

Executive Summary Political Science

The Collaboratory's funding enabled us to carry out three additional 2,400 person studies. The funds also allowed us to hire research assistants who collected data at the state and local level, which will allow us to identify best government practices when it comes to battling the pandemic.

Survey data collection -- Masking Public Service Announcement Production

Based on our survey results, we partnered with WRAL in Raleigh to produce two Public Service Announcements (PSAs) promoting mask wearing.

Our PSAs sought to encourage more mask wearing, with a particular focus on Republicans. We recruited Ret. Gen. Hugh Shelton as our spokesperson, as Republicans especially like and trust the military. Results suggest the ads boosted positive feelings about and understanding of mask wearing by between 10 and 15 percentage points among Republicans.

The Shelton ad will soon appear on Facebook. The social media platform has donated ad space to our research group – which, along with UNC, includes people from Stanford, NC State, and UC-Berkeley – to promote masking.

Survey data collection -- Vaccine Public Service Announcement Production

Another focus of our survey work is intent to get vaccinated. Our research reveals the groups less likely to embrace vaccination include young people, especially young women, middle aged conservatives, and African Americans.

We are designing a pro-vaccine PSA campaign to boost young people's and conservatives' concern about Covid's harmfulness. Increasing concern about getting sick can bring Republicans and Democrats together. The same ought to be true for the younger and older. Facebook is enthusiastic about running these PSAs, too. Other platforms like YouTube may follow suit. We are in the process of filming the first of the vaccine ads.

Mask Wearing and Race

We devised an experiment to test whether mask wearing has unintended racial consequences. It revealed a racial double standard. Non-black respondents tended to perceive an African American model in our experiments as more threatening and less trustworthy when he was wearing either a bandana or a cloth mask. However, our white model wearing these masks was rated more favorably when he was wearing any of the three types of masks than when he was not wearing one.

Because our subjects evaluated the black model the *same* when he was wearing a surgical mask as when he was not wearing his face covering, our findings suggested a policy corrective. Making surgical masks readily available in communities of color could have positive implications.

Traditional Survey Analysis

The manner with which we've collected our Covid data combined with the omnipresence of Covid itself allows us leverage to contribute pathbreaking work on causation. Because the same people answered the same questions at several times we know precisely how Americans reacted to the "experimental" manipulation that Covid produced. No research team in the country has the same purchase on matters of causation as it relates to Covid that we do.

Major Data Collection on Institutions' Response to Covid

In addition to the survey data collection, we used the Collaboratory funds to hire research assistants to collect data on the ebb and flow of the virus' spread and the steps that states and localities took to combat it, allowing us to evaluate which policies worked and which didn't under which conditions.

Preliminary analysis suggests three categories of variables that matter. The first is state characteristics that were fixed at the time of the COVID-19 outbreak and, as a result, are largely beyond the control of policymakers, such as the age, health status, and urbanicity of a state.

The second reflects the impact of the mass public's behavior on infection rates. Policies, such as mask mandates, are not self-enforcing. Our data demonstrate that compliance with these measures was much less frequent in heavily Republican states in part because their leaders did not embrace these steps.

The third relates to the impact of public policy. States that had invested heavily in public health infrastructure were better equipped to handle the pandemic. Harder to understand at present is the especially strong negative effect we find for the presence of a Republican legislature. We will drill down into the specifics of which policies were more or less effective and why.

Creating Something for the Future

We plan to create a website that is widely used and highly accessible through which visitors can dig deep into the experience of particular countries as well as look broadly at how people in the US and different countries react. We will present aggregate responses to each of the questions in our surveys and will allow visitors to our website to explore relationships between variables for themselves using simple cross-tabs and correlations. Creating and hosting such a website will put the University of North Carolina firmly on the global map as a leading institution in research on COVID.

Summary of Activities Political Science

With the help of the North Carolina Policy Collaboratory, the Political Science group has accomplished quite a lot. The Collaboratory's funding enabled us to continue a panel survey of Americans' attitudes about Covid. Specifically, we carried out three additional 2,400 person studies to go along with the two we completed before. The funds also allowed us to hire research assistants with the charge of collecting data at the state and local level, which will allow us to continue to work to identify best government practices when it comes to battling the pandemic. In the pages that follow, I detail what the Political Science group accomplished with these funds, and what these funds will allow us to accomplish in the future.

