

**A Qualitative Exploration of Socioeconomic Status' Impact on Mask
Wearing Behaviors During the COVID-19 Mask Mandate**

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Abstract

The Covid-19 pandemic resulted in lifestyle changes and challenged the public to cooperate towards the goal of slowing the spread. While it is known that wearing a mask significantly reduces the risk of contracting the disease, still, there was significant pushback against the government implemented mask mandate. The aim of this study was to identify and understand the student perspective on the decision-making process of masking. The study also explored if and how socioeconomic status might influence these decisions. Using qualitative methods, this study involved 24 students from a small liberal arts institution in the southeastern United States. Students were recruited to take part in the study through study flyers containing contact information for the study and the sponsoring university lab. An additional number of students who were enrolled in the university's *Research Methods in Health and Wellness Promotion* class took part in the study as part of an experiential learning activity. Demographic data was anonymously collected from each participant prior to the start of each interview. Primary data was collected through semi-structured focus groups and in-depth one-on-one interviews. Data triangulation efforts were present as observers and note-takers took part in the data collection process. All interviews were recorded and transcribed using the *NVivo* software. Interview transcripts were then coded for the identification of themes. The results from this research suggest that while most respondents held reservations about the regulations, they believed that the masks were effective and thus complied with the mandate. The results also demonstrate that decisions and opinions vary drastically among participants due to personal reasons, that include socioeconomic background. These findings have important implications that demonstrate health decision making can be complex for college-aged students.

Introduction

Mask wearing has become a contested issue during the pandemic. The decision of whether or not to wear a mask has divided the nation, with various factors influencing the position held by individuals. These factors include political alignment, socioeconomic status, gender, age and race (Brown-Iannuzzi, J. L. et al, 2017; Pew Research Center, 2020). Generally, the difference in perspectives around mask-wearing decisions can be classified by two ethical principles. The first is the ethical principle of utilitarianism, where mask-wearing is framed as a personal action that will benefit the majority. The second is the principle of libertarianism, where mask-wearing guidelines are seen as infringing on individual liberty. (Brown-Iannuzzi, J. L. et al, 2017) Since the beginning of the pandemic, the debate between personal freedom and prioritizing population health has generated much public discourse, revealing major differences in opinions and practices (Pew Research Center, 2020). During the height of

the pandemic, it was reported that 85% of adults wore a mask all or most of the time in a store or business. The rising fatality rates were noted as a primary contributing factor to this decision (Pew Research Center, 2020). While these polls capture the perspectives and attitudes of American adults on the subject matter, seldom is focus given to the perspectives of young people.

This research aims to explore the perspective of young college students at the *University of North Carolina at Asheville* to understand their position on the matter and to contextually investigate their preferences. Because of COVID-19's devastating impact and the projection that it is here to stay (Phillips, 2021), it is important to explore how it has affected the population that will be dealing with the brunt force of future pandemics. Ultimately, understanding their positions and attitudes will be helpful tools for public health experts in the future.

The central research question for this study is how does an individual's socioeconomic status influence their decision around mask-wearing? Using qualitative research methods, we explore the positions, attitudes, and rationale behind the mask wearing decisions of college-aged students. Our findings suggest mixed views on the subject matter and demonstrate the unique and varying role that socioeconomic status plays in health decision making.

Perspectives on Mask Wearing

There are considerable factors that determine the position held by individuals around mask wearing. Individuals who did not want to wear masks often cited that they believed it was difficult to get in the habit of wearing them and also found them to be uncomfortable (Taylor, Asmundson, 2021). Additionally, they believed the masks were not effective in slowing the spread of COVID-19 and expressed a lack of concern about the severity of the disease (2021).

In contrast to this, those who chose to comply with public health guidelines and wear a mask were often driven to do so by their social identities (Powdthavee et al., 2021). Embedded in social entities is the occupied status of individuals. Occupied status refers to the social position held by individuals or a group of people and is strongly associated with their socioeconomic status (Julien and Drentea, 2020). Socioeconomic status is comprised of education, income levels, and occupation (Duncan et al., 2002). All of these factors have been documented to have influence on mask-wearing decisions (Liu, Arledge, 2022).

Socioeconomic Status and Lifestyle Choices

A person's understanding of health and how they value their own personal wellbeing can play a role in their outlook on acquiring COVID-19, and this can inadvertently influence their behaviors. Studies have found that expectations of a shorter life span are observed among those in lower social classes (Wardle, Steptoe, 2003). This finding could point to increased susceptibility concerns among those most vulnerable, which could influence diligent efforts to protect their health. At the same time, the finding could also suggest the presence of a learned helplessness mindset, where those most vulnerable are less optimistic about their health, and thus take less precaution against the virus.

