitter. Also, word of mouth, like the people around me, because they were getting it and so that kinda urged me to do it.” D11 stated, “I like New York Times personally. Just the alerts that I get from the New York Times and having the subscription and then just being able to have the notification of I know that this is happening, but also then, being able to access that information, I think probably this is my preferred thing.”

Sought out Vaccine Information From the Media. This question asked participants where they went to seek information surrounding the vaccine. Most participants sought out forms of social media, digital media like websites, and mainstream news channels. R1 stated, “Yeah, when it came to the vaccine, I feel like I was looking online on the CDC's website based off of articles my mom sent and then wanting to get more information. Trying to kind of understand the difference between Pfizer, Moderna and all that kind of stuff, I would search online because I wanted to understand that difference.” C2 stated, “So I primarily tried to go to like.org sites that actually kind of updated about the actual situation with COVID. So, I go to reliable medical articles for specific details of how COVID was going, and the symptoms, experiences, and all that. I think sometimes when it came to social media, there were a couple of doctors that I followed on YouTube that I was particularly interested in, and I feel like their information on COVID was pretty accurate, so it was like a mixture of medical articles or medical journals and just medical influences I followed.” J3 stated, “I usually just kind of look towards my Twitter and see what's happening. I try to curate it, to make sure that I'm kind of updated on what's happening around the world, because I feel like it makes me more aware and learn new things,

but also usually when I get that information.” M5 stated, “Definitely I wanna say, was that CNN or was its NBC. Basically, when we were at home quarantining, the news was on every single day, like we were watching the news, trying to see what was new, what happened, if there were any updates in people, deaths, and the vaccine. So, yeah, when it came time for me to get the vaccine, I went online, and I just read about it at the pharmacy that I went to to get it.” T6 stated, “I think when it came to the actual vaccines, I went to – so I know the CDC has social media pages and I also went to the CDC website and kinda did a little research. If I were to do more research, it would have been scientific and medical journal articles from virologists who talked about the different vaccines because I'd be compared to vaccines as well.” M7 stated, “Mainly the CDC website, because I knew that's where the information was mostly getting updated from and where it seemed to be more clearly, just concisely stated.” B8 stated, “I think that I went more towards my trusted sources, like CNN or MSNBC. But I know that when I go to those large umbrella news corporations and stuff that I mean, it's gotta be trusted. I went to their live broadcast and websites. You know, it's actually kind of both. CNN, I'm seeing that on TV, but then it's like, Okay, I also get their alerts of course, as a journalist because I see the news pop up on your phone.” K9 stated, “I went to my primary care Provider.” S10 stated, “I just remember people posting articles on Instagram or Twitter. I saw it on the news. They talked about it on the news a lot, and also like when the school emailed about their clinic, I would see the vaccine and stuff.” D11 stated, “I'm sure there was some form of social media cause I don't even watch TV. I'm assuming my social media and word of mouth I'm sure also playing a part in it. A lot of people, too, that I worked with. But probably New York Times subscriptions like that.”

Trusted Sources. This question asked participants what sources they trusted when it came to the vaccine. Most responses trusted social media, digital media, and mainstream

television, but others looked to primary care providers, and prestigious institutions. R1 stated, “When I was living back home, my mom and dad really liked watching the ABC world news tonight. So, we would always watch that newscast for our like general updates, and they would always have COVID-19 updates and vaccine developments. So, I would definitely watch live broadcasts like that. And basically, any time I would go online to .org or .Edu; you can kind of trust the site.” C2 stated, “Social media, because I know many different people had different opinions of it, especially celebrities and certain news outlets. Like even the news, it was very divided on how to advertise the COVID vaccine. So, I actually, that's why it is hard to say that social media influenced me to go get the vaccine cause I often avoided it when it came to information about Covid.” J3 stated, “Like Black reporters reporting on what's happening globally and then also like more specifically here, not necessarily like what the news we're saying but what was being posted on CDC, or like the World News, or some sources like that.” J4 stated, “So the news is really what I would go to when they were talking about, the factual information, but for the most part I would go to CNN, and I know my mom watches news so like if she would tell me something she saw that I would just go off with that.” M5 stated, “I trust mainstream television, but from multiple sources I do watch multiple platforms. I also will look up information like the professional health ones But if you search something, and then it's like .md or something like that. I'll look at those websites.” T6 stated, “I trusted the virologists, the scientists who actually are in the labs studying viruses, creating vaccines. I trusted the CDC website for the most part. I think for me the biggest convincing factor for me was listening to psychologists within my department and within the clinics that I worked at, talk about their reasons for getting the vaccine, and their trust in the vaccine, and I trusted them because I know that they are also critical consumers of research who are teaching us to be critical consumers of

research.” M7 stated, “Just back to the CDC.” B8 stated, “I feel like it was just people talking on TV at that point. I remember when the different strands were coming out. And they meaning health professionals you know how they have health professionals come in and sit on panels and stuff like that.” K9 stated, “I somewhat trust the news. I do trust some of what I'm hearing from CDC and some of what I'm hearing from NIH. I do trust my primary care provider, and so I think that also makes a difference. Everyone doesn't have a primary care provider. Everyone doesn't have access to equitable health care. So, I am thankful that I have that rapport with my primary care provider at that time. So, I definitely trusted her suggestions and input and looking at my medical history; her taking time to talk with me about it so I definitely trusted that, and I trusted her.” S10 stated, “I trusted the CDC website, and like doctors, if I heard it from a doctor, I'd be more likely to believe it more so than like blogs and like people online talking about it cause you know, they're not the experts.” D11 stated, “I still think I did buy into the prestigious universities. I did go to WashU, and I really had a great experience, so I felt trusting of some of those people, and even knowing some of the people that I went to school with are now people that are there in those positions. So, I felt trusting of a lot of those highly prestigious universities that we're doing a lot of research around it.”

Self-Efficacy

These questions examined the level of confidence Black college students had when getting the vaccine on their own. Modeling of others (e.g., seeing others engaging and being successful in that behavior), having conversations with friends and family, and vulnerable individuals were common themes of the participants ability to successfully perform behavior, which was getting the vaccine. Self-efficacy helped framed the answer to my research questions as this construct speaks to non-mediated forms of communication.

Modeling of Others. The first common response for participants receiving the vaccine was modeling of others where friends and family around them also got the vaccine. R1 stated, “All my friends got the vaccine. At the time, like when COVID was first this big thing, pretty much everybody around me was getting it, and posting pictures of their stickers and stuff like it was kind of a big deal.” C2 stated, “It was mainly my family, due to my mom having immune problems, we all got the vaccine. My boyfriend also got it because we were going long distance after 2021 and in order for us to see each other we had to guarantee that we were protected from COVID.” J3 stated, “My cousin, at the time, she worked at the Mayo clinic in Minnesota, and she got hers earlier than everybody else did.” J4 stated, “Yeah, my mom, my dad, and pretty much all my immediate family and aunts and uncles. I know some people were kind of hesitant at first, but then they ended up doing it.” M5 stated, “Yeah, my family, my mom, my grandparents. My friends did; most of my friends did.” T6 stated, “Yeah, absolutely. There were multiple people around me who got the vaccine. I know that it was them who convinced me to go ahead and get it.” M7 stated, “My mom, my grandparents, and cousins.” B8 stated, “Yes, so everybody. My family got the vaccine. If one of us got it, the rest of us got it. It's only 3 of us in my household or immediate household.” K9 stated, “Yes, a lot of people in my family got it. A lot of my great aunts, great uncles got it, and those are the elders of the family, and then, of course, my older cousins got it. One of my parents did and one sibling got it.” S10 stated, “I saw my whole family got it – like some aunts and uncles. Me and my mom and brother, my grandma, like we all got it at some point. Like most people – I went with my best friend, who I was rooming with at the time, so most people around me were vaccinated.” D11 stated, “Everyone in my family. My grandmother, my parents, younger brother and then also friends. Most of my

friends at the time worked and we're working in the same place, so we also had access to it in that way. So, I don't really know too many people that didn't get it.”