Survey data collection -- Masking Public Service Announcement Production

Our general approach was to collect and use survey research to identify public attitudes about Covid in real time, with the purpose of creating messages to persuade the public to adopt best practices recommended by the scientific community. The first of these efforts has already born significant fruit, and nicely captures the general approach we will continue to follow. Based on our analysis of national survey data, we pinpoint target groups and characteristics that we believe might be relevant to persuading group members. In this case, we partnered with WRAL in Raleigh to produce two Public Service Announcements (PSAs) promoting mask wearing. The network ran them for three weeks, both on its NBC network and also on its Fox affiliate.

We found in our data that, by summer, Americans' reaction to the pandemic had become fundamentally linked to their political partisanship. Reflecting the messages that people were receiving from their party leaders, Republicans had become much less likely than others to embrace Covid mitigation steps, with mask wearing an especially problematic political football. Our PSAs sought to encourage more mask wearing, with a particular focus on Republicans and conservatives. Our baseline survey work identified a number of groups that people on the political right liked especially well, making them especially good messengers for pro-mask information. The military was at the top of the list of groups well liked by conservatives and Republicans.

We produced a script and recruited Ret. Gen. Hugh Shelton, former member of the Joint Chiefs of Staff, to perform it. Our partners at WRAL produced accompanying video. Shelton suggested to the audience that Covid represented among the hardest fights the country had ever faced. Indeed it had claimed more American lives than all the wars during his lifetime combined. He argued it was patriotic to wear a mask. Riffing on a message that had worked well in Britain, he told the audience that people needed to wear masks to protect each other. The other PSA we produced with WRAL did not involve a military veteran, but it told a similar story. It explained how, specifically, masks worked to reduce viral spread and how wearing them would allow us to get back to our normal lives much more quickly than if people didn't wear them.

After the ads ran, we conducted a survey of nearly 1,000 people who lived in a place that might have plausibly seen the PSA. The follow up survey work we carried out in the Raleigh DMA demonstrated that both ads worked incredibly well. They boosted positive feelings about and understanding of mask wearing by between 10 and 15 percentage points among Republicans in our sample. We hope and believe that, as a result, our PSAs actually increased mask wearing in the area. In a later wave of our national surveys, we found that they also had a positive effect on mask

attitudes for people across the entire political spectrum. It wasn't just Republicans and conservatives who responded well to our appeals.

This successful effort, carried out in part with Collaboratory funds, has proven to have significant appeal. The WRAL team shared the PSAs we designed with them with the state's broadcasters association, so they could be shown more widely across the state. We are also on the verge of the Shelton ad reaching a national audience. Because of a connection that we developed with an economist at Stanford, Brad Larsen, the PSA will soon be appearing on Facebook. The social media platform has donated ad space to our research group – which, along with UNC, includes people from Stanford, NC State, and UC-Berkeley – to promote masking. This research is occurring in real time (with exciting real world implications). Not only will the work benefit the public good, it has the potential to produce an array of high profile, high impact academic publications.

Survey data collection -- Vaccine Public Service Announcement Production

In the last of our Covid surveys of 2020, we began to focus on vaccine awareness and intent to get vaccinated. This has allowed us to identify different groups that express less enthusiasm than others about getting vaccinated. These groups include young people, especially young women, middle aged conservatives, and African Americans. We have followed a process similar to the one I described above about mask messaging to determine what messages might be most compelling to target these specific groups with.

Among the most promising messaging ideas we've identified based on our survey data collection suggests that fear of becoming seriously ill from Covid has great potential power. This is true especially for both those who are younger and for those who are more conservative and Republican, as both are more likely to underestimate the harmfulness of the virus. Boosting their concern about Covid's harmfulness should provide a mechanism for increasing vaccination intent.

When it comes to masking, we've already shown in an academic paper how this process ought to play out. Our panel data reveal that fear could sever the connection between mask wearing behavior and partisanship that had developed after former President Trump began to question the value of masks. In looking at the same people's opinions and behaviors over time, we found that Republicans who either remained afraid of getting seriously or became more so over the many months of our survey work adopted mask attitudes and behaviors much like those of Democrats and independents. Only Republicans who remained unconcerned about getting seriously ill or got less so remained less likely to comply. A healthy dose of fear can help gain compliance.