Socioeconomic Status and Political Views

Studies have found that political alignment is related to one's socioeconomic standing (Brown-Iannuzzi et al., 2017). With that said, it is difficult to separate the topic of COVID-19 from politics. At the height of the pandemic, 92% of Democrats reported regularly wearing a mask, compared to 76% of Republicans. Research has found that the position individuals hold often mirrors the views of their political alignment (Pew Research Center, 2020). For example, in July of 2020, there was an increase in the Republican support towards mask wearing, after Former President Donald Trump was shown (for the first time) wearing a mask (2020).

Mask Mandates and Social Identities

Race plays an important role in influencing mask-wearing behavior; this role has been found to be statistically significant (Lawrence, 2020). Research has shown that ethnic minorities are more likely to live in areas highly affected by COVID-19 (Kirby, 2020). At the height of the pandemic, White Americans were found to be the least likely to wear a mask at 62%, compared to other ethnicities like 69% of Black Americans, 74% of Hispanic Americans, and 80% of Asian Americans (Pew Research Center, 2020).

Methodology

Participants (Focus Groups)

Qualitative data were gathered through focus groups, in-depth one-on-one interviews, and surveys. Participants consisted of undergraduate students enrolled at UNC-Asheville ranging from ages 18-25. A total of 24 undergraduate students enrolled at the *University of North Carolina at Asheville* took part in the focus groups and one-on-one interviews for this research study for a total of two focus groups and five one-on-one interviews. These participants included students enrolled in *Research Methods in*

Health Promotion course at UNCA, who participated as part of an experiential learning activity. A summary of these findings is noted in Table 1 and Table 2. Per the university guidelines involving research with human subjects, the study fit the criteria for IRB exemption.

Participants (One-on-One Interviews)

Participants were recruited through social media flyers advertising the study. In addition to this, on-campus recruitment efforts included the distribution of these flyers across university lecture halls and common areas.

Procedures

Each focus group engaged students in a facilitator-guided discussion. The discussion sought the students' perspectives, personal thoughts, and emotions about different aspects of the pandemic. In each session, the facilitator administered open-ended questions that allowed for students to provide and explore their feelings on the subject matter. The questions assessed the participant's reaction to the mask mandate and its later removal as well as their level of concern during the pandemic. The study also explored their habits surrounding mask wearing, the influence of their political views on their decisions, and their main takeaway from the pandemic so far. The data provided insight on how the individual views themselves in socioeconomic dynamics and the potential relationship that has on their willingness to wear a mask. All one-on-one interviews and focus group sessions were recorded and transcribed using *Nvivo* software. Prior to the start of the recording, participants were informed of the recording and that all data would be kept secure and anonymous. Data triangulation efforts were present as a note-taker recorded their observations of the focus group participants.

The one-on-one interviews were facilitated over zoom in order to eliminate response bias against the facilitator in regard to mask wearing. All one-on-one interviews were conducted during the month of March 2023, with a total of five students participating in the one-on-one interviews. Each participant was given up to 60 minutes for their interview.

The qualitative data was collected following a semi-structured interview approach using an interview guide. The questions were asked with the goal of understanding the participants' perspective pertaining to the pandemic and the factors of their life that may have influenced their behavior. All focus groups took place during the month of February 2023, with a total of 16 students participating in the focus groups. Focus groups were held in two separate groups, ranging from seven to nine participants per focus groups session. The duration of the focus group sessions ranged from 40 to 60 minutes and participants were encouraged to share what information they felt

comfortable answering. Prior to the start of the focus groups, participants completed an anonymous survey that collected demographic information to that included: age, race/ethnicity, marital status, gender identity, academic year, major, GPA, employment status, if they worked remotely, decision to wear a mask, belief in mask effectiveness, perceived risk of contracting COVID-19, perceived socioeconomic standing: Upper, Middle, Working, or Lower, financial independence, and estimated yearly household income.

Instruments

Seven open-ended questions were administered to all students to inquire into whether an individual's socioeconomic standing influenced their decision to wear a mask. The questions were as follows:

"When the mandate was implemented, what were your initial thoughts on having to wear masks?"

"After the mandate was lifted, did you continue to wear a mask in public? Explain."

"What were your emotions/thoughts like when the mandate was lifted?"

