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Impact of Official State Messaging on COVID-19 Infection and Death Rates in Five U.S. States

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Abstract

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By

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MPhil, Walden University, 2022

MS, New England College, 2016

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Dissertation Submitted in Partial Fulfillment

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Abstract

Some U.S. states effectively managed the spread of COVID-19 through effective messaging by state officials, while others had high COVID-19 infection and death rates that correlated to ineffective messaging. COVID-19 presented a wicked problem that required rapid and effective responses from government officials. The purpose of this qualitative study was to explore how official state messaging through press conferences and press releases impacted citizens in Arizona, Mississippi, South Carolina, Hawaii, and Vermont, resulting in varying COVID-19 infection and death rates. The conceptual framework consisted of Schneider and Ingram's social construction of target populations and Rittel and Webber's design of wicked problems. Archival press conferences from state officials regarding COVID-19 were explored using a content analysis methodology and coding for key phrases that related to the research question and conceptual framework. Findings indicated a need for cohesive and standardized messaging by state officials to increase COVID-19 vaccines and lower death rates for citizens. Findings also showed that state officials in the five selected states used social constructivism to create their own realities regarding COVID-19. Findings may be used to promote positive social change through more effective pandemic management techniques through more effective communication.

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Chapter 1: Introduction to the Study

In 2020, COVID-19 presented a significant global health threat resulting in shutdowns and closures that impacted schools, businesses, and governments. The World Health Organization (WHO, 2020) estimated global deaths from COVID-19 to be more than six million. In the past, certain diseases such as polio have been effectively mitigated using vaccines. It would similarly seem that COVID-19 spread may have been mitigated by increasing COVID-19 vaccinations in 2020. The messaging provided to citizens by state officials regarding the effectiveness of COVID-19 vaccines impacted vaccination rates and, in turn, death rates.

COVID-19 has characteristics of a wicked problem. First introduced in 1973, Rittel and Webber explored the challenges of complex social problems, which they termed wicked problems, compared to the tame problems of mathematics. Rittel and Webber created a checklist of 10 characteristics of a wicked problem, which modern authors such as Baltzersen (2022) have applied to COVID-19 resulting in COVID-19 being defined as a wicked problem. Rittel and Webber's checklist, presented in more detail in Chapter 2, includes the notion that wicked problems have no specific indication of completion or an indication that they are solved. Given that COVID-19 is still a significant health issue and was the third leading cause of death in the United States in 2023, it is possible that it does not have a clear completion date, aligning it with this Rittel and Webber's checklist item (Centers for Disease Control and Prevention [CDC], 2023a).

Also applicable to the current study was the idea that resolutions and steps toward the resolution of a wicked problem are endless, according to Rittel and Webber's (1973) checklist. The resolutions offered from March-December 2020 by state officials of Arizona, Hawaii, Mississippi, South Carolina, and Vermont reflected the wide range of possible solutions. The resolutions offered by the selected states indicated how another item on Rittel and Webber's checklist was applied: Wicked problems are often linked to other issues. COVID-19 impacted not only the health of citizens but also the politics, economics, and education around the world. For the current study, the last item on Rittel and Webber's checklist was the most impactful. Rittel and Webber said that planners and officials mitigating a wicked problem, such as COVID-19, have no room for error. Rittel and Webber indicated that planners are responsible for the resolutions they create; their actions can greatly affect those who are impacted by their decisions.

After months of speculation about COVID-19, the WHO (2020) made a global declaration. On March 11, 2020, the WHO declared COVID-19 a global pandemic. By 2022, there were over 6.5 million deaths due to COVID-19 globally (Covid-19 Data Explorer, 2022). Over one million of those deaths are in the United States (Covid-19 Data Explorer, 2022). During the initial months of the pandemic, many U.S. states navigated the problem of COVID-19 that resulted in citizen COVID-19 vaccination buy-in and cooperation. Other states had significantly lowered COVID-19 vaccine rates that resulted in higher COVID-19 death rates (Centers for Disease Control and Prevention [CDC], 2023a).

Despite months of shortages and time at home, there were still states in which barely half of the citizens had opted to receive the COVID-19 vaccine, according to Johns Hopkins University tracking (John Hopkins University, 2021) . For example, the COVID-19 vaccination rate for South Carolina from March-December 2020 for White citizens was 45.66%, according to the South Carolina Department of Health and Environmental Control (SCDHEC, 2020).

The current study explored the messaging by selected state officials as presented in official press conferences and in official press releases that resulted in high vaccination and low death rates compared to states that experience high death and low vaccination rates during March-December 2020 of the COVID-19 pandemic. Although not specifically referencing COVID-19, Schneider and Ingram (Schneider & Ingram, 2020) suggested that messaging from officials has an impact on citizens' decision-making. Based on this idea, the current study needed to be conducted to explore whether messaging by state officials had an impact on COVID-19 vaccination and death rates. Public officials' messaging regarding COVID-19, including messaging regarding vaccinations, and the influence on citizens, was important to this study. This study compared selected states that ranked high in terms of low death rates and high vaccination rates from COVID-19, and states that rank poorly with those parameters. The handling of the pandemic by state officials may have impacted COVID-19 vaccinations and, in turn, lowered deaths due to COVID-19. Messaging that minimized the effects of COVID-19 may have resulted in lower vaccination rates and higher death rates.

Findings from this study may lead to the creation of public policy that would allow for and promote cohesive and standardized state messaging to increase COVID-19 vaccines and lower death rates. Recognizing that states create their own policies during crisis times, this study may encourage state officials to consider options that prioritize citizens' well-being. Identifying and understanding the messaging patterns by state officials that both positively and negatively impacted state citizens is the key to more effective management in future wicked problems.

This chapter provides background on how COVID-19 as a global pandemic affected populations within a selection of U.S. states. States such as Hawaii and Vermont saw low death rates and high vaccination rates for COVID-19. Other states such as Arizona, Mississippi, and South Carolina experienced low COVID-19 vaccination rates and high death rates. Messaging by state officials promoted vaccinations in Hawaii and Vermont while Arizona, Mississippi, and South Carolina officials may have downplayed the effects of COVID-19. Chapter 1 provides the background of this issue and a preview of theoretical concepts for the study. The problem statement and relevance of this study are also discussed. Chapter 1 provides an overview of how the study was conducted and why it was timely and valuable for public policy and administration.

Background

The literature suggested patterns of effective communication by states that had a low mortality rate due to COVID-19 compared to states that had both high death and low vaccination rates for COVID-19. The literature also indicated common factors relating to COVID-19 vaccine hesitancy that could be identified through key phrases. Katella (2020)

created a vocabulary list that provided definitions to key phrases that the public would need to be familiar with as the COVID-19 pandemic began. Many of these key phrases, such as “self-isolation,” “social distancing,” and “shelter in place,” would be used by state officials in their messaging to the public (Katella, 2020). A preliminary exploration of official news conferences and official press releases indicated that there were patterns of messaging, which led to my interest in this topic.

The creation of state-centric realities in key messaging is related to social constructivism because each state created their own narrative during COVID-19. These narratives sometimes differed from information communicated on a national and global level, possibly creating confusion and distrust. That messaging may have had an impact on citizens’ health care decisions to seek COVID-19 vaccinations, and those vaccination decisions may have played a role in COVID-19 death rates.

Previous research addressed many reasons for COVID-19 vaccine hesitancy, but there was a gap when addressing official state messaging that may have increased or decreased COVID-19 vaccination rates. There have been numerous studies citing widespread reasons for citizens opting in or out of getting vaccinated against COVID-19. Harris and Van Bavel (2021) cited feelings of party superiority that may have infiltrated into the public health sector. Ghaddar et al. (2022) attributed vaccination hesitancy to conspiracy theories. In addition, cultural orientation was viewed as a contributing factor in the dilemma (Biddlestone, 2020). Other factors may have included a distrust of government and a desire for personal choices. Creating a balance between COVID-19 vaccinations and personal choices was cumbersome and imperfect (Teixeira da Silva,

2020). The findings from the current qualitative study could be used by governing officials in creating public policy regarding vaccine mandates that more of the population will embrace, thereby protecting society during problem events such as COVID-19. The identification of common phrases and keywords used to manage COVID-19 effectively and ineffectively could provide a framework for communication to keep citizens informed and protected during any future global pandemic.

Documented COVID-19 death rates and COVID-19 vaccination rates from March -December 2020 were referenced to determine which states had high and low COVID-19 vaccination and death rates using CDC data. The CDC (2022) considered effective COVID-19 pandemic management to be states with high vaccination rates and low death rates. The CDC (2022) considered ineffective COVID-19 management to be states with low vaccination rates and high death rates. In the current study, five states were selected by picking two states from the top 10 states that were considered by the CDC to have been effective in mitigating COVID-19 (Hawaii and Vermont) and three states that were considered to have ineffectively managed the COVID-19 pandemic (Arizona, Mississippi, and South Carolina,).