These responses highlight the influence of close others in vaccination. Specifically, if one has a person whom they are close with who models a behavior with perceived success, they may be more likely to also engage in the desired health behavior. Influence from others within social networks helps public health information resonate and persuade individuals to participate in positive health behaviors.

Having Conversations Around Vaccinations. The second common response regarding self-efficacy was getting the vaccine because they had conversations with others around them. R1 stated, “I definitely talk to my friends, because I just wanted to see if they were doing it and to see if we wanted to go together. I actually remember, like some of my friends, were working for the University as tour guides at the time, and they were saying that their job was making them get it or like incentivizing them in some way to get it. And, like some people, talking about things like dang, I can't believe they're making us do this.” C2 stated, “Oftentimes I would send – even if it was shaming them a little bit, I would send the articles to my friends and would be like, Well, you know, this is how the vaccine works, you should really get one, even if you feel like it doesn't help you.” J3 stated, “I had talked to her about getting the vaccine, my cousin, because she had gotten it. She got it sooner than like the public had because of the hospital that she worked at. I talked to her around the time I was trying to figure it out. She was saying her effects like how she felt, and how people have different reactions.” J4 stated, “Yeah. My close friends, we would talk about it, especially when COVID first happened. My line sisters, we all have talked about COVID, and I think going to the hospital kind of made more of them try to be a little bit safer, because some of them are like, oh, I'm not gonna get the vaccine or they wouldn't

wear a mask, but I think after this happened to me, they kind of like changed their minds.” M5 stated, “Yeah I talked to my roommates and my family.” T6 stated, “I started talking to my friends, who were very much against the vaccine, especially when it became a requirement to be able to do certain things and travel certain places, to be able to work for some people. I told them like, it's your decision to make ultimately, and I encourage you not to just look on social media, but to do your own research from experts who actually know about vaccines and viruses. So, I think when it came to my friends and family and my loved ones' livelihood being impacted because they refused to get the vaccine, that's when I was really like, yeah, you should really like, consider this.” M7 stated, “I talked to my mom's friends cuz she's a nurse and the doctor she worked with was head of disease for that hospital and then friends.” K9 stated, “Yeah, I talked to my family about it. I talked to a few friends about it. I didn't really talk to coworkers much about it but of course you kind of knew that they got their vaccine cause they had to. So, some of them talked about some of the side effects, so we talked about that somewhat that we had or didn't have. But yeah, most of the time it was just me talking with my family and a few close friends.” S10 stated, “Yeah, I had a lot of conversations just like with my family members, because I remember my dad specifically kept urging me not to get. But then, like with people in college, and like my brother more specifically, I feel like those are more informed conversations, and they were more based on more reliable sources. Like he would look at the CDC website almost every day. So, I feel like most of the conversations I had about it were really just with people trying to protect other people. It wasn't because they wanted to get the vaccine, it was because they're trying to protect others.” D11 stated, “I think I talked to my family a lot about getting in, and especially my dad, who – He has a lot of underlying health conditions, but he's

also just hard-headed. But I think the biggest thing in my mind was like my family. I don't feel like I really had conversations with other people my age or other people about getting in it.”

B8 was the only one who didn't really talk to others about the vaccine stating, “I didn't really talk to other people about getting the vaccine, because I feel like as a unit, like for the Black community, we have so many different thoughts about so many different things and I'm like it can be as small as just getting a shot can become so controversial.”

Based on the findings, breaking down and explaining public health information with family, friends, and others with a given network show benefits. Although others around them did not have the expertise to provide keen advice about health decisions, they were able to provide their experiences to help participants make more informed decisions as they were not able to talk with their health providers at the time.

Inspiring Messages Around Vaccinations. The third common response regarding self-efficacy was getting the vaccine because of inspiring messages, mediated and non-mediated, from others in their network. Inspiration varied from person to person. R1 stated, “Yeah, I know I keep name dropping my mom, but it really was my mom. She was like the most influential person, and I feel if she didn't feel the way she felt about it, I might have been way more impartial. Also, I feel like I was seeing a lot of stuff on TikTok of people just kind of sharing their personal experiences about having family members die from COVID, and not really like realizing that it could happen to them. I feel like that was kind of a mindset that made me like, “Okay, I need to start wanting this for myself and not just cause, like my mom told me to.” J3 stated, “I think social media, being like saving people lives and I was like, you're so right. I would prefer to help save lives, because I personally couldn't imagine one day, my close friend, or one day someone that I need just suddenly disappeared because COVID hit them that quickly.

I know some other people that I know had that experience with them, and I felt very sorry.” J4 stated, “Yeah, I had a professor in undergrad and she was a part of like this Docuseries about COVID and the Black community and she was really influential to me at my time in school, and so, when she was kind of campaigning, and being a firsthand person thing like this is safe for the Black community you trust, this made me feel a little bit better about taking it because she's someone I know wouldn't put anyone in harm's way and so I felt like if she was kind of rallying for people to do this, it was something that I should do.” M5 stated, “I think it was like social media messages from Facebook, but also like advertising from my school. Specifically, my school is Vikings, Take care! So that was kind of a Vikings take care of yourself, take care of others, and I personally feel like it's not only my responsibility. I feel like it matters for me because I'm going to affect those around me, and it's my moral responsibility to like to do no harm to others.” T6 stated, “It was my family. My family got the vaccines, and I think that they were inspired by the media. Like my mom and dad watch the news a lot like CNN and so, I'm sure they probably saw messages about the efficacy of the COVID-19 vaccines, and the importance of getting them. They basically translated that to me and explained to me like why they wanted me to get it and I think for me to be honest, the biggest motivator was my mom, like worrying about me so much to the point of being like, please just get the vaccines. I was like, okay, I'll get it for you.” M7 stated, “I guess like broadcast but mostly from my family and just going off like what they read from articles because that's where I get my sense of trust from.” B8 stated, “Dr. Fauci because I feel like we weren't talking to our own health professionals during this time. I couldn't call it my doctor, and ask should I go get this COVID-19 vaccine? It was just more of a proponent of self I feel, and it was just what do you think is best for you. I'm trusting in these people who are very highly qualified, who don't even know my health situation, but I

mean those are the people that I ended up trusting because it's like you keep coming on TV, so clearly you know something.” K9 stated, “I would say that my family kind of inspired me to get it because of the large majority of them had it, and they got the vaccine, and a lot of them are the elders in the family, and so I think, listen to them and took that into consideration, and then, of course, made my own informed decision on what was best for me, which was getting the vaccine after I had talked to my primary care provider of course.” S10 stated, “Probably Twitter, I would say. The messages that I saw were like, there are people who are immunocompromised and weren't able to get the vaccine because it was risky for them to do it and I was like, well, if I'm healthy enough to get it, and stop or slow the spread then I might as well do what I can to protect my fellow Americans.” D11, “I just think the opportunity to not get it was good enough for me. If I get this, I might not get it.”