"What was your level of concern or care in regard to the pandemic?"

"When Lockdown was implemented, did you agree with the mask wearing policies and believe they were effective in slowing the spread? And regardless of personal feelings, did you adhere to state and federal mandates when out in public? Explain."

"Was it difficult to establish a habit of wearing a mask? Explain."

"Do you feel your position on mask wearing during the pandemic has been influenced by your political views? Explain."

"What is your main takeaway from the pandemic so far?"

Coding and Analyses

Data were analyzed utilizing thematic analysis. Participants' statements were coded using a grounded theory approach. Direct quotes from the participants were used to represent the identified themes. A summary of this data is provided in Tables 3 and 4.

Discussion and Results

Table 1. Profile of Focus Group Participants

Variables	N%
Age (16)	
18	1 (6.25%)
19	3 (18.75%)
20	7 (43.75%)
21	1 (6.25%)
22	2 (12.5%)
23	1 (6.25%)
25	1 (6.25%)
Race/Ethnicity (16) *NME	
Asian or Pacific Islander	0 (0%)
Black or African American	2 (11.76%)
Hispanic or Latino	3 (17.65%)
Multiracial or Biracial	1 (5.88%)
Native American or Alaskan Native*	1 (5.88%)
White or Caucasian*	10 (58.82%)
Marital Status (16)	
Divorced	0 (0%)
Married	1 (6.25%)
Single	15 (93.75%)
Widowed	0 (0%)

Gender Identity (16)

Cisgendered Female/Woman	12 (75%)
Cisgendered Male/Man	4 (25%)
Nonbinary/Genderfluid/Genderqueer	0 (0%)
Transgendered Female/Woman	
Transgendered Male/Man	0 (0%)
	0 (0%)

Academic Year (16)

Freshman	2 (12.5%)
Sophomore	4 (25%)
Junior	4 (25%)
Senior	6 (37.5%)
5 th Year Senior	0 (0%)
Postbac.	0 (0%)

Major (16) *NME

Health and Wellness*	15 (93.75%)
Neuroscience*	1 (6.25%)
Undecided	1 (6.25%)

GPA (16)

0.0-0.99	0 (0%)
1.0-1.99	0 (0%)
2.0-2.99	3 (18.75%)
3.0-3.99	11 (68.75%)
4.00+	2 (12.5%)

Employment Status (16)

Yes 9 (56.25%)

No 7 (43.75%)

Remote Work (9)

Yes 0

No 9 (100%)

Decision to Wear a Mask (16)

Yes, I regularly wear a mask

No, I do not regularly wear a mask 3 (18.75%)

13 (81.25%)

Belief in Effectiveness of Mask (15)

I believe masks are effective

I do not believe masks are effective 14 (93.33%)

1 (6.67%)

Perceived Risk (15)

Very Low 0 (0%)

Low 7 (46.67%)

Medium 6 (40%)

High 2 (13.33%)

Very High 0 (0%)

Perceived Socioeconomic Standing (16)

Upper

Middle 1 (6.25%)

Working 9 (56.25%)

Lower 1 (6.25%)

5 (31.25%)

Financially Independent (16)

Yes	3 (18.75%)
No	13 (81.25%)

Estimated Yearly Household Income (15)

Less than \$20,000	
\$20,000 to \$44,999	4 (26.67%)
\$45,000 to \$139,999	3 (20%)
\$140,000 to \$149,999	3 (20%)
\$150,000 to \$199,999	1 (6.67%)
\$200,000 and above	2 (13.33%)
	2 (13.33%)

NME *Responses not mutually exclusive. More than one answer allowed*

Table 2. Profile of One-on-One Interview Participants

Variables	N%
Age (5)	
21	5 (100%)
Race/Ethnicity (5) *NME	
Asian or Pacific Islander	0 (0%)
Black or African American	1 (16.7%)
Hispanic or Latino*	1 (16.7%)
Multiracial or Biracial	0 (0%)
Native American or Alaskan Native	0 (0%)
White or Caucasian*	4 (66.7%)
Marital Status (5)	
Married	0 (0%)
Single	5 (100%)
Gender Identity (5)	
Cigendered Female/Woman	4 (80%)
Cisgendered Male/Man	1 (20%)
Nonbinary/Genderfluid/Genderqueer	0 (0%)
Transgendered Female/Woman	0 (0%)
Transgendered Male/Man	0 (0%)
Academic Year (5)	
Freshman	0 (0%)
Sophomore	0 (0%)
Junior	3 (60%)