Problem Statement

The problem that was addressed through this study was how messaging from state officials may have impacted low COVID-19 vaccination rates in certain states compared to high vaccination rates in other states. Identifying the communication roles of public officials and their handling of COVID-19 in these states may lessen mortality and infection rates of future pandemics by providing valid and understandable information

and lessening the chances that unreliable sources will be sought (Kricorian et al., 2022). The situation or issue that prompted me to search the literature was COVID-19 vaccination rates in South Carolina are 53%, compared to a U.S. COVID-19 vaccination rate of 65% (SCDHEC, 2020). Low COVID-19 vaccine rates in South Carolina created a community welfare issue. The death rate from COVID-19 in South Carolina was the 17th highest in the United States while being 23rd in terms of population. Lack of COVID-19 vaccination created a community welfare issue by creating additional stress on the health care system, school systems, and government agencies.

The exploration of effective information versus misinformation impacting public health by state officials during the onset of COVID-19 needed to be further explored. Initial research indicated there were other quantitative studies that sought answers through statistics and mathematical data. The data from the current qualitative study may be used in creating public policy regarding vaccine mandates that more of the population will embrace, thereby protecting society during problem events such as COVID-19. The identification of common phrases and keywords used to manage COVID-19 effectively and ineffectively may provide a framework of communication to keep citizens protected during an ongoing global pandemic.

Understanding the official messaging by state officials and, in turn, how that messaging impacted citizens' perceptions of COVID-19 may be a factor in keeping the population protected during a global pandemic and other wicked problem scenarios. COVID-19 vaccine hesitancy created a myriad of issues for the American public. Increasing the COVID-19 vaccination rates would have decreased the burden placed on

hospitals, health care workers, and public health budgets as more preventive measures were taken to decrease infection rates. The current study may help public officials create effective messaging system in the United States, resulting in a unified and cohesive flow of information versus state-by-state interpretations during times of crisis, such as a global pandemic.

State and federal identification of the social determinants of health (SDOH), which the CDC (2021) defined as the situations in which citizens reside, retain information, are employed, and enjoy recreation that impact health and other quality of life decisions, could be impacted by the identification of the messaging that proved effective in raising vaccination rates and lowering death rates during COVID-19. Bias and politic-free messaging by state officials, relying on health information and science, may save lives. Furthermore, disparities among states with differing socioeconomic statuses would be lessened as resources would be equalized. Clear public policy at the onset of a crisis would lessen the spread of misinformation within government officials. Nationwide, public policy may eventually be tailored to counter low COVID-19 vaccination rates and high COVID-19 death rates in states that are disproportionately experiencing impacts from COVID-19 based on what was effectively communicated by states that have high COVID-19 vaccination rates and low COVID-19 death rates.

Previous research addressed many reasons for COVID-19 vaccine hesitancy, but few addressed the state messaging that proved effective and ineffective for increasing COVID-19 vaccination rates and lowering death rates. There have been numerous studies citing widespread reasons for citizens opting to get vaccinated, or not vaccinated, against

COVID-19, citing everything from feelings of party superiority that may have infiltrated into the public health sector (Harris & Van Bavel, 2021) to conspiracy theories (Ghaddar et al., 2022) to cultural orientation (Biddlestone, 2020). Other factors may have included a distrust of government and a desire for personal choices.

This initial study of South Carolina public policy led to comparisons with other states that experienced lower death rates and higher vaccination rates during the ongoing COVID-19 pandemic. A pattern began to emerge that indicated COVID-19 seemed to be a problem, managed differently by different states, and by definition wicked in nature. For the current study, effective management of COVID-19 was based on death rates and current vaccination rates based on per capita populations from U.S. states in 2020. Nationwide, public policy may eventually be tailored to counter low COVID-19 vaccination rates and high COVID-19 death rates in states that are disproportionately experiencing impacts from COVID-19 based on what was effectively communicated by States that have high COVID-19 vaccination rates and low COVID-19 death rates.

The social change implications for this study include creating public policy that would promote cohesive and standardized state messaging to increase COVID-19 vaccines and lower death rates. Identifying and understanding the messaging patterns by state officials that may have both positively and negatively impacted state citizens could provide a key to more effective management in future pandemics. Messaging that encourages citizens' welfare may be key to effective management in the future.

Purpose of the Study

The purpose of this qualitative study was to explore what common factors, through selected state official messaging, appeared to contribute to citizens' health decisions in five states during the early days of the COVID-19 pandemic. Document analysis of archival materials, including data from media and state websites, was conducted. Reviews of official news briefings by selected state officials were used to provide insight into the factors that may have contributed to COVID-19 death and vaccination rates. The current study may help state officials create more effective messaging during the onset of future pandemics or other emergency situations that require public cooperation for the greater good.

Three of the states selected, Arizona, Mississippi, and South Carolina, represented some of the lowest vaccination rates in the United States (CDC, 2020). I explored whether these states created their own reality regarding COVID-19 information, thereby creating a phenomenon of ignoring traditional guidance and protocols during a global pandemic. Exploring the common state official messaging factors that were shared by these different states, each with unique different demographic segments within the populations, was conducted to explain possible COVID-19 vaccine hesitancy. Exploring these states' messaging may identify ways to contradict misinformation and increase COVID-19 vaccine rates. Increasing COVID-19 vaccination rates would improve death rates due to COVID-19 in Arizona, Mississippi, and South Carolina.

Based on COVID-19 vaccination and death rates, comparing the messaging of these state officials to the state communication by the officials in Hawaii and Vermont

may identify measures that may have worked in the latter states to prevent deaths and illness due to COVID-19. I sought to identify key phrases from Hawaii and Vermont that may have encouraged citizens to get the COVID-19 vaccine, which may have kept COVID-19 death rates low. Population was not a measurable factor because these selected states ranked from the 14th most populated state to the 49th most populated state (United States Population by State, 2021).

The phenomenon that was explored in this study was how different U.S. states may have used social constructivism to create their own realities regarding the handling of COVID-19. These social constructivism realities may have impacted COVID-19 vaccination rates, and in turn COVID-19 death rates. The identification of keywords that seemed effective and ineffective may provide insight into effective messaging during future crises that impact all citizens.

Research Question

The research question that I addressed in this study was the following: What role did social constructivism play in COVID-19 messaging to citizens by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020?

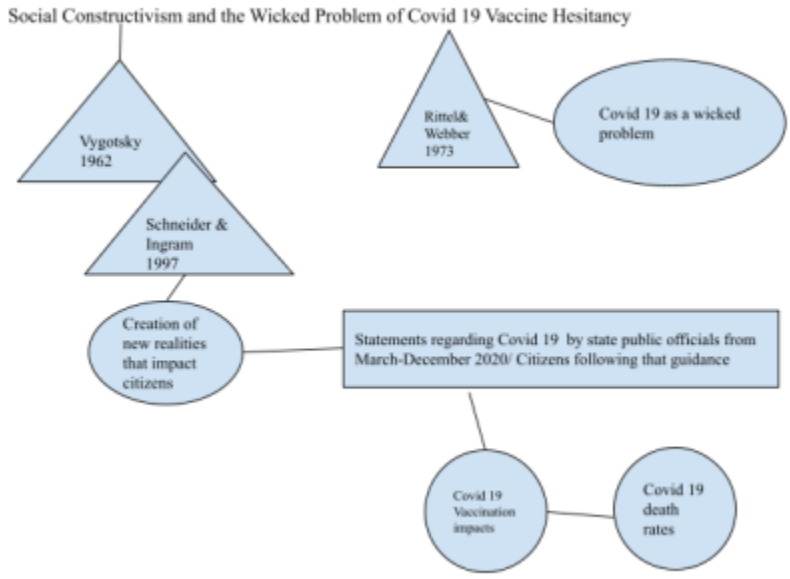
Conceptual Framework

The conceptual framework that guided this study included Rittel and Weber's (1973) wicked problems theory and Vygotsky's (Vygotsky & Cole, 1978) social constructivism theory. I also used Schneider and Ingram's (1997) social constructivism theory of target populations. Reality is often considered a social construct, as as public

policy by state officials that may have impacted citizens' health decisions. Figure 1 depicts how these three theories informed this study's conceptual framework.

Figure 1

Conceptual Framework



COVID-19 as a wicked problem was suggested by several studies. In 1973, Rittel and Webber described 10 characteristics that defined a wicked problem that modern authors have applied to COVID-19. Rittel and Webber's checklist included the notion that wicked problems have no specific indication of completion or an indication that they are solved. COVID-19 is still a significant health issue and was a leading cause of death in the United States in 2023 (American Public Health Association, 2023). Also applicable to the current study was the idea that resolutions and steps toward the resolution of a wicked problem are endless, according to Rittel and Webber's checklist. The resolutions

offered from March-December 2020 by the state officials of Arizona, Hawaii, Mississippi, South Carolina, and Vermont may reflect the wide range of possible solutions. The resolutions offered by the selected states may also indicate how another item on Rittel and Webber's checklist is applied: Wicked problems are often linked to other issues. COVID-19 impacted not only the health of citizens but also the politics, economics, and education around the world.