Vulnerable Populations. The fourth common response regarding self-efficacy was getting the vaccine because of vulnerable individuals within their network. Because someone around them was vulnerable to getting COVID-19, this gave them the confidence to get the vaccine on their own. R1 stated, “So my dad was the most vulnerable. He had a kidney transplant like 10 years ago, and so being susceptible to health failures was like a thing for him. Then a couple of months ago maybe it was a year ago at this point, he had kidney cancer so it's a really big deal for my mom, because she didn't want us coming in the house without having to COVID test because she didn't want him to contract COVID.” C2 stated, “My grandmother is currently 97 so because of that, she has no immune system and she's also very prone to illness. My mom, who had cancer, and my grandma are probably too big motivators.” J3 stated, “Definitely because I feel like more vulnerable people just tend to care more about it, because they understand more of the effects of it, because they realize that it could happen to them.” J4 stated,

Yeah, my dad, my dad has high blood pressure and he also just had surgery on his foot, so he already was in the hospital, and he's also in his sixties. I didn't want to get him sick, and I have a lot of like elderly aunts and uncles. If I'm gonna be around them, I want to make sure that I'm protecting them." M5 stated, "My grandparents as well like I do not want to put them at risk, and my mom is extremely compromised. She's got a really serious liver problem and so I don't think if she had Covid she would survive that – she's weak." T6 stated, "Well, my parents, yes, because they're older in age, with underlying health conditions. I also recognize that I do have quite a few family members who are older in age, with underlying health conditions which also motivated me to get the vaccine because we're collectivistic. We love family reunions, we like going, and celebrating holidays together and just fellowshiping with each other, so I didn't want that guilt of haven't done everything that I can do to make sure that my grandma, my parents, and other folks are protected." M7 stated, "I would say yes, just to protect them. My grandmother like years ago had pancreatic cancer and then my grandmother, she had breast cancer." B8 stated, "They had more of a fear of getting COVID, because my parents are a little bit on the older side and I feel like the older generation like, yes, they wanna protect their health as much as they can. Also, my grandfather at the time, was in that facility. We had to do window visits so when it came down to that I was like I'm getting the shot. At least I knew I had the shot in order to go and see him if I actually got the opportunity to." K9 stated, "Yes, because I knew that I would wanna be visiting my family again and so I definitely took that into consideration and especially since we're in different states." D11 stated, "I do think working with my students made me probably seek it out more and I think it's even changed the way I think about vaccines moving forward. I'm really intentional about getting the flu shot. If there's any boosters, I get them. In some ways I protect the students, but also, I do see, like kids in general, as just like a vulnerable

population and I'm working around them a lot.” S10 was the only one who was not influenced by vulnerable populations when it came to herself efficacy of getting the vaccine stating, “Hmm, not really. I don't think I'm not around very many vulnerable individuals, so I wasn't really thinking about that when I got it. I was just thinking about like, maybe if I was around someone like just in public in a grocery store, or just like walking around campus.”

Mediated Forms of Communication vs Non-mediated Forms of Communication

Cues to action and self-efficacy were the primary constructs of the HBM used to analyze mediated and non-mediated communications influenced on Black students' decision-making process to receive the vaccine. Most participants agreed that non-mediated forms of communication such as having conversations with friends, family, and co-workers about the vaccine, was more influential on their vaccination decision than media information regarding the vaccine. For example, R1 stated, “I would say for sure, because it just personalizes it. You don't really feel like it's this big thing, unless it's like happening to you or you're seeing people, you know, actually go through it. Even though the news is telling you it's a big epidemic. So even just having conversations with people who were really concerned about it or were actively trying to stay safe and whatnot like I feel like that helped way more, because then I kind of saw how it fit into my own life and like with people I like cared about and new.” C2 stated, “My mom was going through chemo treatments, and it often wasn't really a choice for me. Social media, they're not really talking to your friends, they're talking to an audience, and especially when it came to TikTok, like at the time, I think you only had like a minute to really get your information out so a lot of them are very crass and very blunt. They're just like, if you're not getting the vaccine, you're a menace to your society, or you're just a terrible person, or you're just lazy.” J3 stated, “I definitely think conversations was more influential when it came to the vaccine, but the media

was more influential when it came to the virus.” J4 stated, “Yeah, I think the media is kind of just second handed of what I already believe. So, like I was hearing these conversations from my inner circle; my friends, family, classmates, and then the media, which is confirming, like everything that we had talked about, and it kind of was like a circle. We’d hear something, we all talk about it, we make our decision then, we hear something else.” M5 stated, “Yes, always. I think that interpersonal communication is the best way to have an influence on anybody. I think that if somebody's seeing any type of advertisement or any type of information, whether seeing it or hearing it, they can scroll, they can swipe, they can change the channel, whatever it is, and it's gone. But if you're having a conversation with somebody, you are better able to understand, like on a level of humanity, you're better able to understand how this disease impacts people, how people can be suffering from it, and what you can do to stop that. I think that with everything; you have to talk to people in order for people to truly understand they need to empathize.” T6 stated, “Talking about it with people was more influential for me.” M7 stated, “I think the conversations with family and friends was more influential but then once that conversation was had, to confirm my point, just going back to the CDC.” D11 stated, “I think I would say that the people were more influential because it was very much discussed like how vulnerable our students were, and we also discuss if we just do this, because most of us we're gonna get to get it at the same time, and that opens the door for social interactions you know so I think people more than the media.”

Two participants agreed that the media and conversations with others were influential in vaccination decisions. B8 stated, “There were so many people that were like “I'm not getting the shot,” so it's like well let me go rely on the media right quick, because it seems like you all are not taking this seriously. A lot of times I wasn't the one checking for the new updates, it'd be

like, my mom told me the Covid numbers are at blah blah blah and if she's saying that i'm gonna believe her. If there's something that she says, I'll go and check it out for myself, but I think that my parents definitely had the highest impact everything that I thought about Covid, but when it came to like information and stuff like that, I definitely rely more on the media rather than I did the community.” K9 stated, “I think it was about the same cause I mean, I was just talking with my family about it, and they were basically listening to what they heard on the news, which is fine you know most older people are glued to the news so, yeah, I would say about the same.”

S10 was the only person who agreed that the media was more influential than people around her stating, “I'd say it was less influential just because most of the people around me were against it, and I didn't trust their sources, so I said the media definitely was more influential to me personally.”