Senior	2 (40%)
5 th Year Senior	0 (0%)
Postbac.	0 (0%)
Major (5) *NME	
International Studies*	1 (12.25%)
Management*	1 (12.25%)
Health and Wellness	2 (25%)
Economics*	2 (25%)
Accounting*	1 (12.25%)
Political Science	1 (12.25%)
GPA (5)	
0.0-0.99	0 (0%)
1.0-1.99	0 (0%)
2.0-2.99	0 (0%)
3.0-3.99	5 (100%)
4.00+	0 (0%)
Employment Status (5)	
Yes	5 (100%)
No	0 (0%)
Remote Work (5)	
Yes	0 (0%)
No	5 (100%)
Decision to Wear a Mask (5)	
Yes, I regularly wear a mask	1 (20%)
No, I do not regularly wear a mask	4 (80%)

Belief in Effectiveness of Mask (5)

I believe masks are effective

I do not believe masks are effective 5 (100%)

0 (0%)

Perceived Risk (5)

Very Low 1 (20%)

Low 1 (20%)

Medium 2 (40%)

High 1 (20%)

Very High 0 (0%)

Perceived Socioeconomic Standing (5)

Upper

Middle 2 (40%)

Working 3 (60%)

Lower 0 (0%)

0 (0%)

Financially Independent (5)

Yes 5 (100%)

No 0 (0%)

Estimated Yearly Household Income (5)

Less than \$20,000

\$20,000 to \$44,999 1 (20%)

\$45,000 to \$139,999 0 (0%)

\$140,000 to \$149,999 1 (20%)

\$150,000 to \$199,999 1 (20%)

\$200,000 and above

1 (20%)

1 (20%)

NME *Responses not mutually exclusive. More than one answer allowed*

Focus Group Participant Profiles

Many participants from the focus group currently study in a field of science: 88.23% were majoring in the Health and Wellness program, with 5.88% majoring in Neuroscience, and 5.88% being undecided. Participants reporting studying Health Science, Health Promotion, and Neuroscience could explain why their responses had a tendency to be about “trusting in science” during discussions and why they held a strong belief that masks worked in slowing the spread of COVID-19. As recommended by the CDC, wearing an N-95 mask significantly diminishes the spread of particles through the air. Studying in a science-based field shows a preference to adhere to scientifically supported advice. It is also important to note that it is likely that many of these participants will use their degree to continue their education or secure a job in a corresponding field of science, potentially resulting in a higher income job in the medical field later in life. This continuation of education or possession of a high-income job can influence an individual’s socioeconomic standing.

The focus groups reported 18.75% of participants regularly wore a mask. Considering 93.33% of participants believed wearing a mask slowed the spread, there is a drastic difference between participant belief and action. This may be due to the public declaration that the COVID-19 pandemic is over and participants feel that action is not necessary. Regardless, it is shown that while participants believe masks are effective, the majority of respondents chose not to wear them. This is an interesting result since the majority of the participants are science-based majors and hold the belief that masks are effective, there is a lack of implementation of their beliefs in their actions. This is an intriguing development in the understanding behind mask wearing behaviors in association with socioeconomic status.

Focus Group Themes

There were a few common themes from the focus groups responses that emerged. The most prevalent one was the participant’s desire to center the needs of elderly and immunocompromised populations. Participants noted that these populations were especially at risk of contracting the disease and so their safety was a high priority. One individual described it as having a moral obligation to do their part in preventing the spread and protecting others. This perspective mirrors what is discussed in the Machida

et al. study, in which research participants believed that COVID-19 could be controlled through collective effort to benefit those most vulnerable (2020).

Another major theme that emerged was that wearing a mask was a simple intervention that yielded significant benefits. Although masks had some reported drawbacks in terms of comfort or convenience, including fogging glasses and resultant sore ears, most participants declared that the effort to put on a mask was a simple task to prevent the spread of a deadly virus. Though some had difficulties with remembering to bring a mask when they went out, many spoke about utilizing provided masks in establishments, and returning to retrieve one the moment they remembered it was left behind. Even though they expressed it was inconvenient, participants explained that it was the safest thing to do and something they deemed necessary and important.

Another theme that emerged was listening to science. Participants stated that they were more inclined to listen to scientific reason during the pandemic and the mask mandate than any other source. Many claimed they wanted to follow the mandate, as it made sense, especially since health care workers already wear masks in their practice. Due to this, participants agreed that wearing a mask would lessen the risk of exposure and contamination. During a period when there was not much known about the disease itself, participants noted they were eager to learn how they could stay safe and appreciated the information supplied by health organizations to slow the spread.