For the current study, the last item on Rittel and Webber's (1973) checklist may be the most impactful. Rittel and Webber said that planners and officials mitigating a wicked problem, such as COVID-19, have no room for error. Rittel and Webber indicated that planners are responsible for the resolutions they create; their actions can greatly affect those who are impacted by their decisions. Chapter 2 provide a complete description of the characteristics of Rittel and Webber's checklist defining wicked problems.

Vygotsky's social constructivist theory, while rooted in psychology and learning strategies, was applicable because the spread of misinformation has created a new reality in states with high COVID-19 death rates and low COVID-19 vaccination rates(Vygotsky& Cole, 1978) . Ingram, et al. (2007) also wondered whether public policy influences citizens. Ingram et al.'s theory of social construction and policy design includes the idea that policy has the power to influence citizens in relationship to political attributes. In other words, policy has the potential to galvanize citizens to respond in a certain way.

Policy created by state officials during the onset of COVID-19 could have impacted citizens' health and vaccination decisions. Because policy has an intrinsic social and political outcome on citizen welfare (Ingram et al., 2004), the messaging by state officials may have impacted citizens' actions during the onset of COVID-19. Ingram et al.'s theory of social construction and policy design includes the idea that policy has the power to influence citizens in relationship to political attributes.

Nature of the Study

To answer the research question in this qualitative study, I explored states' official press conferences and press releases from selected samplings that coincided with the major milestones of COVID-19 between March and December 2020 from the CDC (2023) COVID timeline. I explored the official state responses of Arizona, Hawaii, Mississippi, South Carolina, and Vermont to COVID-19 in the face of a public health crisis. Video of archival press conferences and state websites and official press releases were also analyzed. Reviews of official news briefings by state officials were used to provide insight into the factors that may have contributed to COVID-19 death and vaccination rates. Footage and news articles from the early days of the COVID-19 pandemic from these states' officials were used to identify trends in language and sentiment that influenced the citizens. The nature of COVID-19 as a wicked problem, with impacts on health, society, and the economy, was noted in the coding of these official state messages.

An increase in COVID-19 vaccinations may have helped to lower the death rate from COVID-19 in the United States, although there are conflicting views on this notion.

The conflicting views on COVID-19 vaccination may indicate how politicized the issue has become. Institutions such as the CDC (2020), Johns Hopkins (2021), and the WHO (2023) published articles on COVID-19 vaccine myths and realities. Kricorian et al. (2021) noted that citizens who believed myths about the COVID-19 vaccine were less likely to get it. Kricorian et al. also emphasized the importance of communication that was applicable to a wide range of citizens with diverse socioeconomic and educational foundations. The lessons learned from the early days of COVID-19 could positively impact messaging related to ongoing COVID-19 vaccination boosters. Recognizing communication failures and successes may impact future public policy to manage cohesive COVID-19 and future pandemic messaging more effectively for the greater good.

The phenomenon that was relevant to this study was how these five U.S. states may have constructed COVID-19 realities through their messaging, policies, and protocols. Those realities may have impacted COVID-19 vaccination rates, and in turn COVID-19 death rates. The identification of messaging used by the state officials helped identify what phrasing and wording may have been effective or ineffective in mitigating COVID-19 vaccination rates. This identification may provide insight into effective messaging during future crises that impact all citizens.

Definitions

Based on CDC (2022) guidelines, the following definitions were used in this study:

Effective management: High COVID-19 vaccination rates paired with low COVID-19 deaths was considered effective management of the pandemic by state officials (CDC, 2020).

Ineffective management: Low COVID-19 vaccination rates and high COVID-19 death rates was considered ineffective pandemic management by state officials (CDC, 2020).

Assumptions

Public officials may have created their own assumptions during the early days of COVID-19, and those assumptions may have impacted citizens' decision making regarding how to process protocols, mandates, and health decisions. Ontological assumptions were defined by Walden University Academic Guides (2022) as the nature of reality as seen by the participants. The messaging presented by public officials during the early days of COVID-19 could not be verified as truthful or accurate for the current study but represented the beliefs and information available from those public officials at the time. Furthermore, assumptions can be fluid, with older ideas being replaced by newer notions (Walden University Academic Guides, 2022). There may be a change in perspective and assumptions today that may have been different in March-December 2020. All attempts were made in the current study to reflect the perspectives and assumptions being made by public officials in March-December 2020.

Based on those assumptions, I sought to determine whether messaging by state officials may have influenced COVID-19 vaccination rates. Furthermore, I explored whether COVID-19 vaccinations may have impacted COVID-19 death rates. Ultimately,

I sought to determine whether public officials can play a role in keeping their citizens safe and healthy through effective messaging during other wicked problem scenarios.

Scope and Delimitations

Scope and delimitations help a researcher maintain focus and set goals for the study. The scope of the study was defined as the parameters that helped bring accuracy and impartiality to the study (Eze, 2018). Delimitations are defined as the attributes that define the scope and indicate the sample size and limitations of the study, including the researcher's choice of subjects (Eze, 2018).

The current study addressed aspects of messaging by state officials during the early days of COVID-19. Understanding the official messaging by state officials and, in turn, how that messaging impacted citizens' perceptions of COVID-19, including decisions on vaccinations, is the key to keeping the population protected during a global pandemic and other wicked problems. Effective information distribution regarding COVID-19 by state officials versus misinformation had a direct impact on citizens' willingness to get vaccinated. The lack of COVID-19 vaccinations created a social problem that have impacted many aspects of citizens' lives including health, welfare, and economics. This study needed to be conducted because messaging by state officials may have had an impact on citizens' decision making regarding COVID-19, including vaccinations. This study explored the differences between states that ranked high in terms of low death rates and high vaccination rates from COVID-19, and states that rank low with those same parameters. The handling of the pandemic by state officials may have impacted their citizens' well-being by increasing COVID-19 vaccinations and, in turn,

lowering deaths due to COVID-19 and, conversely, by lowering vaccination rates and increasing death rates.

This study was limited in scope because it focused on state messaging in five states. Limiting the scope to five states made identification of phrases by state officials a manageable undertaking. There are many theories and conceptual frameworks regarding COVID-19 that were not included in this study, including the origin of the pandemic. This study concentrated on the timeframe of March-December 2020, and how public officials disseminated information to the citizens of Arizona, Mississippi, South Carolina, Hawaii, and Vermont.

Future studies could include more states, national information distribution from organizations such as the CDC, and how global entities such as the WHO managed information distribution during the early days of COVID-19. There is a potential of transferability on an international scale down to specific city and township management. The study could also be expanded into how specific school systems successfully and unsuccessfully managed and navigated the challenges of educational access during COVID-19 through their official messaging.

Limitations

Limitations are conditions that a researcher cannot control during their research. Limitations are the factors of design and methodology that impact a study's outcomes (Abbadia, 2022). There were potential shortcomings of the current study based on selection of states and those states' political climates. The states selected had a variety of political party traditions that may have contributed to the tone of official messaging.

Using only five states with diverse geographical and population demographics limited the study. I sought to overcome these limitations by identifying common messaging trends by state officials in the distribution of information regarding COVID-19 from within these states. Using archival media and periodicals also had its limitations because no individual subjects were utilized. This methodology required the identification of keywords and phrases with no consideration of the way individuals felt about the information that public officials were providing. Those feelings and interpretations may be viable for future studies to determine what public official communication efforts were best received by the public during a wicked problem scenario.

Researcher bias was managed by exploring states outside of my home state of South Carolina. Exploring additional states that I was not familiar with provided the opportunity to determine whether common themes emerged that may have impacted COVID-19 vaccination rates and death rates. The selection of states based on COVID-19 vaccination and death rates was undertaken with consideration to not limit the selection to specific geographic regions. Some regions may have had disproportionately high COVID-19 death rates and low COVID-19 vaccination rates, so every effort was made to provide a selection of states with different geographical locations to provide an unbiased overview of public officials messaging during the early days of the COVID-19 pandemic.

I served as the former director of operations for the 2022 Democratic candidate for South Carolina governor, Joe Cunningham. Cunningham's campaign focused on the actions of Governor Henry McMaster, who was governor during the onset of COVID-19

and subsequently won reelection. I made sure that the information I researched and used during that campaign did not affect my perceptions of messaging by South Carolina state public officials, including Governor McMaster, during the early days of COVID-19. During that time, I also had interactions with other public officials from the state of South Carolina. I am a military widow residing in South Carolina and interacting with other elected public officials in South Carolina. I had no other personal knowledge of public figures from any state included in the study outside of South Carolina.