Chapter 5: Discussion

I carried out this research to understand why Black college students who were vaccinated against COVID-19 decided to get vaccinated. I wanted to understand their lived experience through the pandemic, and how it affected how they view diseases and vaccinations. It was important to me to find an explanation for what types of communication, mediated and non-mediated, that influenced vaccination decisions. Hearing participants' stories helped gain better insight and understanding around perceptions of vaccinations and the COVID-19 disease. These findings are important because they showcase what types of messages resonate best within Black students regarding vaccinations decisions. These findings can be implemented in future public health messaging campaigns.

The HBM contributed to me answering my research questions because cues to action and self-efficacy most highlighted the influence of mediated and non-mediated forms of communication on Black students' decision-making process. Those two constructs played a major role in how the participants made their decision to vaccinate. Perceived susceptibility and perceived severity, allowed participants understand how the virus itself played a role in feeling safe, thus leading them to understand what perceived benefits and barriers there were to treatment (e.g., vaccination). The study was developed to provide detail on the following research questions:

RQ1: How do U.S. Black college students perceive mediated public health messages related to COVID-19 vaccinations?

Cues to action was the most helpful construct that helped answer this question. Participants ages 18-35 within this study were receptive of mediated messages related to COVID-19 vaccinations. When it came to general messages from the media regarding vaccinations, most participants stated that the vaccine was not a permanent solution, or it would

not stop one from getting COVID-19 but would allow for the symptoms to be less severe. The media was also a source of information for the vaccine and different strains of the virus that was developing. Secondly, participants stated that the media urged for vaccination to keep children and those who were immunocompromised safe and emphasized going back to some sense of normalcy. Some felt as a Black community, they were urged by some media platforms to wait and see how it affected others first. There were also many conspiracy theories that participants stated came from the media such as the government was creating the vaccine to kill and/or track people by inserting a chip in the arms of recipients. Others stated that some media said that the vaccine would put cancer in the body or give STDs.

The risks and benefits that were communicated from the media, for the most part, were consumed in the same way across all participants. Participants stated that the media communicated that the benefits of the vaccine was that you were less likely to spread the disease to other people, didn't have to wear a mask, it was an opportunity to protect others around you, your symptoms will be more manageable and less severe, it would reduce your chances of catching the disease, decrease your chances being hospitalized, and acts as an extra layer of protection. Participants stated that the media communicated that the risks of the vaccine were allergen related, experiencing side effects, blood clots, long term birth defects and sexual reproduction issues, and still being at risk for contracting COVID-19. Some of the risks that were communicated by the media have not been proven and can be seen as conspiracy theories.

There were some forms of media that were received negatively by participants and were subsequently actively avoided. For instance, right leaning platforms such as Fox News, social media platforms such as TheShadeRoom, international sources such as Russia Today, national sources, and celebrities.

Forms of Mediated Communication. Social media platforms such as Twitter, Instagram, Facebook, and YouTube, were used to understand different publics point of view around the virus and the vaccine. It was also used to understand the discourse around the topic (e.g., opinions and conspiracy theories) and helped in the decision-making process for participants to vaccinate. Social media provided short digestible information that was easy to understand. Formats such as Instagram and TikTok provided carousel graphics and short videos that many participants enjoyed. There were some doctors who used their social platforms to spread information, that participants followed. Social media was also used as a tool to understand the vaccine and virus from the perspective of Black and brown people as well as people living with disabilities and how the pandemic was currently affecting them.

Digital media such as emails helped students stay updated about school related protocol around vaccinations, testing and the COVID-19 virus. Because of their role as students, many already checked their emails for other information. Other forms of digital media such as Hulu ran ads while participants were streaming the platform. Ads also appeared within Google searches. Subscription services like the New York times provided alerts that helped participants stay updated.

The CDC was used as a primary source of information regarding updates and instruction for how to handle the virus and vaccinations. Many participants trusted this source and always reverted here to learn more. NIH was also used. In the same way, medical articles, .org sites, and .edu sites were used to understand the different types of vaccines and understand the latest research findings in the space from scientists, virologist, and institutions.

Live broadcasts from local news channels or channels such as ABC World News, NBC, MSNBC, and CNN were used to stayed updated on vaccine developments, deaths, and COVID-19 updates. Panel discussions with Dr. Fauci and other health professionals on these platforms

would discuss the efficacy of the vaccine and the potential harms/benefits. Commercials that would air these channels would discuss the vaccine as well.

RQ2: What role do mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process for U.S. Black college students?

The constructs with the HBM model that were useful to understand Black student decision making process were perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.

Participants used mediated forms of communication as a reminder to get vaccinated and as a way to understand and search for information related to vaccinations within their decision-making process. Media was something that could not be avoided because the television was right in front of them, or some form of communication was sent or shown to them. School communication was being sent to students offering free vaccinations which made students consider getting the vaccine. Scrolling through social media allowed participants to see much discourse and conversation around vaccinations, therefore persuading them to decide around getting vaccinated.

News channels such as CNN and MSNBC were a way to keep participants updated with the types of vaccines that were being made open to the public, how many shots one needed to take, and potential side effects. Streaming platforms such as Hulu, had commercials and ads around vaccines. Participants subscribed to alert systems such as the NY Times to stay updated on vaccinations. Jobs were requiring some participants to be vaccinated and had internal communication on how to go about that process. Lastly, participants would also utilize the CDC website or their local pharmacy website to stay up to date on vaccinations.

It is important to mention that while participants received information from these various channels, they did have some feeling of doubt toward them as well. While social media was used

as a source of information, participants knew that they couldn't trust every bit of information and had to take it with a grain of salt. There was so many different conversations and ideas around vaccinations and the virus that some of the feedback became unbelievable especially the conspiracy theories. In the same way, there were news sources who were also spreading misinformation and were not see as trusted. Right leaning sites and outlets such as Fox news, celebrities, members of the Republican party, Donald Trump, Russia Today, some social media channels, national newspapers were sources that participants did not trust.

RQ3: How did the influence of mediated public health messages related to COVID-19 vaccinations compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication)?

Non-mediated forms of communication had a greater influence on participants' decision to vaccinate than mediated communication. Mediated communication was useful, in that it helped participants stay updated and learn information as stated above. It was also used to confirm their point of view and conversations they had with others. Non-mediated forms of communication were a way for participants to have conversations with family members, friends, and co-workers to understand others' ideas around the vaccine. The media spoke to one audience – everyone in the world. Their only objective was to get people to take the vaccine. Alternatively, friends, family, and co-workers brought a more personalized level of understanding to how COVID-19 affected others and why the vaccine was important. Conversations around vaccinations included why others were getting the vaccine, the side effects of the vaccine, how to get the vaccine, and the benefits of the vaccine. Non-mediated forms of communication were a way for participants to have one-on-one understanding of why others made their decision and sort of humanized vaccinations. The main contrasts within the HBM that

were used to help answer this question were cues to action and self- efficacy as these constructs discussed mediated and non-mediated forms of communication.