Though most participants agreed that the elderly populations and immunocompromised individuals were at risk and had severe, negative consequences from contracting COVID-19, participants had varying levels of concern for themselves. Based on personal factors, participants had different outlooks on how they viewed COVID-19. Some lost family members to the virus and found the loss changed their view on the pandemic and allowed them to realize its severity. Others who did not personally know anyone who had died of COVID-19 expressed that they would not be worried at all if they got sick. For the participants who were immunocompromised themselves or had close family members who were, they expressed that they had a more difficult time with the pandemic and were more worried about their health or a family member's health.

Another theme that emerged was that environment influenced participant's perception of COVID-19 and the actions they took in response. The location where an individual experienced COVID-19 greatly influenced the way they saw the pandemic and exposed them to varying opinions and actions of their community. Some participants were located in areas that were compliant with mask mandates and upon noticing a vast majority of community members wearing masks, decided to also wear their mask. Others experienced active pushback from their community members and witnessed

public outcry against the mandate. Some areas were more saturated with COVID-19 cases, which could contribute to the levels of fear participants experienced. While these are locations on a community level, participants also found what situation they were in influenced their mask wearing habits. For one given example, in large, crowded areas, especially indoors, there was a higher need for a mask in comparison to being outside. There was also a conformist mindset when everyone else around them was wearing a mask.

Socioeconomic factors also was a theme. Educational advancement was left unknown for many when online courses started. A few participants were in high school when the pandemic started, with some describing COVID-19 as not feeling as prevalent in their lives as it is now that they are in college. This change in education level could help them understand the impacts of the disease better as maturity and experience grows. As most of the workforce experienced job issues as a result of the pandemic, a few participants also experienced job insecurity with hours being cut or total transformation of their job role. The participant’s specific job also allowed for certain experiences. When working in health care, workers experienced an overflow of patients and had high levels of stress and anxiety along with a hopeless feeling of the pandemic being never ending. This certainly would have an influence over the individual’s willingness to wear a mask, since they saw the worst of COVID-19’s influence and their job required so much from them as a result of the disease. For some, seeing firsthand the devastation of COVID-19 solidified their intentions to pursue a career in the medical field.

The table below depicts common themes pulled from the cumulative focus groups. Each theme is explained in short detail and are supported by specific quotes from participant responses.

Table 3. Summary of Focus Group Themes, Subthemes, and Representative Quotations

Factor	Description	Example Quote	Example Quote
Listening to science	Participants found that in the pandemic and beginnings of lockdown when many aspects of the disease were unknown, science was one thing they could count on. When claims and mandates of the government were substantiated by science, people felt	“I don’t think it was ever a matter of whether or not we agree with it. If the government says to do it [because there’s] this deadly virus out there, we’re not arguing or anything, we’re just like, alright.”	“...definitely the videos coming out with like the ‘Stop the spread effectiveness’ ... having those things supplemented with it definitely made it feel a lot more like it would work in the beginning because I didn’t know it they were just freestyling or what.”

	more inclined to adhere to the acts.		
Protect Immunocompromised Populations and Elderly	All participants worried for their family's health during the pandemic, especially their higher risk family members and grandparents. Personal concern varied and so did overall enthusiasm to wear a mask, but the underlying message was the same.	"...I just kind of felt a moral responsibility for the elderly populations."	"Yeah, I kind of did a similar thing, once the mandate ended, I still wore it around my grandparents and my one friend who's immunocompromised."
Wearing a mask is a simple intervention with significant benefits	A common theme shared by participants was that mask wearing was a simple intervention that yielded significant benefits for the population at large.	"Look, if that's all I have to do to do my best to avoid spreading something deadly, it doesn't seem like a big price to pay to put a piece of cloth over my face for a bit."	"I mean, there may be some people who are still anxious low key, and I'm probably still a little bit anxious subconsciously, so [I mean,] it doesn't hurt me."
Severity awareness and level of personal concern	Concern for personal as well as public health and safety is a common theme pertaining to the pandemic. Certain factors influenced the magnitude of which participants viewed their own personal risk.	"I had a few family members pass away from it as well and that was really devastating. That definitely changed my viewpoint on it."	"...I remember being very wary and cautious around family members [a lot of elderly family members] ...I also am kind of immunocompromised right now. So, I was a little extra careful and people were more worried for me."
Environment influenced perception and action	A person's physical environment can have a lot of influence over their opinions and actions. During the mask mandate, participants found they felt pressured to act in	"... general thoughts about it depended on where you are from. I'm from a more conservative, small town in North Carolina, and people in the peak of COVID would go	"The majority of people weren't wearing masks and then all of the sudden, everybody was wearing a mask. So that's when I started. I would say that up until all [like] my