This suggests a pro-vaccine PSA campaign designed like the anti-smoking "Tips" campaign might have great promise. These anti-smoking ads featured relatable former smokers who share tips with viewers about what they learned about the horrors of smoking. Based on the causal analysis from our survey work on masks, we feel quite confident that appeals like this will increase vaccine compliance. Increasing concern about getting sick can bring Republicans and Democrats together. The same ought to be true for the younger and older.

Given the promise of that our masking work has already demonstrated, Facebook is enthusiastic about running our vaccine PSAs as well. As of the present moment, we are in the process of filming the first of the vaccine ads, which is focused on young people. We hope to have it tested and in the

field by April, when the vaccine will begin to become available to young people. Facebook has suggested to us that they are interested in running them. Other platforms like YouTube may follow suit.

The last of our Collaboratory funded national surveys focuses even more squarely on intent to get vaccinated. It goes into the field next week. In this survey, our research team has conceived several survey experiments designed to reduce vaccination concerns among African Americans, specifically. Again the messenger is critical in this work, focusing on the potential persuasive impact of African American medical personnel and people of color from other professions. We expect these results will provide us the building blocks to construct further public service announcements in the future. I should add that, in addition to serving the public good, all these efforts should net important scholarly publications as well.

Mask Wearing and Race

In addition to messaging, we have been working on understanding other Covid-related attitudes. One involves how wearing masks affects how citizens are perceived. A group from the Political Science group devised an experiment to test whether mask wearing might have unintended racial consequences. To do that, we designed and implemented a survey experiment in one of our national surveys that varied the race and type of mask being worn by a young man in a parking lot during the pandemic. The model was either African American or white and was wearing either a surgical mask, a cloth mask, a bandana, or no face covering. We then had survey participants rate the trustworthiness and the threateningness posed by the man. Our work revealed something of a racial double standard. Non-black respondents tended to perceive the African American man, when he was wearing either a bandana or a cloth mask, as more threatening and less trustworthy than when he was wearing either a surgical mask or was not wearing his face covering. But the white man wearing these masks produced different effects. Our subjects actually rated him more favorably when he was wearing any of the three types of masks (surgical, cloth, and bandana) than when he was not wearing one.

Obviously this pattern of results is concerning. Importantly, we also found something useful as it related to policy making. Our subjects evaluated the black model the *same* when he was wearing a surgical mask as when he was not wearing his face covering. Because surgical masks, specifically, are not associated with crime, they seem to dampen the existing stereotypical link between mask wearing and black criminality. Of course, the onus should not be on black people to ensure that non-black people do not see them as threats. Rather, our study might validate what black people already were expressing concerns about, namely wearing a mask can make them seem more threatening to some non-black people, due to negative racial stereotypes. This work got substantial attention from national media outlets. In addition, we shared our findings with the Department of Health and Human Services as they grappled with how to navigate the masking issue in the state. Hopefully it provided some direction.

Traditional Survey Analysis

Although Covid is on a timely subject, the data collection we've put together has the potential to make a timeless scholarly contribution. Behavioral and attitudinal research often breaks down over

questions of validity. Some rely on observational survey data to buttress their arguments; but such data lack the internal control to establish causation. Researchers can't be sure respondents "got the treatment." Others rely on experimental manipulations in the survey or lab setting. Such studies address the control issue but lack the naturalism of survey data collected "in the wild." No IRB would allow, for example, the introduction of a pandemic into a research design. Covid has served as something of a giant, real world experimental manipulation, maximizing both internal and external validity. Throughout 2020, millions have experienced genuine, politically relevant fear as they contemplated the possibility that they or a loved one would contract a potentially deadly disease.

The manner with which we've collected our Covid data since April combined with the omnipresence of Covid itself allows us leverage to contribute potentially pathbreaking work to the scholarly dialogue on causation. Because our approach has relied, in part, on a panel data design – the same people answer the same questions at several times – we know precisely how Americans have reacted to the "experimental" manipulation that Covid is producing. Combined with several traditional survey experimental manipulations that we've also embedded in the survey collections, it is probably fair to say that no research team in the country has the same purchase on matters of causation as it relates to Covid that we do. This has clear implications for Covid research, but it may have even larger implications for the entire enterprise of observational and experimental research on ordinary citizens across the breadth of the social sciences.