There is an interplay between mediated and non-mediated forms of communication that should be highlighted. Although participants were made their decisions to vaccinated based on non-mediated forms of communication, those non-mediated sources (e.g., family, friends, etc.) received their information from the media. For example, many participants said they listened to their mom, however their mom received her information from the media. K9 actually mentioned this connection after being asked if mediated or non-mediated forms of communication had a greater influence on her vaccination decision by stating, “Yeah, because, I was just talking with my family about it and they were -- basically saying what they heard on the news, which is fine, you know most older people are glued to the news so, yeah, I would say about the same.” There has to be a recognition of interpersonal communication in mediated contexts.

Significance

Findings & Extant Literature. Throughout the literature review, a variety of past literature was examined, and the review explained how each prior study connected to some elements I was looking at in this study.

First, the literature review discussed how Wotring, et al., (2021) revealed 85% of students did not trust that the vaccine was fully tested, 78% feared potential side effects, 72% did not trust the vaccine was safe, 61% did not trust the U.S. government, and 60% read negative reports from the media about the vaccine. The study found the opposite and revealed that out of 1,653 students at a Midwest University, about 49% did not intend to get vaccinated and 22% were undecided. This study revealed explanations for hesitancy and asked questions around COVID-19 vaccination, intent, and behavior in undergraduate students. Additionally, an important

finding showcased that participants refrained from receiving the vaccine if they also had family members who have not been vaccinated. Regarding perception, students in this study had a common concern that they heard or read negative ideas from the media about the vaccine. Most of those ideas were either conspiracy theories or politicized views of the vaccine, which contributed to distrust in a government as well as medical system.

Secondly, the literature review discussed how Genga (2022) revealed that knowledge, trust, conception, social behavior, and information sources were important factors in students making a decision to receive the COVID-19 vaccine. The study looked at 34 other studies involving 42 countries and came to the conclusion that 69% of college students accepted the COVID-19 vaccine. Students who were concerned about contracting COVID-19, perceived sufficient knowledge about the COVID-19, realized the importance of COVID-19, and supported the compulsory vaccination for the public, were more likely to get vaccinated. This supports the current study as these ideas were consistent in how the participants responded. All participants accepted the vaccine, realized its importance to society, understood basic knowledge on how the virus was transmitted and vaccine protocols, and supported the compulsory vaccination because they were required to get vaccinated by the university or places of employment.

Next, the literature review discussed how Purnell, et al., (2022) revealed that college students at University of Maryland Eastern shore, an HBCU in a rural community, were mostly not hesitant to receive the vaccine. Result showed that 87% of participants were non-hesitant and 54% had already received one dose. Vaccine hesitancy was low among 18-24 African American college students at a rule HBCU because many had a desire to protect themselves, family, or community from COVID-19 followed by work/school requirements. Purnell, et al. (2022) supports the current study as hesitancy was not a theme within this set of participants. All

participants received the vaccine to protect themselves and others around them as well as to follow work and the university requirements of vaccination. Jaffe, 2022 conducted a study on perceived social norms in college students, found that reasons for hesitancy were wanting to see how it affected others first (75.2%). Although this study did not fully support the current study, participants did mention “wait and see” tactics were used within the Black community to observe how the rest of the world responded to vaccinations.

Next, the literature review discussed how Green, et al., (2013) showed that African Americans are less likely to use health services and reasons may point to their perceptions of how they might be treated. While not directly related to the current study, this idea was stated in regard to stigma and medicine and how Black populations are less likely to be believed when they say something's happening to them. Scharff, et al., (2010) discussed how there were several barriers that affect the participation of African Americans in research studies and how there are more factors at play than skepticism in the healthcare system like disparities and current racism. This study did support the history of medical racism and current health disparities as participants agreed that many Black Americans did not trust the vaccine and look at the past to make conclusions about the present pandemic. Cultural content of past mistreatment was often highlighted in participants' responses.

Next, the literature discussed how Dhanania & Franz (2022) revealed using tailored messages was important for Black Americans to increase willingness to receive the vaccine. Vaccine hesitancy decreased when messages acknowledged past unethical treatment of Black Americans in medical research and emphasized current safeguards to prevent medical mistreatment. Some elements of this study support some aspects of Dhanania & Franz study as tailored messages from participants' inner networks influenced their vaccine decision and past

mistreatment of Black population was discussed. Lawes-Wickwar, et al., (2021) discussed that implementing community or hospital-wide mixed media messages, text message prompts sent from local physician clinics to adults from high-risk groups, text prompts with information about virus prevention and addressing misunderstandings about vaccination, the inclusion of a map with vaccination clinic locations in an email, were several successful strategies. This supports the current study because although participants' having conversations within their inner network (e.g., friends, family, and co-workers) was the main influence on getting vaccinated, they still utilized various forms of media (e.g., digital media, social media, mainstream television, etc.) to seek information. Everett, et al., 2020 discussed that utilitarian messages which emphasize the concern for the wellbeing of all, had a lot of influence on the way people perceive public health messages about the COVID-19 pandemic. Public health messages focused on duty and responsibility towards family, loved ones, and fellow citizens showcases that people take emotional decisions when it comes to following COVID-19 guidelines. This study supports participants' ideas around vaccination as reasons to vaccinate included protecting others and to achieve population immunity. In the future, messages could be improved by ensuring they address the information needs of target populations, by using credible sources, are personally relevant, shorter, and are honest about what is known about vaccines without over-emphasizing the health benefits of vaccination. It can be hypothesized that learning to understand how the general public responds to vaccination messages can possibly give insight to how Black communities respond to public health messages.

Lastly, Laurencin & McClinton (2020), discussed a young Cameroonian student being infected and became the first African to contract the virus. Unsubstantiated reports emerged declaring that the genetic makeup of Blacks or even the presence of melanin rendered Blacks

immune to the virus (Glanton, 2020; Ross, 2020; Carter & Sanford, 2020). This same theme of misinformation spreading through the media was found within the current study as participants told some of the myths they heard as well as how misinformation was affecting the Black community and their families through processes.

Application to Theory. Using the Health Belief Model as my main viewpoint for examination, helped to construct my interview questions in a way that allowed me to clearly see why people will take action to prevent, detect, or control illness conditions. The model argues that our belief in the threat of an illness or disease, plus our belief in the effectiveness in a proposed behavior determines whether we engage in that positive behavior. This study found that Black graduate and undergraduate students aged 18 to 35 believed that they were at risk for contracting COVID-19, and believed in the effectiveness of the vaccine, which led them in making the decision to get the vaccine.

Viewing the model from its six constructs and comparing it to this study showed that *perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy*, all need to be considered before participating in the positive health behavior, which in this case is obtaining the COVID-19 vaccine. Students needed to believe that they were more susceptible to contracting COVID-19, believe that contracting COVID-19 was serious, believe that the positive features of receiving the vaccine outweighed the obstacles, utilized external factors such as the media to engage in getting the vaccine, and have confidence in oneself to get the vaccine on their own.

Applying the HBM to this study produced results that showed that participants were susceptible to contracting COVID-19 because of their living conditions, student life on campus, their work environment, traveling, their belief that COVID-19 was killing more Black Americans

than any other race, their belief that they were more likely to contract COVID-19 as a person of color, and seeing how COVID-19 affected the health of their community. Participants viewed the COVID-19 disease as very severe because they believe COVID-19 killed many people, COVID-19 was dangerous for those with pre-existing conditions, COVID-19 would affect their life physically, socially, and academically, and their belief that COVID-19 attacks the body.