	certain ways in their environment due to this.	into a restaurant or go into a doctor's office and debate about not wanting to wear a mask... I do definitely think that like people's opinions on COVID were partially shaped by what everyone around them thought about it and how seriously their community was treating it."	community started wearing a mask, I did because I saw it."
Socioeconomic factors	Income, education, and occupation are all factors that determine an individual's socioeconomic status. When the pandemic began hindering educational opportunities and COVID patient intake swamped health care workers, participants found their outlook on the pandemic was drastically affected.	"I was very worried. I didn't even know if I was going to come to college because I was like, we're still in the middle of a pandemic. What are we doing?" "And I took advantage of that [time off] and then I was also working so that made it real to having to [like], shut down and like people lose hours."	"I've been working in health care during all of this and I had to work with a lot of the clients and so I was still seeing this stuff every day, but when you got to the point of like, are we are safe, we can take off our mask, it didn't feel like it was there yet for me."

One-on-One Interview Participant Profiles

The following majors were represented during the one-on-one interviews: 25% of participants were majoring in Health and Wellness, 25% were majoring in Economics, 12.25% were majoring in Accounting, 12.25% were majoring in International Studies, 12.25% were majoring in Management, and 12.25% were majoring in Political Science. Some participants double majored, resulting in a higher academic load. With a more diverse sample, it is intriguing to see how the different majors influence their actions and beliefs. It is important to consider that 50% of the participants reported studying in a social science when looking at responses during discussion and the results of the survey, as this could indicate an alignment with scientific views. This high percentage of

a science-based major could explain why 100% of participants believed that masks were helpful in decreasing the spread of COVID-19.

The one-on-one interviews reported 20% of participants regularly wore a mask and that 100% of participants believed wearing a mask was effective in decreasing the spread of COVID-19. This is interesting because of the complete agreement with mask wearing, yet a very low amount of participants actually acting upon that sentiment. Considering all participants from the one-on-one interviews were upperclassmen, these participants would have experienced attending college either at the start of the COVID-19 pandemic or during their freshman and part of their sophomore year. In their one-on-one interviews, 100% of participants expressed they wore a mask during the mandate, but few wore them after the mandate. COVID-19 is still around even though the pandemic has been declared over and the mandate lifted, meaning the threat of contracting the disease is still present, but the severity is declared manageable. It is interesting to see that the participants appear to not be following scientific advice now, when as of January 2023, the WHO (World Health Organization) still continued to recommend wearing a mask in specific situations.

One-on-One Interview Themes

During the one-on-one interviews, a number of themes and commonalities emerged from the data collected.

Every participant expressed some form of listening to and trusting science throughout the pandemic and especially at the beginning. Not only did they trust that implementing the advice into their lifestyle would protect themselves and others, there was trust that the mandate and other safety measures would not have been put into action if they did not help. Many of the participants referenced the CDC when answering, showing that their trust was put in a credible, science-based organization.

A common theme shared amongst the majority of participants was that they wanted to protect the elderly and immunocompromised populations. Since most directly cited having grandparents as this reason and/or the fact that they interacted with them a lot, many participants wore a mask to protect these members of their family. The same went for other high-risk individuals in their family, whether they were immunocompromised or not. Overall, the general mindset was to wear a mask to keep these groups safe, so the participants did not accidentally spread the disease to them.

While most were happy to wear a mask for the safety of others, there was a general agreement that masks were inconvenient and uncomfortable. It was a theme amongst participants to mention difficulties breathing in warmer climates and while working out,

sore ears from extended use, and annoyance of having to constantly be aware of when to pull their mask up around others when outside. Despite these drawbacks, it was found that participants still wore them and since they believed they were effective in slowing the spread, were not a big deal to work with. This theme of putting aside one's comfort for the safety of others is an interesting topic.

Another theme that emerged was that participants were happy when the mask mandate was lifted. Though opinions varied on whether or not it was safe to do so, most participants agreed that it was a relief that the mandate was lifted. As the majority had stated, masks could get uncomfortable and inconvenient. Others cited their happiness to be from the hope that COVID-19 was being put behind them. This draws back to the theme of participant's trusting in science and the CDC, as the participants believed that the CDC would not remove the mandate unless it was safe to do so. Some trusted that the vaccine would do its part to minimize the effects of COVID-19, with some pointing to this as a reason they were comfortable with the lift. There was also variance in continued mask-wearing post-mandate. Participants that cited that they were worried about a spike following the mask mandate removal on UNCA's campus after spring break of 2022, indicated that they wore a mask for a few weeks after.