Significance

This study may help to close a gap in the literature regarding the impact of states' official messaging about COVID-19 on citizens as the pandemic began. Arizona, Mississippi, and South Carolina all had low COVID-19 vaccination rates and high COVID-19 death rates. Comparing the messaging of these state officials to the more effective state communication of Hawaii and Vermont, based on COVID-19 vaccination and death rates, can identify measures that worked to prevent deaths and illness due to COVID-19. This study may advance the knowledge of public officials regarding how to create policy that is effective in protecting the lives of citizens. Cohesive and standardized state messaging by public officials may increase vaccination rates and lower death rates not only for COVID-19 but also for future pandemic scenarios.

The social messaging created by these five states may have impacted citizen well-being and health decisions regarding COVID-19 for the better and for the worse. This study may aid in advancing public policy by providing insight into what messaging by public officials during the early months of the COVID-19 pandemic seemed effective at

increasing vaccination rates and lowering death rates. I sought to understand what messaging or key phrases by public officials resulted in low COVID-19 vaccination rates and high death rates. Public officials have an obligation to create policies that keep their citizens alive and healthy.

The social change implications for this study may include the creation of public policy that would promote cohesive and standardized state messaging to increase COVID-19 vaccination rates and lower death rates. COVID-19 will be an ongoing public health issue with outbreaks continuing globally, most notably in China, widely regarded as the origin of the pandemic (Weise & Weintraub, 2021). Identifying and understanding the messaging patterns by state officials that both positively and negatively impacted state citizens may be the key to more effective management of future wicked problems and the key to saving lives.

Summary

Some state officials created their own reality regarding COVID-19 information, creating a phenomenon of ignoring traditional guidance and protocols during a global pandemic. Low vaccination rates and high death rates due to COVID-19 were the consequences of this created reality. Comparing these states' messaging to states that had high COVID-19 vaccination rates and low COVID-19 death rates may identify ways to contradict misinformation and increase COVID-19 vaccine rates. Public policy regarding pandemic information procedures could be put in place before the next crisis occurs, providing protocols for information to best protect citizens from harm.

Chapter 2 addresses how social constructivism and the realities created by public officials were represented in recent literature. Previous pandemics were not managed based on partisan ideas, and officials worked in tandem and cooperation to keep citizens protected. The consideration of COVID-19 as a wicked problem may have contributed to these perceptions. Chapter 2 addresses these topics.

Chapter 2: Literature Review

I explored the messaging that state officials provided during COVID-19 that may have influenced their citizens' health decisions from March to December 2020. Different states created different realities that correlated with COVID-19 vaccination and death rates. Citizens had to trust the information that was provided to them even as COVID-19 was defined as a wicked problem with numerous challenges (Schiefloe, 2021). Messaging from the states of Arizona, Hawaii, Mississippi, South Carolina, and Vermont may have impacted COVID-19 vaccination rates between March and December 2020.

Phrases and guidance related to COVID-19 were new notions in 2020. Katella (2020), working with Yale Medicine, created a list of common terms related to COVID-19. At that time, many ideas, phrases, and verbiage related to COVID-19 were new both to public officials and citizens (Katella, 2020). Those terms included definitions of now common phasing such as "social distancing," defined as adding physical distance between both individuals and groups and considered a key strategy for preventing exposure to COVID-19 (Katella, 2020). Since 2020, those terms have become part of the vernacular and are more readily understood by both public officials and citizens. From March to December 2020, however, many of these terms were being communicated for the first time.

The effective information versus misinformation impacting public health by state officials needs to be further explored. The findings from the current qualitative study may be used in creating public policy regarding vaccine mandates that more of the population will embrace, thereby protecting society during problem events such as COVID-19. The

identification of common phrases and keywords used to manage COVID-19 effectively and ineffectively may provide a framework of communication to keep citizens protected during an ongoing global pandemic. Feldscher (2020) noted that Michael Barnett, assistant professor of health policy and management at Harvard T.H. Chan School of Public Health, said that the health care system should be considered as basically nonpartisan, but the COVID-19 pandemic may have started to chip away at this notion because the pandemic became a politically charged issue.

Understanding the official messaging by state officials and, in turn, how that messaging may have impacted citizens' perceptions of COVID-19 is the key to keeping the population protected during a global pandemic and other wicked problem scenarios. The purpose of this qualitative study was to explore what common state messaging factors may have impacted the COVID-19 vaccine behavior of citizens in five diverse states, which may have impacted COVID-19 death rates as well. The literature supported the relevance of how the unique perspectives of state officials influenced the citizens' decisions about the COVID-19 vaccine. States that encouraged COVID-19 vaccines experienced lower death rates due to COVID-19 than states that embraced conspiracy theories and questioned scientific findings. States that were transparent, noting that information would be fluid and updated as new findings emerged, were more successful in protecting the well-being of citizens.

Chapter 2 includes the literature search strategy, theoretical foundation, and a review of the applicable literature. Studies that were consistent with the scope of the

current study were reviewed as well as opposing viewpoints. The literature justified the theories chosen.

Literature Search Strategy

The literature search strategy used included the EBSCO and ProQuest databases. I searched the term *Covid 19 state statistics* exclusively for the state of South Carolina to determine COVID-19 vaccination and death rates. That search was expanded to include the entire United States to see which states had high death rates due to Covid 19, paired with low vaccination rates for COVID-19. That search identified South Carolina, Arizona, and Mississippi as states with high COVID-19 death rates and low COVID-19 vaccination rates. That initial search led to the identification of Vermont and Hawaii as states with high COVID-19 vaccination rates possibly resulting in low death rates due to COVID-19. *State responses to Covid 19* and *state specific websites* for press releases were also search terms. Specific state officials who received national coverage for their COVID-19 responses included Dr. Thomas Dobbs of Mississippi and Pressley Stutts of South Carolina.

The search led me to question why these states had the response to COVID-19 that they did. To explore the conceptual theories, search terms were expanded to include *social constructivism.* Vygotsky developed the theory of modern social constructivism, so those notions were explored. Schneider and Ingram were known for their theories on social constructivism, target groups, and the formation of policy. Additionally, the theory of planned behavior was considered. The literature referenced COVID-19 as a wicked problem; therefore, *the wicked problem of Covid 19* became another search term. *Rittel*

and Webber as well as *wicked problem theory* were also search terms. These terms would form the conceptual framework for the study.

Once the search terms were established, I did a preliminary search of the five selected states health department publications and official press releases, which I discuss more in the methodology section of Chapter 3, to ensure enough sources would be available. I also searched archival press conferences using search terms related to important COVID-19 milestones including *shutdowns*, *mask mandates*, and *school closures* based on the COVID-19 timeline from the CDC (2023b). The exploration of states' COVID-19 messaging led to a search of *Covid 19 conspiracy theories* to determine whether the public officials' messaging might include common conspiracy theories and to determine whether patterns emerged that may be related to the study.

A search was used to determine the top COVID-19 conspiracy theories in 2020. Lynas (2020) created a list of the top 10 current conspiracy theories. This list was relevant to the current study because the time frame this study was March-December 2020. Using this list provided guidance on conspiracy theory search terms including *Covid 19 conspiracy theories* and *Covid 19 as a hoax*. Other search terms included *Covid 19 as a lab experiment gone wrong* and *Covid 19 as a biological weapon*. I also searched *conspiracy theory related* to *the actual existence of Covid 19.* Further conspiracy theory searches included *Covid 19 as a deep state manipulation to make then President Trump look bad*. I sought to determine whether these common conspiracy theories were present in public officials' messaging to citizens.

The messaging by state public officials also led to searches regarding political party superiority and states' response to COVID-19 federal mandates. Other searches included *school shutdowns* pertaining to the five states that were studied. *Mask mandates* and *ongoing Covid 19 legislation* of the five selected states were also searched. There was a plethora of information regarding COVID-19 available, including current COVID-19 research. If anything, the availability of information made limiting the study challenging. Early days were defined as the period around March 2020, when states first addressed COVID-19 as an emerging pandemic under the Trump administration (Mukherjee, 2021) until December 2020. COVID-19 has not had a finite end date and is still ongoing. Updated information from the Biden administration and states' reaction to mandates post 2021, when President Biden took office, were also notable milestones for this study. All vaccinations rates cited in this study reference 2022 statistics while the messaging from state officials that was explored was from March-December 2020. COVID-19 vaccination rates and death rates continue to be updated by state officials because the pandemic has not been fully eradicated.

It was also very useful to use the reference sections from previous studies. Using the sources that authors had already related to themes proved to be insightful. Linking those studies to my research was made easier by referencing what sources had proved useful in previous studies.