Participants believed that the benefits of getting the vaccine outweighed the barriers with overall opinions of the vaccine being positive, believing that the vaccine was important for people of color, and trusting that the vaccine was safe and worked. Participants experienced barriers with scheduling, transportation, potential cost, and family concerns, but those factors did not deter them from getting the vaccine. Cues to action revealed that participants were reminded to get the vaccine through used interpersonal communication (family members), social media, and digital media. Participants preferred ways of communication to receive information about the COVID-19 vaccine through social media, digital media, and mainstream television. Participants sought out information around the vaccine through social media, digital media like websites, and mainstream news channels. Participants trusted sources like social media, digital media, mainstream television, primary care providers, and prestigious institutions surrounding vaccine information. This made them confident to get the vaccine on their own.

Another component of this study was to assess the role of media and its influence on COVID-19 vaccination decisions, and how that influence compared to non-mediated forms of communication. The HBM was useful in helping me answer this question because self-efficacy and cues to action spoke to mediated and non-mediated forms of communication. The participants reported that non-mediated forms of communication such as talking to family, friends, and coworkers, were more influential on their vaccine decision than watching the news,

scrolling through social media, and seeing communication through their email or subscription services. Media was used as a tool to seek information about the vaccine as well as COVID-19 disease.

Research Significance. My research in this study contributes to the field of journalism and health communication by furthering the research of prior scholars, students, and researchers. It focuses on understanding the role that mediated and non-mediated forms of communication play in the COVID-19 vaccination decision making process. There is a gap in data regarding what influences Black college students to receive the COVID-19 vaccine. After reviewing prior materials and research done on similar topics and seeing that most topics cover vaccine hesitancy, I believe that semi-structured interviews with Black students at a public institution were needed. This is why this study exists, and it serves to explain questions and provide elaborate reasoning as to why Black college students obtained the COVID-19 vaccine. It also utilizes the Health Belief Model to explain and understand thought processes for engaging in positive health behaviors like getting the vaccine.

Limitations

One of the limitations to my study is the sample size. I interviewed 11 Black students on campus, which provides some context, but more participants would allow for a more robust study and greater saturation of information. This research is a steppingstone to include Black students in research regarding infectious diseases, vaccinations, and decision-making. Additionally, this study did not include a member-checking process. Future research should allow for time and ability for presenting the data and interpretation to the participants to ensure that they agree. Other concerns include the possibility of response biases, where respondents do not provide honest responses for any reason, which may include them perceiving a given topic as

a threat, or them being willing to ‘please’ the researcher with responses they believe are desirable (Kriukow, 2020), however this is a risk for any self-report study. Lastly, although this study was available to all Black students on campus, only Black women signed up to participate (see Participant Demographics in Appendix A). This research does not include the opinions of Black males when it comes to their decision-making process on receiving the COVID-19 vaccine. Future research may benefit from including a Black man on the research team to facilitate the participant recruitment process, or a design that targets Black men who are also often, and even more excluded and absent from education, research, and industry, than Black women.

Reflexivity Statement

As a qualitative researcher it is my duty to ask myself if my beliefs make me predisposed to internalize my data towards a particular conclusion.

Prior Assumptions and Experience with Research Topic. Within the context of the current study, I was involved in zoom interviews with study participants and needed to consider the ways in which my interactions with participants might be influenced by my own status as a college student and experiences with COVID-19 and vaccinations. I am a Black female graduate student, close in age to most participants, who had experiences with the virus and vaccine and the way that it has been communicated to me by the media – similar to the participants. In that same way, because everyone in the world was affected by COVID-19, regardless of race, I had to recognize that alone was a connecting point for students to feel vulnerable with me and tell their story. An important question I needed to address in drawing conclusions from the data concerned whether or not knowing about my background could have impacted on participants’ willingness to talk openly about experiences, or how this knowledge might have shaped what was said. Some students knew me from around campus and other students just saw me as a Black

woman who has had the same pandemic experience as them.

Also, when it came to utilizing the HBM as a theory within my research, I was able to use myself as an example to understand how participants may respond to the questions, I asked them. This may have subconsciously pushed me to draw data points early on and agreed with data that already supported my line of thinking.

Social Setting Between The Researcher and Participants. All the interviews were conducted via zoom and schedule at a time that was convenient for the participants. Although I set up the zoom meeting, I was mindful that respondents were given the opportunity to set the tone on how they responded to their questions and let me into a short recap over their pandemic experience. By deliberately taking the ‘back seat’ approach in setting the tone for the interview to take place, I hoped that participants would feel like they were exercising a measure of control over the interview process.

Directions for Future Research

Emergent themes not addressed in this study included youth being tied to reduced COVID-19 susceptibility and severity. Future research should investigate the relationship between age and the perceptions of susceptibility and severity. Longitudinal research would be valuable to see if perceptions are part of a generational ideology, or if these opinions change because of aging. To elaborate and test the relationships identified in the themes, a quantitative research approach employing surveys can be taken to reveal more generalizable findings. Furthermore, a quantitative approach with an experimental design can test which messages would be more efficacious than others. Other theoretical approaches to addressing messaging to promote COVID-19 vaccination should also be considered.

Future research should also include responses from Black students who attend Historically Black Colleges and Universities, as those institutions have larger pools of Black

students and comparisons can be made with decision-making processes of students at predominantly White institutions (PWIs). This research only begins to address how Black college students perceive public health messaging related to COVID-19 vaccinations and can possibly be used to help implement campus wide health campaigns to encourage engagement in positive health behaviors.

Chapter 6: Conclusion

Although this singular research study cannot speak for all Black college students, and how they use mediated and non-mediated forms of communication within their COVID-19 vaccination decision making process, my research can serve as a foundation and inspiration for future studies. With COVID-19 having been around for two years, I wanted to fill the gap within research narratives, since most prior data only focused on students' hesitancy to get the vaccine.

I see this study as relevant and current, because although the world refers to this time as a “post pandemic age,” we are still currently living through on-going infection and the aftereffects of COVID-19. The disease continues to infect, sicken, and kill people of all races. This research supports that, for Black college students, non-mediated forms of communication are more influential than mediated messages, in persuading one to receive the COVID-19 vaccine. The Health Belief Model allowed for an understanding of how Black college students made their decision when it came to getting the vaccine. Perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy are all important constructs in understanding the decision-making process to receive the COVID-19 vaccine. It can be concluded that self-efficacy was the most important of all constructs as family, friends, and one's inner network were ultimately determining factors to receiving the vaccine. As the COVID-19 disease, vaccine, and treatments continue to develop, it will be of theoretical and practical value to continue to analyze the influence and successes, and not just the failures, of mediated and non-mediated forms of communication. Along the way, it will be imperative to include and listen to the voices of the Black community who have been too long abused, ignored, and excluded from the research process. Protecting the public health of the Black community and understanding what motivates COVID-19 vaccination not only helps the Black community, but each community touched by COVID-19 – all communities.