Socioeconomic status was another big theme that emerged from the one-on-one interviews. Many discussed concern about COVID-19 for how it might affect their parents, which many had parents that were considered essential workers. Since all participants were financially dependent, it is safe to assume that the participants socioeconomic class is partially dependent on their parents. This added knowledge that their parent(s) is an essential worker, it may hold significant influence over their willingness to wear a mask and protect others. During the lockdown period, when many were forced to stay home and switch to remote work, essential workers were still required to go to their jobs and interact with the public. Due to this, the jobs and subsequently the income of participants and their family may have an impact on how they viewed the severity of COVID-19. This would then determine whether the participant thought it necessary and beneficial to wear a mask or not. It was shown from the one-on-one interview data that 60% of participants were high school seniors when the pandemic started. As they continued to college, their experiences changed and their outlook was broadened as they attended a college during the COVID-19 pandemic and mask mandate. It was claimed by some that pursuing a higher education helped them understand why mask wearing was beneficial. An individual's intention to continue their education and their pursuit of a scientific degree also impacted their decisions and outlooks. One participant declared that their interest in going into the health care influenced their decision to wear a mask, which also draws back to the theme of trusting in science.

An interesting theme that emerged was that participants' actions were heavily influenced by their peers and social environment. It was presented that some individuals felt judged if they did not comply with the mandate. This threat of social detriment put pressure on participants to act in a way that they might not have, given the circumstances were different. This is interesting to keep in mind when considering what goes into the decision-making process. Peer approval is highly valued and sought after in most situations and it played a significant part in the participants compliance (Rieger, 2020). Even if the participant readily wore a mask and had no arguments against it, there were times where interactions resulted in internalized guilt and shame. There was an instance where a participant was playing outside with a group of others. The participant described that all included in the game were not presenting symptoms and had not tested positive for COVID-19. All were standing six feet apart, as per social distancing guidelines. None of the participants were wearing a mask. During this time, the participant realized that they were being filmed by two peers and immediately felt guilty and nervous, fearing expulsion from the university. The participant explained that their internal thoughts were, *"...I should have been wearing a mask! How stupid of me, that's just not responsible,"* as well as the sentiment that, *"...a person doing that is not a good citizen."* Even though the participant had taken multiple precautions to ensure they were safe, the realization that they were being perceived negatively by a peer instantly brought in feelings of shame and an immediate desire to comply.

Another theme that emerged in the mask wearing decision was a participant's political views. Participants shared that they were more active in watching the news and more involved in the political debate surrounding COVID-19 and because of this, their views on the pandemic and reaction to the mandate differed. One participant stated, *"I watched more TV or the news and the stations were more left leaning ...it definitely impacted my will to wear it because of my political views."* while another commented that even though their views pertained to "freedom of everything", they found it *"...of a lot of importance [to me] to follow that mandate."* Others claimed that at first, their decision was not based on political alignment, but as they moved locations and began studying at UNCA, they began to notice stronger feelings towards mask wearing and those not wearing a mask, citing their political views as the potential root for this.

"... the knowledge of wearing a mask, I don't think it was politically driven, I think looking at other people and seeing how they acted and then how I would think about how they acted because they were not wearing a mask, was."

This idea would also tie back to the social environment theme and seeing both sides of the idea is important.

Table 4. Summary of One-on-One Interview Themes, Subthemes, and Representative Quotations