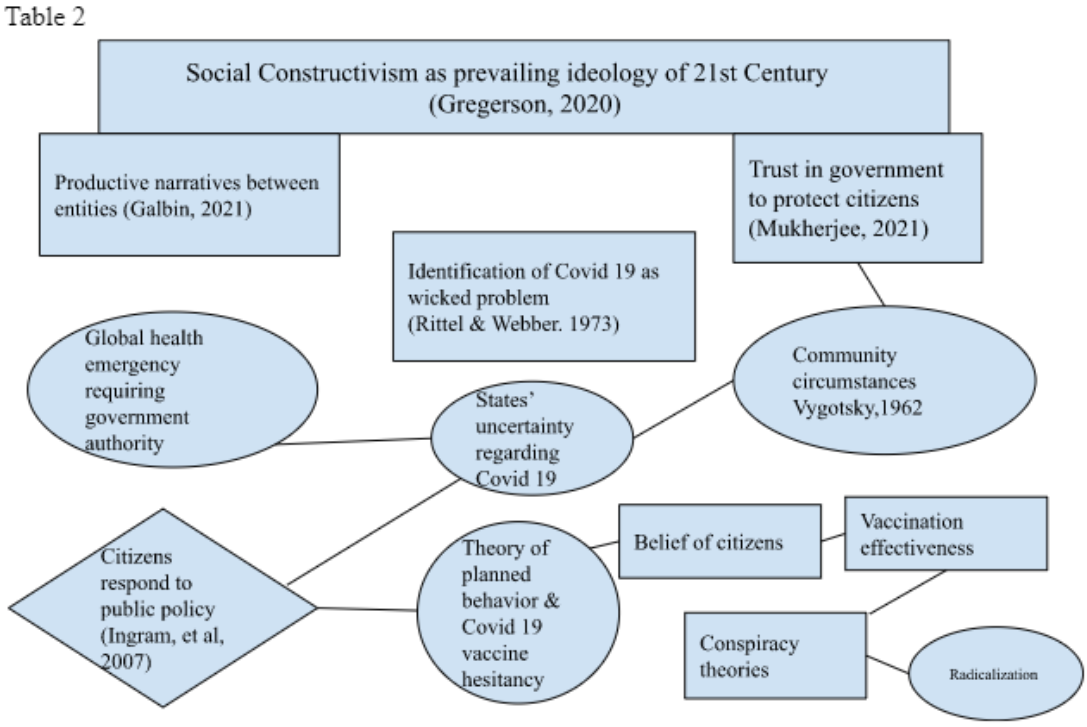
Theoretical Foundation

Theories of social constructivism, wicked problems, and citizens' responses to public policy based on Schneider and Ingram's ideas formed the conceptual framework

for this study. This section discusses how these theories overlaid or related to each other in terms of COVID-19 responses. Figure 2 provides a visual depiction of the outline for this section of the review of literature. Note that Rittel and Webber (1973) did not reference COVID-19 as a wicked problem. Rittel and Webber did, however, provide the first definition of a wicked problem. The notion of COVID-19 as a wicked problem was based on their framework and cited by many later authors, such as Baltzersen (2022).

Figure 2

Social Constructivism as Prevailing Ideology of the 21st Century



Both social constructivism and the definition of COVID-19 as a wicked problem related to this study and the research question. The exploration of the messaging that state officials provided during COVID-19 created a flow of information from state to state that

may have impacted the citizens' health decisions during that time. Different states may have created different realities that correlated with COVID-19 vaccination and death rates. Citizens had to trust the information that was provided to them by state officials even as COVID-19 was defined as a wicked problem with numerous challenges.

Social Constructivism

Considered by many researchers to be one of the prevailing political ideologies of the early 21st century, social constructivism has been cited as a consideration in relation to COVID-19, according to the literature. Gregerson agreed that social constructivism is a prevailing ideology and also indicated that the political response to COVID-19 created a social construction of reality that impacted citizens (Gregerson, 2020). The literature revealed that the narratives produced by government agencies should have been a dialogue between entities to produce meaning and sense but instead seemed to have been divisive along political lines (Galbin, 2021). Galbin (2021) noted that the choices made by some state government agencies, and the governors themselves, represented a relationship between leaders and stakeholders that could have created positive social change by increasing COVID-19 vaccination rates and lowering death rates.

The literature showed that the theory of social constructivism had been used by researchers in understanding the decisions made by world leaders during the early days of COVID-19. Mukherjee (2021) concluded that trust in government was key to protecting citizens during the COVID-19 pandemic. Global leaders created the COVID-19 policy that was not solely based in the health sector but involved every aspect of a global economy, including finance, law, foreign relations, tourism, and industry (Mukherjee,

2021). Mukherjee also noted that COVID-19 could be defined as a wicked problem, per the parameters set forth by Rittel and Webber's (1973) theory of tame and wicked problems. Angeli et al. (2021) referenced that the contradictory ideas among the scientific collective regarding COVID-19 helped define it as a bona fide wicked problem. Baltzersen (2020) also considered the global political and economic factors of COVID-19 and defined COVID-19 as a wicked problem.

One of the original theorists of social constructivism in the 20th century was Vygotsky. Vygotsky, who born in 1896 and died in1934 thought that social constructivism was learned knowledge and the result of societal and community circumstances versus individually ,(1934, as cited in Schreiber & Valle, 2013) . That knowledge, according to Vygotsky (1934, as cited in Schreiber & Valle, 2013), is the result of societal and community circumstances versus individual circumstances. Vygotsky's theory (Vygotsky & Cole, 1978), while rooted in psychology and learning strategies, was applicable to the current study because the spread of misinformation had created a new reality of states with high COVID-19 death rates and low COVID-19 vaccination rates. Those community circumstances may have influenced decisions regarding COVID-19 vaccinations. State officials represented the community, which may have influenced citizens' COVID-19 health decisions.

Vygotsky (1934) applied this notion to learned knowledge between teachers and students, and I determined that foundation could also be applied to state officials as teachers and the citizens as students when exploring the way COVID-19 information was communicated. Vygotsky asserted that there was a more knowledgeable other (MKO)

who possessed a better understanding and higher knowledge than the pupil (Vygotsky & Cole, 1978). During March-December 2020, state officials could be considered the MKO and the citizens seeking information on COVID-19 the students. Vygotsky also acknowledged that there was a gap between the actual knowledge of the pupil and the possibility of knowledge, referred to as the zone of proximal development (Vygotsky & Cole, 1978).

Vygotsky noted that this gap needed to be bridged using two tiers. The first was that the MKO (in this case the state officials) and the student (in this case the citizen) should come to a shared sentiment by considering the viewpoints of the other (Vygotsky & Cole, 1978)The viewpoint of the MKO/state official could become the viewpoint of the student/citizen through this shared sentiment tier. Potentially, citizens could align their COVID-19 viewpoints with the viewpoints of the MKO/state officials.

The other tier of learning is referenced by Vygotsky as scaffolding. In scaffolding, the direct missives initially given to the pupil/citizen by the MKO/State officials are lessened over time as more knowledge is gained by the pupil/citizen (Vygotsky & Cole,1978). As the COVID-19 pandemic continued, this study will also seek to determine if the information flow from the MKO/State officials lessened over time, leaving pupil/citizens to seek other sources of information that potentially were untrustworthy. Kricorian supported the notion that information regarding COVID-19 must come from reliable sources, in language that would be understood, to reduce misinformation (Kricorian,2022). This study will explore state officials' messaging as the MKO in

providing COVID-19 information and directives that may have impacted the pupil/citizens COVID-19 vaccination and death rates.

In 1967, Berger and Luckman explored the social construction of reality. Berger and Luckman noted how regular citizens come to define reality in their day to day lives and how that knowledge then serves as a template for their behavior, with a high level of uniformity between the objective and subjective realities. The relationships between institutions, for example state officials, created perceptions, values, behaviors, and norms for citizens (Berger & Luckman, 1967). They believed that society was created through interactions within a system of these social classes which ultimately created notions of the actions of each other. Given this idea, the actions of the state officials may have had a direct impact on the actions of the citizens during March-December 2020 regarding COVID-19.

Wicked Problem

The consideration of COVID-19 as a wicked problem will begin with Rittel and Webber's theory of tame and wicked problems from 1973. Rittel and Webber described a wicked problem as one in which the solutions are not in place ahead of time. In order to do that, there must be an inherent understanding of the problem and an exhaustive knowledge of solutions and how to achieve them (Rittel & Webber, 1973). Given the global parameters of COVID-19, officials were left without viable answers on effective mitigation of the pandemic. The rapid global spread may have also contributed to the lack of answers. In February 2020, Alessandro Vespignani, an infectious diseases modeler at Northeastern University, was quoted as saying that COVID-19 was a beast that was

moving very rapidly (Kupferschmidt & Cohen, 2020). Hence, the COVID-19 pandemic can be categorized as a wicked problem.