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Appendix A

Participant demographics

Participant	Age	Race	Status	Gender	Vaccine
R1	22	Black or African American	Senior	Female	Pfizer (both doses)
C2	23	Black or African American	Grad student	Female	Moderna (both doses)
J3	21	Black or African American	Junior	Female	Pfizer (both doses)
J4	23	Black or African American	Grad student	Female	Pfizer (both doses)
M5	22	Black or African American	Grad student	Female	Moderna and Pfizer
T6	25	Black or African American	Grad student	Female	Pfizer (both doses)
M7	20	Black or African American	Sophomore	Female	Pfizer (both doses)
B8	19	Black or African American	Sophomore	Female	Pfizer (both doses)
K9	31	Black or African American	Grad student	Female	Pfizer (both doses)
S10	20	Black or African American	Junior	Female	Pfizer (both doses)
D11	26	Black or African American	Grad student	Female	Pfizer and Moderna

Appendix B

Recruitment Email and Group(me) message to participants

Name of Thesis: A QUALITATIVE STUDY ON MEDIATED PUBLIC HEALTH MESSAGES RELATED TO COVID-19 VACCINATIONS

Hello!

Thank you for your interest in this research study on the media's role in COVID-19 vaccination decisions in Black students. There has been much research done examining hesitancy within the Black community as it relates to unethical medical practices against Black bodies, and more recently college students' hesitancy towards the COVID-19 vaccine. However, Black students in particular have been missing from this research on mediated public health messages influence in their decision-making process to obtain the COVID-19 vaccine.

The purpose of this study is to look at the role of media and learn its influence about COVID-19 vaccination decisions and how that influence compares to outside non-mediated forms of communication.

Based on information available, and the lack thereof, this study aims to investigate a) perceived mediated public health messages related to COVID-19 vaccinations; b) what role mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process; and c) how the influence of mediated public health messages related to COVID-19 vaccinations compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication).

Please take this survey to ensure you qualify to participate in the research study and the principal investigator will reach out to you. The survey will take no more than 5-7 minutes.
https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV_4PIKLM2LhHIGToG

The age requirement to participate in this research study is 18-35 years old. If you meet the qualifications, you will be asked to participate in an hour long zoom interview.

Please contact Morgan Jackson with any questions.
mjhht@umsystem.edu

Appendix C

Schedule interview email to participants

Not selected to interview email to participants.

Subject: Research Study Participation: Schedule Your Interview

Hello _____.

Thank you for your interest in the following research study: A Qualitative Study on Mediated Public Health Messages Related to COVID-19 Vaccinations.

Principal Investigator/Researcher: Morgan Jackson

IRB Reference Number: 387028

You have met the criteria to participate and now must schedule a time for your recorded zoom interview. Please use the following link and select the best time that aligns with your schedule. Once you select a time, a zoom link will be sent within 24-48 hours to this same email you have provided. As stated before, the interview will last no more than one hour. Please see a consent form attached to this email. A signature is not required, however, please read the form in its entirety. I would be happy to answer any questions. As a reminder, your participation is voluntary, and you may withdraw at any time. Thank you for your participation.

Subject: Thank you for participating!

Hello.

Thank you for your participation in the survey for the following research study: A Qualitative Study on Mediated Public Health Messages Related to COVID-19 Vaccinations.

Principal Investigator/Researcher: Morgan Jackson

IRB Reference Number: 387028

At this time, we have not selected you to complete an interview. Thank you.

Appendix D

Consent to Participate in a Research Study (adult consent form)

Project Title: A Qualitative Study on Mediated Public Health Messages Related to COVID-19 Vaccinations.

Principal Investigator/Researcher: Morgan Jackson

IRB Reference Number: 387028

You are being invited to take part in a research project. The age requirement to participate in the study is 18-35 years old. Your participation is voluntary, and you may stop being in this study at any time. The purpose of this research project is to investigate a) perceived mediated public health messages related to COVID-19 vaccinations; b) the role mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process; and c) how the influence of mediated public health messages related to COVID-19 vaccinations compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication).

You are being asked to take a prescreening survey that should take no more than 5-7 minutes to ensure you meet the qualifications of the study. If selected to be a part of the study, you will be asked to engage in one hour long recorded zoom interview answering questions provided by the researcher. You will not know the questions beforehand; however, you will be asked to explain your experiences before and after receiving the COVID-19 vaccine.

The information you provide will be kept confidential and only the research team (Morgan Jackson & Dr. Monique Luisi) will have access.

If you have questions about this study, you can contact the University of Missouri researcher at (insert phone number and email address). If you have questions about your rights as a research participant, please contact the University of Missouri Institutional Review Board (IRB) at 573-882-3181 or muresearchirb@missouri.edu. The IRB is a group of people who review research studies to make sure the rights and welfare of participants are protected. If you want to talk privately about any concerns or issues related to your participation, you may contact the Research Participant Advocacy at 888-280-5002 (a free call) or email muresearchrpa@missouri.edu.

You can ask the researcher to provide you with a copy of this consent for your records, or you can save a copy of this consent if it has already been provided to you. We appreciate your consideration to participate in this study.

Appendix E

Interview guide

“The purpose of this research is to compare mediated forms of communication with non-mediated forms of communication to determine which had a greater influence on Black students' decision-making process to receive the covid-19 vaccine. This research is being done to include Black students in research narratives surrounding covid-19 vaccination decisions. I will be recording this zoom meeting and the recording will only be accessible by myself and my research committee chair.”

Consent

1. Are you 18 years of age or older?
2. Do you agree to participate in this study and consent to be recorded?

Demographic questions

3. How old are you?
4. What race or races do you identify with?
5. Are you an undergraduate or graduate student?
 - a. (If undergraduate) What year are you in?
6. What is your gender identity?

COVID-19 and Self

7. How would you describe your experience with COVID-19 over the past few years?
8. What do you know about COVID-19 and the COVID-19 vaccine?
 - a. Do you believe that COVID-19 is a dangerous disease? In what ways?
 - b. How concerned were you about getting COVID-19?
 - c. How would getting COVID-19 affect your life? (physical and social consequences)
9. What is your opinion about the vaccine?
 - a. Do you believe that the vaccine is safe to get?
 - b. Do you believe the vaccine works?
 - c. Did you face any obstacles or barriers when trying to get the vaccine? (e.g., costs, transportation, etc.) (Obstacles may include pain/side effects, missing class/work, and conspiracy theories (e.g., changes to DNA))
10. Were there any risk factors that made you believe that you are more likely to contract COVID-19? (e.g., living conditions, job, etc.)
 - a. Do you believe that you are more likely to get COVID-19 as a person of color?

COVID-19 and the Black/Community

11. Did you see anyone close to you that received the vaccine? If so, who?
12. To what extent do you believe COVID-19 threatened the health of your community?
13. Do you believe that COVID-19 is killing more, less, or the same amount of Black Americans than any other race? Why?
14. Do you believe that getting the vaccine is more or less important for people of color?

Media and Information

15. What forms of communication reminded you to get the vaccine? (e.g., email, phone, media (tv, social media), school communication, flyers, etc.)
16. What are your preferred ways of communication to receive information related to COVID-19 vaccine? (e.g., phone call, social media, email, text messages, etc.)