With that in mind, the work I noted above that shows anxiety about the virus brings Americans together promises to be a major piece of scholarship. Not only is it informing our messaging, it stands alone as a discipline bridging endeavor.

Major Data Collection on Institutions' Response to Covid.

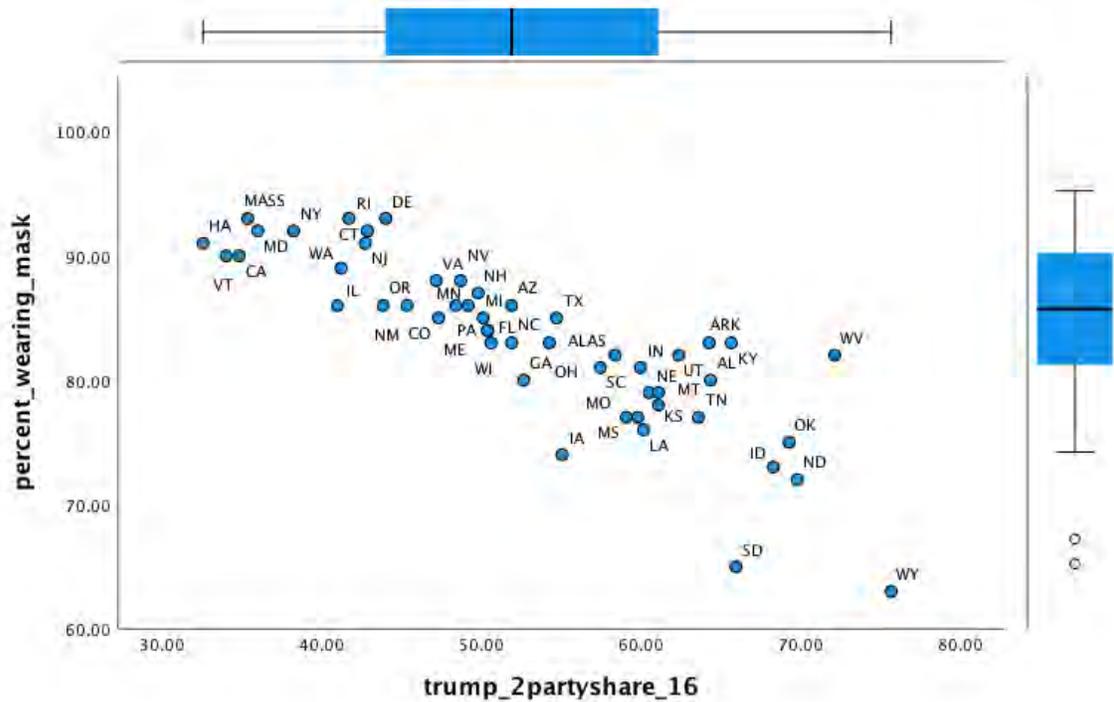
In addition to the survey data collection, we used the Collaboratory funds to hire research assistants to collect data on how the ebb and flow of the virus' spread and the steps that states and localities took to combat it. This is an absolutely massive effort, for which the research team scraped from the internet an incredible array of data at weekly and sometimes daily intervals. Although data analysis from this undertaking is just getting started, it will allow us to answer definitively what worked and what didn't when it came to our policymakers' efforts to fight the virus.

Based on the first cut at the data, several broad categories of findings are emerging. The importance of leaders following the recommendations from science and public health professionals reveals itself quickly. This is because one hard and fast rule in the study of ordinary Americans is that partisans follow their party leaders' cues. Because party polarization has made Americans' party identities central to their personal identities, it has supercharged the leader-follower dynamic. This could have worked to America's benefit if its leaders had been on the same page in advocating pro-science solutions, as was the case in the first weeks of the pandemic. A unified message coming from leaders on both sides of the aisle may have been sufficient to insure a unified, scientifically based, response to COVID-19.