Rittel and Webber created a checklist of how a wicked problem was defined. This checklist was created in 1973, long before COVID-19 was a global pandemic. The literature indicates many subsequent authors and researchers utilized this checklist to make the connection of a wicked problem to COVID-19. Those checklist items are summarized here:

1. No establishment of the problem is defined.
2. No specific completion or indication the problem is solved.
3. The problem resolution is nether true nor false.
4. There is no real way to test the resolution to the problem.
5. There is no way to resolve the problem through trial and error. Every possible solution is irretrievable and every trial counts.
6. Resolutions and steps toward the resolution of a wicked problem are endless.
7. Wicked problems are nonconformable and special.
8. Wicked problems are often linked to other issues.
9. Description of a wicked problem defines its possible solutions.
10. Planners and officials mitigating a wicked problem have no room for error. Planners are responsible for the resolutions they create; their actions can greatly affect those who are impacted by their decisions.

Rittel and Webber spoke of the undisputable public good in a diverse society and the issue of there being no solutions in certain2 scenarios. Rittel and Webber also

referenced that every idea is viewed as a conspiracy against the population (1973). Given the numerous conspiracy theories regarding COVID-19, this idea is important for this study. Biddlestone, et al., also supported the idea that understanding conspiracy theories associated with COVID-19 might be useful to help limit the spread of the pandemic (Biddlestone, et al., 2020).

As early as 1973, Rittel and Webber discussed the public condemnation of professionals. Current events of 1973 saw the suspension of offensive action in the Vietnam war was announced by President Nixon. Other social issues, including the Supreme Court ruling that overturned states bans on abortion in Roe v. Wade, were also happening. This time was one in which there were tremendous shifts in the culture of the United States. While Rittel and Webber cited huge advancements in policies and infrastructure, concern about the public's wariness of public official and professional competency was gaining momentum (Rittel & Webber, 1973). One of the professional achievements that Rittel and Webber touted in their 1973 study was that the dread of diseases was gone for the public sector. Forty-eight years later, Angeli, et al., would define COVID-19 as a wicked problem (Angeli, et al., 2021) -- a connection that Rittel and Webber did not foresee or mention. The Angeli, et al., study showed how informational evidence about COVID-19 was formulated into conflicting guidance regarding the containment policy dependent on the ethical compass of the leaders that may have led to different priorities of mitigation and goals for the citizens (Angeli, et al., 2021). Those same authors also emphasized the necessity of a situated approach to public policy regarding health that considered that public policies have inherent values and need

to be mindful of content focused and historically important socio-cultural and socio-economic norms (Angeli, et al., 2021).

An event like COVID-19 was unprecedented even as it was unfolding globally. WHO declared the COVID-19 outbreak a Public Health Emergency of International Concern in January 2020 (WHO, 2020) but many factors were unknown. Marc Lipsitch, an epidemiologist at the Harvard T.H. Chan School of Public Health, proposed two broad categories for COVID-19 stating that the world gets the virus under control—or it doesn't (Kupferschmidt & Cohen, 2020). Two years later in 2022, Tyson and Funk published a study conducted under the auspices of the Pew Research Foundation that indicated that criticism of public officials' handling of COVID-19 was on the rise (Tyson & Funk, 2022). They found that the United States population was almost evenly split on the management of COVID-19 by the CDC nationwide (Tyson & Funk, 2022). It appeared that partisan differences were reflected in not only in that context but are also present in receiving the COVID-19 vaccination and subsequent booster. During COVID-19, one of the ways citizens learned about the pandemic from state officials during press conferences that were aired on local networks and on public broadcast stations. Given the inability for direct contact, effective communication was one of the biggest challenges of COVID-19 (Maison, et al., 2021).

Political perceptions are part of the equation of governmental planning and policy according to Rittel and Webber (1973). They believed that any policy could produce a domino effect of repercussions because the problems themselves were undefinable–much like the wicked problem of the COVID-19 pandemic was undefinable. These wicked

problem scenarios, such as COVID-19, create a myriad of issues in the public policy sector because there is little way that an event of this magnitude could be adequately anticipated or addressed by public policy. Rittel and Webber go as far as to say that the problem cannot be defined until the solution has been found (Rittel & Webber, 1973). Given the complex nature of the COVID-19 pandemic, it would be virtually impossible to have clear solutions in place by a variety of global, federal, and state officials. There was no way to organize policy into phases, given the rapid onset of the pandemic. There was also no benchmark of completion with the COVID-19 pandemic as is evident in other tame problems.

Wicked problems also present issues in clarifying them as true or false. Thus, solutions to wicked problems like COVID-19 become exercises in deciding which solution is good enough to proceed. COVID-19 saw public officials creating good enough policies in terms of mask mandates, closures, and school shutdowns. Were those policies also good enough to encourage citizens to seek COVID-19 immunizations? For some states the answer may be yes. For other states, policies th2at did not include positive policy towards COVID-19 vaccinations, the answer may be no.

Another concern with wicked problems is the lack of immediate solutions to them. Rittel and Webber discussed the unbounded amount of time that wicked problems can require (Rittel & Webber, 1973). The COVID-19 pandemic represents a problem that lacked immediate solutions and remains unresolved almost three years later as outbreaks have not been eradicated. Every attempt to mitigate the issues of COVID-19 resulted in a significant policy commitment. Those policy commitments each crucially counted in the

eyes of the citizens and in the parameters of a wicked problem. There were consequences for every COVID-19 policy that was put into place. Rittel and Webber spoke of how every trial solution counted in wicked problems (Rittel & Webber, 1973) and those same trial solutions during COVID-19 also had consequences. Wicked problems also lack a cohesive number of solutions and certainly COVID-19 policy lacked solutions due to its far-reaching impact. Rittel and Webber call wicked problems ill-defined with ill-defined solutions, a definition that applies to COVID-19. Additionally, these ill-defined problems are inherently unique. In the case of COVID-19, there was no benchmark or past event to compare it to in a significant way.

Interestingly, Rittel and Webber viewed wicked problems as those which are defined by a series of problems. This idea can be applied to COVID-19 in terms of how the pandemic impacted virtually every aspect of life from the economy to health, to mental well-being, for a few examples. The inconsistency of a wicked problem can be applied to COVID-19 as well: with so many factors to be considered, adequate solution mitigation is difficult. Rittel and Webber spoke of the public officials to reach resolution on wicked problems. That lack of resolution was evident during the early days of COVID-19.

There have been authors that referenced issues in the scientific community regarding COVID-19. Angeli, et al., (2021) referenced the contradictory ideas among the scientific collective regarding COVID-19 helped define it as a bona fide wicked problem. Baltzersen (2020) also considered the global political and economic factors of COVID-19

and defined COVID-19 as a wicked problem (Baltzersen, 2020). Other studies will be explored later that will further connect COVID-19 to the definition of a wicked problem.

Cultural diversity also plays a role in wicked problems. Individual interests and concerns took precedent over the greater good of protecting citizens against COVID-19. Rittel and Webber spoke of the common interests and common core interests that were once prevalent (Rittel and Webber, 1973) and how, even in 1973, small minorities can have a large impact on the solutions to wicked problems by making their voices heard and by wielding influence. Rittel and Webber also discussed how the rise of information availability would impact citizens. Noting how many more possibilities are possible with the volume of information available, Rittel and Webber see this as an opportunity to both exploit and reinvent what the solution to a wicked problem should be. During COVID-19, the abundance of misinformation may have led to the creation of new realities related to the pandemic. Those new realities may have impacted elected officials' policy and messaging regarding how best to deal with COVID-19. The realities created by a highly diverse society have no bundle benchmark, according to Rittel and Webber. The solution for one group is the problem creator for another. These issues were evident during the early days of COVID-19, firmly defining it as a wicked problem, based on the theory presented by Rittel and Webber.

A global issue, such as the wicked problem of COVID-19, is seen as elucidation of factors. Those factors have been noted as complicated and requiring governmental response (Ingram, et al., 2004). In earlier publications Schneider and Ingram had also indicated that scientific findings had insignificant effect on policy change (Scheider &

Ingram, 1997). Given this notion, states may not have adapted policy to encourage COVID-19 vaccinations. Pierson agreed with this idea, intoning that policy will remain stagnant long past the time that components should be changed or altered (Pierson, 2004). In terms of social constructivism, Schneider and Ingram stated that when robust social construction is a factor, science that is controversial is often disregarded in terms of public policy (Schneider & Ingram, 1997).

Social Construction

At the heart of Schneider and Ingram's theory is that the social construction of certain citizen groups has a substantial impact on government officials affecting both the policy agenda and the way that policy is implemented (Schneider & Ingram, 1997). Social construction becomes intertwined in policy as statements are taken in by the public and affect their reality. Schneider and Ingram discuss the way policies are received by the citizens and how that reception leads to conformity or to resistance. The policy, according to Schneider and Ingram, can promote inaction among certain populations. Given these parameters, is it possible that some states' policy during the early days of COVID-19 created a scenario in which that inaction translated to not getting COVID-19 vaccinations?