17. Where did you go to get information about the COVID-19 vaccine? (e.g., mainstream television, social media, subscription services, digital media, etc.) Why?
18. What are the general messages that you have been seeing about the vaccine?
 - a. What did the media say were the benefits of the vaccine?
 - b. What did the media say were the risk of the vaccine?
 - c. What media sources of information about COVID-19 vaccine do/did you trust?
 - d. What media message, or messages, inspired you to receive the vaccine? Where do you recall seeing them? What made it influential?
 - e. Were there any sources that you actively avoided? Why?
19. Did you talk to other people about getting the COVID-19 vaccine? Who?
 - a. Were there any influential people in your network of friends, family, or community that made you feel positive about getting the vaccine on your own? (e.g., church community, classmates, family members, etc.)? Who?
 - i. Were any of these people particularly vulnerable to getting COVID?
 - b. Did vulnerable individuals (e.g., elderly family members, friends) around you influence your decisions on getting the vaccine?
 - i. Did those individuals have a greater impact on your decision than the media?
 - c. Was talking about it with people more or less influential than the media information? Why or why not?

Appendix F

Research & Interview Questions

- RQ1: How do U.S. Black undergraduate and graduate students perceive mediated public health messages related to COVID-19 vaccinations?
 - Questions that tie into perceived susceptibility and perceived severity
 - How concerned were you about getting COVID-19?
 - How would getting COVID-19 affect your life?
 - Do you believe that COVID-19 is a dangerous disease? In what ways?
 - Do you believe that you are more likely to get COVID-19 as a person of color?
 - Do you believe that getting the vaccine is more or less important for people of color?
 - Were there any risk factors that made you believe that you are more likely to contract COVID-19? (e.g., living conditions, job, etc.)
 - To what extent do you believe COVID-19 threatened the health of your community?
 - Do you believe that COVID-19 is killing more, less, or the same amount of Black Americans than any other race?
 - What do you know about the COVID-19 and the COVID-19 vaccine?
- RQ2: What role do mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process for U.S. Black undergraduate and graduate students?
 - Questions that tie into perceived benefits and perceived barriers?
 - What is your opinion about the vaccine?
 - Do you believe that the vaccine is safe to get?
 - Do you believe the vaccine works?
 - What are the general messages that you have been seeing about the vaccine?
 - How did media messages speak to the benefits of vaccines?
 - What messages inspired you to receive the vaccine? Where do you recall seeing them?
 - Where did you go to get information about the COVID-19 vaccine?? (e.g., mainstream television, social media, subscription services, digital media, etc.) Why?
 - Were there any sources that you actively avoided? Why?
 - Was there one particular type of media(s) that was the most influential in your decision-making process to get the COVID-19 vaccine? What made it influential?
 - Did you face any obstacles when trying to get the vaccine?
 - Were there any factors in your life that you felt hindered you from getting the vaccine initially? (e.g., access, transportation, childcare, work hours, lack of insurance, class schedule conflicts, etc.)
- RQ3: How did the influence of mediated public health messages related to COVID-19 vaccinations compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication)?

- Questions that tie into self-efficacy and cues to action?
 - Did you talk to other people about getting the COVID-19 vaccine? Who?
 - Was talking about it with people more or less influential than the media information? Why or why not?
 - Did you see anyone close to you that received the vaccine? If so, who?
 - Were there any influences in your network of friends, family, or community that made you feel positive about getting the vaccine on your own? (e.g., church community, classmates, family members, etc.)
 - Did vulnerable individuals (e.g., elderly family members, friends) around you influence your decisions on getting the vaccine? Did those individuals have a greater impact on your decision than the media?
 - What forms of communication reminded you to get the vaccine? (e.g., email, phone, media (tv, social media), school communications, flyers, etc.)
 - What are your preferred ways of communication to receive information related to COVID-19 vaccine? (e.g., phone call, social media, email, text messages, etc.)

Appendix G

Pre-Screening Survey

Instruction

Thank you for your interest in this research study. The form will be used to ensure that all potential participants qualify before the interview process has begun. Please read all the questions carefully.

Consent to Participate in a Research Study Project Title: A Qualitative Study on Mediated Public Health Messages Related to COVID-19 Vaccinations.

Principal Investigator/Researcher: Morgan Jackson IRB Reference Number: 387028

You are being invited to take part in a research project. You must be 18 years of age or older. Your participation is voluntary, and you may stop being in this study at any time. The purpose of this research project is to investigate a) perceived mediated public health messages related to COVID-19 vaccinations; b) the role mediated public health messages related to COVID-19 vaccinations play in the COVID-19 vaccination decision-making process; and c) how the influence of mediated public health messages related to COVID-19 vaccinations compare with non-mediated COVID-19 vaccination related messages (e.g., personal communication). You are being asked to take a prescreening survey that should take no more than 5-7 minutes to ensure you meet the qualifications of the study. If selected to be a part of the study, you will be asked to engage in one hour long recorded zoom interview answering questions provided by the researcher. You will not know the questions before hand; however, you will be asked to explain your experiences before and after receiving the COVID-19 vaccine. The information you provide will be kept confidential and only research team (Morgan Jackson & Dr. Monique Luisi) will have access. If you have questions about this study, you can contact the University of Missouri researcher at (insert phone number and email address).

If you have questions about your rights as a research participant, please contact the University of Missouri Institutional Review Board (IRB) at 573-882-3181 or muresearchirb@missouri.edu. The IRB is a group of people who review research studies to make sure the rights and welfare of participants are protected. If you want to talk privately about any concerns or issues related to your participation, you may contact the Research Participant Advocacy at 888-280-5002 (a free call) or email muresearchrpa@missouri.edu.

You can ask the researcher to provide you with a copy of this consent for your records, or you can save a copy of this consent if it has already been provided to you. We appreciate your consideration to participate in this study.

Q1
What is your name? 🔍 *

First Name

Last Name

Q2 *

Are you a student at the University of Missouri - Columbia?

Yes

No

Page Break

Q3 *

What is your gender?

Male

Female

Other

Choose not to answer

Page Break

Q4 🔍 *

What is your age?

Page Break

Q5 *

How do you identify? (select all that apply).

Afro-Caribbean

Black or African-American

Afro-Cuban

Afro-Brazilian

Afro-Costa Rican

West African (e.g., Ghana, Nigeria)

Central African (e.g., Congo, Cameroon)

Afro-Latin American

Mixed ethnicity

Q6 *

What is your classification?

- Freshman
- Sophomore
- Junior
- Senior
- Grad student

Page Break

Q7 *

Which vaccine did you receive?

- Moderna
- Pfizer
- Johnson & Johnson

Page Break

Q8 *

Did you receive all vaccine shots associated with your vaccine type? (Both doses of Moderna and Pfizer or one dose of Johnson & Johnson)

- Yes
- No

Q9 💡 *

Have all of your vaccination shots for COVID-19 been from the same company? (If yes, simply type yes in the box. If not, please type which vaccines you have received.)

Page Break

Q10 *

Are you a U.S. Citizen?

- Yes
- No

Q11 💡 *

What is your email address?

Email Address

Page Break

Add Block

End of Survey

We thank you for your time spent taking this survey.
Your response has been recorded.