Unfortunately, the data we collected shows that, after President Trump and some other Republican office holders departed from the advice of public health professionals in the late spring, troubling differences between Democrats and Republicans developed. Most fundamental was partisans'

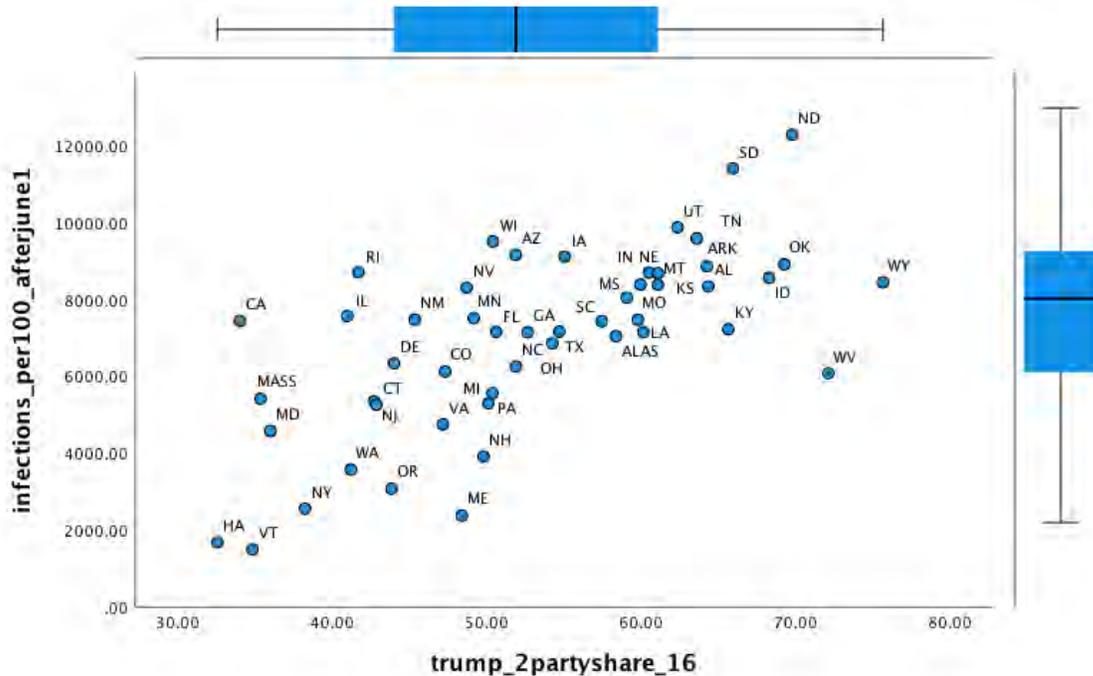
assessment of the virus itself. In our October survey, we found that a majority of Democrats saw COVID-19 as serious illness that could be fatal, while a majority of Republicans saw it as more like a bad flu or perhaps a little worse. In minimizing the severity of the virus, Republicans in the electorate were following the cues of their party leader.

These differing evaluations of COVID-19 by partisans spawned different levels of commitment to mitigation strategies, which opened the door to a deepening of the crisis. Why, for example, wear a mask if COVID-19 is not deadlier than the flu? The graph below illustrates the relationship that developed between the percentage of people wearing a mask in a state according to Carnegie-Mellon's estimates of mask wearing and the percentage of people in a state who voted for Donald Trump in the 2016 election.



The relationship is incredibly strong. More than 90 percent of people are wearing masks in dark blue states like Massachusetts, Hawaii, and Maryland. In contrast, fewer than 75 percent are wearing them in dark red states like Wyoming, North Dakota, and Idaho. Mask wearing in swing states like North Carolina, Georgia, and Pennsylvania clusters around 85 percent.

Because fewer masks produce more viral spread, America's bifurcated response to the pandemic reveals itself in the number of confirmed cases at the state level data as well. States that voted more heavily for Trump, not only masked less, they also tended to lead the nation in infections. As the graph below shows, the relationship is again strong. Blue states as regionally diverse as Vermont, Maryland, and Washington had fewer than 5,000 infections per 100,000 residents. Regionally diverse red states, such as the Dakotas, Tennessee and Utah all had more than 8,000 infections per 100,000. Swing states are mostly in between.



Importantly we also identify a range of factors beyond a state’s support for Donald Trump that affected the number of infections a state experienced. These variables include 1) the percentage of people in a state living in urban areas, 2) a state’s health care spending, 3) a state’s median age, and 4) the presence or absence of a Republican state legislature.