Schneider and Ingram discussed two important observations regarding social constructivism and elected officials. The first is in those elected officials handling of acknowledged public problems, including problems like COVID-19. The second consideration is that public officials must produce policies that will also help them remain in office and get re-elected. The elected officials must also consider their target

populations, which Schneider and Ingram divide into categories of positive and negative constructions that include different population groups (Schneider & Ingram, 1997). The specific populations that are the most important to the elected officials are the ones that the elected officials take most into consideration in the creation of policy. For this study, could that focus have impacted messaging about COVID-19 that appealed to the elected officials' public base? Certainly, Schneider and Ingram believed that elected officials faced pressure from the public to embrace policy that reflected the public's social construction (Schneider & Ingram, 1997) so could policy created during COVID-19 reflect the social constructed reality of not only the elected officials but, that of the citizens, following their lead?

Schneider and Ingram (2020) also discussed elected officials' concern for far reaching public retaliation against both the policy and the policy producer: the elected official. Given the wicked problem nature of COVID-19, there was no real panacea style solution or policy to be embraced. Elected officials may have embraced their target groups during the creation of COVID-19 policy—target groups that included those considered advantaged, contenders, dependents, and deviants (Schneider & Ingram, 1997). The advantage group is noted as having problems that are smart and that deserve respect of the elected officials. The contenders' problems are more controversial and invoke more distrustful treatment by elected officials. As COVID-19 became as much of a controversial political issue as it was a health issue, elected officials may have considered it a contender issue in terms of policy creation. According to Schneider and Ingram, that contender consideration may have placed COVID-19 into a category of

lukewarm response for some elected officials while invoking a powerful response from elected officials that considered it an advantage issue.

Schneider and Ingram believed that there was a direct link to policy and citizen participation and embracing of that policy. The foundation that authorities believe will impact the public hinge on preconceived notions about the conduct that is impacted by social constructivism. Policy is based on the notion that the policy must be tolerable for the population. When social constructions are impactful in the formation of policy, that policy may be affected. Furthermore, Schneider and Ingram believed that effective policies solved problems and that a failure to do so created chaos in the citizens (Schneider & Ingram, 1997). As COVID-19 was considered an unsolvable wicked problem, could any policy effectively be created that met the social constructs of all the citizens while promoting participation?

Schneider and Ingram believed that policy should empower citizens but, that notion may have been impossible, given the constraints of the issue of COVID-19 itself. The robust social construction of certain state governments in relation to COVID-19 would support this theory in the way COVID-19 was managed. Ingram and Schneider's theory of social construction and policy design (Ingram, et al., 2007) also has ties to the earliest of social constructivism theories. 2

This power to influence citizens that Ingram and Schneider discuss can be tied to the father of social constructivism: Lev Vygotsky (Vygotsky & Cole, 1978), who was working in the field of psychology. Vygotsky's theory of social constructivism (Vygotsky & Cole, 1978) believed that children acquired beliefs by following the lead of

more knowledgeable members of society. Vygotsky further believed that knowledge was actively constructed by the environment. In times of crisis, the state authorities and public officials could be considered the more knowledgeable members of society. Those more knowledgeable public officials shared information about COVID-19 with the children/citizens. Vygotsky references both the observation of skilled persons and exposure to adults with more knowledge and experience as factors influencing behavior in children (Vygotsky & Cole, 1978). Given this idea, citizens would perceive those public officials had more knowledge and insight to COVID-19, and would learn from those individuals, following their lead. Vygotsky also thought that social constructivism was learned knowledge is the result of societal and community circumstances versus individually (Schreiber & Valle, 2013). In other words, communication from state officials potentially impacted citizens' COVID-19 vaccination and death rates. Moreover, the information provided by political leaders at the federal level at the onset of COVID-19 caused states to both embrace and rally against information designed to protect the welfare of United States citizens.

The community aspects of a wicked problem such as COVID-19 may have links to social constructivism. Vygotsky thought that social constructivism was learned knowledge is the result of societal and community circumstances versus individually (Schreiber & Valle, 2013). These community circumstances, and the new realities created, may contribute to COVID-19 being considered both a wicked problem and have ties to social constructivism. Vygotsky's theory, while rooted in psychology, is applicable as the spread of misinformation has created a new reality of specific societies within

states with high COVID-19 death rates and low COVID-19 vaccination rates. During COVID-19, citizens learned about the pandemic from state officials. Those community circumstances may have influenced decisions regarding COVID-19 vaccinations. State officials represented the community which influenced citizens' COVID-19 health decisions. Rittel and Webber believed that small groups, with vocal voices, could impact the ability of a wicked problem to be managed or solved. These groups, with their constructed realities, may have impacted not only state policy but also trickled down to influence citizens' behavior regarding health decisions such as vaccinations against COVID-19.

Vygotsky further expressed that knowledge happens within social context that included both citizen-to-citizen and professional-to-citizen partnerships on real world issues (Vygotsky & Cole, 1978). COVID-19 is a real-world issue. Vygotsky theorized solving real-world issues should build on language, skills, and experience, based on culture (Vygotsky & Cole, 1978). The cultural norms of state officials may have affected the information they were relaying to the citizens during the early days of COVID-19.

Social constructivism relates to this study and the research questions by the exploration of the messaging that state officials provided during COVID-19 that impacted the citizens' health decisions during that time. COVID-19 as a wicked problem by Baltzersen (2022) reiterated that government officials were challenged in creating public policy to protect citizens worldwide. Angeli (2021) also referred to COVID-19 as a wicked problem and discussed how the same information could be used to create inconsistent and conflicting guidance both in the scientific community and in public

policy. Opposite viewpoints concerning the definition of COVID-19 as well as the resolutions needed to mitigate it are consistent with a wicked problem, according to Angeli (2021), citing Alford and Head (2017). Alford and Head (2017) also emphasized the need for cooperation among stakeholders during a wicked problem occurrence. That cooperation did not happen among different states within the United States, creating messaging by state officials that was conflicting and hard to interpret.

I believe messaging from state officials impacted COVID-19 vaccination and death rates. Specifically, I believe that states that encouraged public participation in COVID-19 vaccinations experienced lower death rates compared to states that downplayed the effectiveness of the vaccine and experienced high death rates due to COVID-19. During COVID-19, citizens learned about the pandemic from state officials. Those community circumstances influenced decisions regarding COVID-19 vaccinations. How did social constructivism and the creation of identifiable realities impact effective and ineffective messaging by state officials during COVID-19? Communication from state officials impacted citizens' COVID-19 vaccination and death rates. Additionally, the information provided by political leaders at the federal level at the onset of COVID-19 caused states to both embrace and rally against information designed to protect the welfare of United States citizens.

The phenomenon that is relevant to this study is how different states, within the United States used social constructivism to create their own realities about the handling of COVID-19. Those realities impacted COVID-19 vaccination rates, and in turn, COVID-19 death rates. The identification of keywords that proved effective and

ineffective can provide insight to effective messaging during future crises that impact all citizens.

To address the research questions in this qualitative study, the specific research design will include a mixed model method utilizing archival research of secondary data on the distribution of COVID-19 information in five states: Arizona, Hawaii, Mississippi, South Carolina, and Vermont. Footage and news articles from the early days of the COVID-19 pandemic from these states' officials to identify trends in language and sentiment that influenced the citizens. Quantitative studies will be used as background research, citing statistics and demographics from previous studies about COVID-19 deaths and vaccine hesitancy.

Previous studies citing the theory of planned behavior indicated Covid -19 vaccination hesitancy was associated with the notion that the seriousness of COVID-19 has been inflated. Those studies stated that the theory of planned behavior explained how vaccination hesitancy has been linked to fear, the notion that infection will not happen, attitude, knowledge, the perception of being at risk and prior vaccinations for other diseases, including influenza (Ghaddar et al., 2021). State officials adhering to this idea may have inadvertently put their citizens at an elevated risk from COVID-19. The correlation between states with inadequate health literacy and lower education may also be contributing factors in states that have high COVID-19 death rates and low vaccination rates. how specific state officials constructed their own, unique, reality during a global pandemic. This new reality is framed by social constructivism. Chapter two will

provide more insight to previous studies on vaccine hesitancy and the rise of factors that may influence the public's decisions.

This framework of social constructivism can be observed in the way specific states relayed information to citizens during the early days of COVID-19. Reviewing and analyzing archival footage and news briefs can help identify how social constructivism and the creation of identifiable realities impact effective and ineffective messaging by state officials during COVID-19. Official information from the five selected states' health officials will also be referenced.