Factor	Description	Example Quote	Example Quote
Listening to science	In the uncertainty of the pandemic and many opinions surrounding mask wearing, participants found that they could put their trust in scientific evidence and the CDC.	“I think, in my mind, I just wanted to listen to the science behind it and follow what the CDC had to say, regardless of the diverse political views that were influencing how people viewed the mask mandate.”	“[But I mean,] I just kind of listened to what the CDC said. I mean, it’s science, it’s pretty hard to deny.”
Protect Immunocompromised Populations and Elderly	The elderly population and immunocompromised individuals were the groups with the highest risk during COVID. Almost all participants had grandparents they wanted to protect or high-risk individuals in their family.	“We made sure to wear a mask, all of us, because we didn’t want to get each other sick. So, I’d say we were pretty serious just because I have a lot of high-risk people in my family when it come to my parents or when it come to my grandparents.”	“I personally hated wearing a mask, but I did it for the safety of others all the time because I was worried mostly about the elderly community and I spent a lot of time with my grandparents.”
Masks work, but they are uncomfortable and unpractical	The consensus was that participants thought masks worked and were happy to wear them, but most agreed that they were a hinderance to everyday life.	“I run, so when I go out, I have one of those little mask things around your neck [gator] and I pull it up whenever I cross paths with someone. That was a little bit annoying. But again, it’s a minor inconvenience to be able to not get	“Although I do think masks were super helpful and very beneficial, I personally, like I guess everyone else on this planet, didn’t particularly enjoy wearing them. I knew they were very uncomfortable, especially during the

		sick or get someone else sick, so I don't have a problem with it at all."	summer when it's hot and humid and you feel like you can't really breathe, and you know your ears start hurting..."
Happy mandate was lifted	The majority of participants expressed relief and happiness when the mandate was lifted, for various reasons. Even then, some still wore masks when they felt it was necessary.	"For me, I was really happy when the mandate was lifted. I know there was a lot of controversy, but in my mind, there was almost, like, we were moving through the pandemic, we're taking a step forward, and it meant that although COVID was like still within us, we could start building out immune systems in other ways."	"I felt like lifting the mandate at that time was fine because most people were already vaccinated and the cases plateaued. [Yeah] I didn't have any negative thoughts about it and I just wore my mask for an extra week because of spring break."
Socioeconomic status	Factors like location, job, financial dependency, and education make up an individual's socioeconomic standing. As these factors shifted or were threatened, participants found that their concern and care shifted as well.	"I guess because of my age. I'm younger and I'm in college. I guess my education level helped me understand why wearing a mask is better. And I've always been interested in health care and have wanted to go into health care."	"I was very worried, more on a familial scale, because my dad was considered an essential worker and at the beginning, we really didn't know anything."
Social environment and peer pressure	Social perception and peer approval are very important in	"...there was like two people videotaping us and we thought we	"Yes, I did, because a lot of it was more of like being seen as

	<p>human behavior. Participants found that they experienced elevated internalized guilt and shame when not complying with the mandate.</p>	<p>were going to get expelled because we weren't wearing a mask and playing volleyball outside. ... I was genuinely like, 'oh my gosh, I should have been wearing a mask! How stupid of me, that's just not responsible, you know – a person doing that is not a good citizen'."</p>	<p>judged by others. Like, if you weren't wearing a mask, there was a really, really high risk of being judged. And I struggle with that anyway. So, I wore a mask so that people wouldn't judge me as much."</p>
<p>Political views and decision making</p>	<p>Though all participants stated that they wore masks, some held reservations about being required to follow CDC guidelines. Political alignment played a substantial role in participants outlook on masks and the mandate.</p>	<p>"Yes, I would say so... I don't really watch the news like that anyways. But I feel like during the pandemic, I guess I watched more TV or the news and the stations were more left leaning or moderate. So, I guess, yeah, it definitely impacted my will to wear it because of my political views."</p>	<p>"I lean more conservative and 'freedom of everything'. It's very important to me; but when it was mandated, it was also of a lot of importance to me to follow that mandate."</p>

Limitations

This research study is subject to multiple limitations. Most important, this study is done on human subjects and this raises some concern for recall bias, which in turn can challenge the integrity of the obtained responses. It is important to note that the facilitator did not wear a mask during the interview process, which could create the potential for response bias by the focus group participants. Also, a focus group format has the potential to skew responses (Janis, 2008). Groupthink occurs when cohesiveness is high and the members desire to maintain relationships and group harmony among the group at all costs. Participants with a differing opinion or answer

may be less inclined to speak up when the majority agrees on one opinion. Another important limitation to note is that a large percentage of respondents were students enrolled in a degree program within the *Health and Wellness Department*. This could have skewed results in that respondents have had exposure to a health-based curriculum, which could have influenced their positions and behaviors. Finally, it is important to note that many of the one-on-one interview participants had an existing relationship with the facilitator, which may have influenced their comfort levels and generated more personal data collection.

Conclusion

Overall, our findings suggest that various factors influence the decision around mask-wearing and that this is especially complex for college-aged students. Socioeconomic status plays a critical role in health decision making. Future research should investigate how these views evolve over time, as it has been noted that the COVID-19 pandemic will be with us for some time (Telenti et al., 2021).

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