Three categories of variables reflected in these findings will structure our continuing investigation. The first category is made up of state characteristics that were fixed at the time of the COVID-19 outbreak and, as a result, are largely beyond the control of policymakers. In the US, these include the age, health status, and urbanicity of a state. Other things equal, older residents and less urban population saw fewer infections.

The second category of variables reflects the impact of the mass public’s behavior on infection rates. As the graph above indicated, the more pro-Trump a state is, the more infections it suffered, even after taking account of the effects of other variables. Policies, such as mask mandates, no matter what they are or what they are based on are not self-enforcing. As such, when it comes to confronting viral spread, the decisions that ordinary people make have a profound impact. No state has sufficient capacity to monitor and police the decisions of individual residents. For mitigation measures to succeed, people must stay at home, mask when they can’t stay at home, and remain six feet apart. Compliance with these measures is no fun for anyone, regardless of their political affiliation. However, our data demonstrate that compliance with these measures was much less frequent in heavily Republican states in part because their leaders failed their followers in the electorate by not embracing these steps.

The third category of explanatory variables relate to the impact of public policy. That health care spending has a statistically significant effect in lowering infections suggests that policymakers could and did affect outcomes. States that had invested heavily in public health infrastructure were better equipped to handle the pandemic. Harder to understand at present is the especially strong effect of

a Republican legislature. Even after controlling for how heavily a state voted for Donald Trump, states with Republican legislatures averaged far more infections per 100,000 residents than states with Democratic legislatures. Only a deeper look at the data will reveal what, specifically, Republican and Democratic legislatures were doing differently. We will drill down into the specifics of which specific policies worked better than others and which specific decisions made by Republican legislatures were less effective than those that were adopted by Democratic ones. We have data on what kinds of mitigation strategies that states employed, when they were employed, and when and if they were removed.

The importance of these several categories of explanations reminds us of the complicated politics of the pandemic. Success required some good fortune (the happenstance of a more rural and older populations), effective public policy, and high levels of citizen buy in. The quality of leaders' ideas overlays these categories. Not only must leaders themselves initiate good policy, they also are critical to informing their followers of the best practices to follow and convincing them to do so.

As for this part of our work, it appears that our prospects for receiving an advance contract from the University of Chicago Press for a book about the American experience with Covid are excellent. The editor, Chuck Myers, has already expressed his enthusiasm. Personnel on the book will include at least three members of the Political Science group. It is worth noting that Chicago is by consensus one of the two or three best university presses when it comes to political science.

Creating Something for the Future

Finally, the huge data collection we are producing is creating an unparalleled resource that would be of great benefit to the broader community. The research assistance that the Collaboratory's funds allowed us to hire got us started on this part of the project. The initiative involves both the data on the US that the Political Science group gathered and data that other department members working on other country contexts gathered in parallel. When possible, we worked together to make sure we were asking citizens the same survey questions in the US, Ukraine, Russia, Germany, Turkey, and elsewhere. We plan to create a website that is widely used and highly accessible through which visitors can dig deep into the experience of particular countries as well as look broadly at how people in the US and different countries react.

We will present aggregate responses to each of the questions in our surveys and will allow visitors to our website to explore relationships between variables for themselves using simple cross-tabs and correlations. This website would represent a unique opportunity for citizens, educators, journalists and others concerned with the politics of COVID in the years to come. The easy accessibility of the data and the capacity to perform simple analyses would be of particular valuable for educators and public health professionals working with students to learn both important facts about COVID and to develop an interest in and capacity for analyzing data – skills that are invaluable in today's world. Creating and hosting such a website will put the University of North Carolina firmly on the global map as a leading institution in research on COVID.

Finally, the work the Collaboratory funds helped us carry out points to a model of inquiry that we hope to be able to replicate in the years to come. Just eight months after the first Covid survey finished, we count over a dozen working scholarly papers and dissertation chapters built on these data. Dozens more are sure to follow. To compete in a highly competitive field like ours, we must continue to provide such opportunities to our faculty and graduate students year in and year out.

The model we favor and the one that the Covid pandemic revealed as so useful is one that combines rigorous scholarship focused on politically relevant problems. That model has provided the energy and success for the Covid research. But we can replicate the approach. The world has no shortage of vexing political problems. If done right, institutionalizing the operation we've been building could make UNC a hub for substantively important political research for years to come.