Many authors have previously addressed this topic. Galbin (2021) previously studied how social constructivism can help frame dialogue and relationships during uncertain times such as Covid-19. Understanding these relationships and the realities created by them leads to the power to influence others (Galbin, 2021). Galbin's notions echo those of Schneider and Ingram, who agree that the power to influence exists and has real outcomes (Ingram, et al., 2004).

The consideration of COVID-19 as a wicked problem will revisit the initial designation of difficult problems as wicked problems. Specifically, it will reference Rittel and Webber's theory of tame and wicked problems (1973). Rittel and Webber speak of the undisputable public good in a diverse society and the issue of there being no solutions in certain scenarios. Interestingly, Rittel and Webber also reference that every idea is a conspiracy against the population (Rittel & Webber, 1973). Given the numerous conspiracy theories regarding COVID-19, this idea is especially important for this study.

Planning is an integral part of management of wicked problems according to the literature. Political perceptions are part of the equation of governmental planning and policy according to Rittel and Webber (1973). They believed that any policy could produce a domino effect of repercussions because the problems themselves were undefinable–much like the wicked problem of the COVID-19 pandemic was undefinable. These wicked problem scenarios, such as COVID-19, create a myriad of issues in the public policy sector because there is little way that an event of this magnitude could be adequately anticipated or addressed by public policy. Rittel and Webber go as far as to say that the problem cannot be defined until the solution has been found (Rittel & Webber, 1973). Given the complex nature of the COVID-19 pandemic, it would be virtually impossible to have clear solutions in place by a variety of global, federal, and state officials. There was no way to organize policy into phases, given the rapid onset of the pandemic. There was also no benchmark of completion with the COVID-19 pandemic as is evident in other tame problems.

Wicked problems also present issues in clarifying them as true or false. Thus, solutions to wicked problems like COVID-19 become exercises in deciding which solution is good enough to proceed. COVID-19 saw public officials creating good enough policies in terms of mask mandates, closures, and school shutdowns. Were those policies also good enough to encourage citizens to seek COVID-19 immunizations? For some states the answer may be yes. For other states, policies that did not include positive policy towards COVID-19 vaccinations, the answer may be no.

Another concern with wicked problems is the lack of immediate solutions to them. Rittel and Webber discussed the unbounded amount of time that wicked problems can require (Rittel & Webber, 1973). The COVID-19 pandemic represents a problem that lacked immediate solutions and remains unresolved almost three years later as outbreaks have not been eradicated. Every attempt to mitigate the issues of COVID-19 resulted in a significant policy commitment. Those policy commitments each crucially counted in the eyes of the citizens and in the parameters of a wicked problem. There were consequences for every COVID-19 policy that was put into place. Rittel and Webber spoke of how every trial solution counted in wicked problems (Rittel & Webber, 1973) and those same trial solutions during COVID-19 also had consequences. Wicked problems also lack a cohesive number of solutions and certainly COVID-19 policy lacked solutions due to its far-reaching impact. Rittel and Webber call wicked problems ill-defined with ill-defined solutions, a definition that applies to COVID-19. Additionally, these ill-defined problems are inherently unique. In the case of COVID-19, there was no benchmark or past event to compare it to in a significant way.

Schneider and Ingram also agree that planning and policy is the responsibility of elected official and discussed two important observations regarding social constructivism and elected officials. The first is in those elected officials handling of acknowledged public problems, including problems like COVID-19. The second consideration is that public officials must produce policies that will also help them remain in office and get re-elected. The elected officials must also consider their target populations, which Schneider and Ingram divide into categories of positive and negative constructions that include

different population groups (Schneider & Ingram, 1997). The specific populations that are the most important to the elected officials are the ones that the elected officials take most into consideration in the creation of policy. For this study, could that focus have impacted messaging about COVID-19 that appealed to the elected officials' public base? Certainly, Schneider and Ingram believed that elected officials faced pressure from the public to embrace policy that reflected the public's social construction (Schneider & Ingram, 1997) so could policy created during COVID-19 reflect the social constructed reality of not only the elected officials but, that of the citizens, following their lead?

During COVID-19, citizens learned about the pandemic from state officials. Those community circumstances influenced decisions regarding COVID-19 vaccinations. How did social constructivism and the creation of identifiable realities impact effective and ineffective messaging by state officials during COVID-19? Communication from state officials impacted citizens' COVID-19 vaccination and death rates. Additionally, the information provided by political leaders at the federal level at the onset of COVID-19 caused states to both embrace and rally against information designed to protect the welfare of United States citizens. Document analysis of archival materials, including data from media and state websites, will be reviewed. Reviews of official news briefings by state officials will be used to provide insight to the factors that have contributed to COVID-19 death and vaccination rates and will note which officials were present. Footage and news articles from the early days of the COVID-19 pandemic from these states' officials to identify trends in language and sentiment that influenced the citizens.

Quantitative studies will be used as background research, citing statistics and demographics from previous studies about COVID-19 deaths and vaccine hesitancy.

The literature suggests Covid-19 has been considered a critical problem that requires timely decisions. Mukherjee (2021) indicated that the social construction of a global health emergency required expedited use of authority—an authority that the United Sates was slow to enact. Mukherjee utilized the theory of Rittel and Webster's tame and wicked problems (1973). The lack of quick leadership on behalf of President Trump to act on Covid-19 as a wicked problem can be attributed to several factors. He had no real answers during an emerging pandemic and was wary of asking citizen stakeholders to step up and do their part to curb the pandemic. Trump failed to ask citizens to get vaccinated for the greater good and to create an ongoing effort in the fight against Covid-19. Mukherjee's analysis indicated a slow response on COVID-19 by President Trump, when compared to other nations.

The consideration of COVID-19 as a wicked problem has been well documented. COVID-19 can also be considered a community circumstance. The Rittel and Webber theory of wicked problems (1973) has been referenced in modern times in terms of public policy. COVID-19 remains a pandemic that is not limited to the public health sector, according to the literature. It involves finance, law, foreign relations, tourism, and industry among other factors (Mukherjee, 2021). Given these far-reaching factors, Pesh and Vermass (2020) reference the provisional expert opinions of the stakeholders and the information that was provided to national and state officials. Pesh and Vermass (2020),

indicated that contrasting groups within societies prioritized different values and thus, create a better understanding of problems within those groups.

The literature stated that the unfolding situation of COVID-19 created an uncertainty in science-based knowledge due to the evolving nature of the situation. This uncertainty led to a rise in national and state government entities questioning the knowledge of scientists and contagious disease experts (Funtowicz & Ravetz, 1990; Pellizzoni, 2003). The political aspect was also impacted (Jasanoff, 1997). Vermont did not question the evolving nature of COVID-19 and instead, publicly acknowledged information would be changing as more information became available. Similarly, Hawaii said that websites and information would be updated as new treatments became available. These preemptive steps made the public aware that COVID-19 was a fluid situation, requiring evolving management. Other states viewed changing and updated information as shortcomings on the part of scientists—and vocally said as much through media outlets.

Citizen belief in the policy of public officials can be based on Vygotsky's social constructivist notions, the literature indicated. One of the consequences for government compliance is emotional distress. Past public health emergencies have been known to create anxiety, insomnia, and anger. Pfefferbaum & North believed that is also the case for COVID-19 (Pfefferbaum & North, 2020). The literature reveals that compliance with government COVID-19 mandates on social distancing and stay at home orders feasibly add to these issues.

According to the literature, to mitigate a wicked problem like COVID-19, citizen cooperation to government policy is imperative. Ingram, et al., believed citizens respond in a certain way to policy (Ingram, et al., 2007). If that policy is inherently ineffective, as may have been the case for specific states during the initial days of COVID-19, citizen health and well-being is directly impacted. Baltzersen referenced COVID-19 as a wicked problem for several reasons including the fast-track information flow from governments and the citizens' need to comply with government mandates in a timely manner (Baltzersen, 2022). This on demand information flow can be likened to a score, according to Baltzersen (2022) in which citizens feel like they are winning or losing against the pandemic as statistics regarding vaccinations, infection rates, and death rates either decreased (winning) or increased (losing). Baltzersen communicated that these statistics should encourage citizens to share a collective COVID-19 responsibility and encourages them to follow behavioral and policy measures put in place to keep them safe. Statistics from the literature suggest some states, seeing COVID-19 statistics in real time, resulted in more effort to curb the pandemic with increased vaccination rates but, for other states, this was not the case.

Political affiliation may also influence COVID-19 vaccination decisions, according to the literature. Tyson and Funk found Democrats, and those who identify as part of the Democratic Party, are much more likely than Republicans and Republican Party supporters to indicate they have received at least one dose of a COVID-19 vaccine (90% vs. 64%) (Tyson & Funk, 2022). Eight-in-ten Republicans ages 65 and older (80%) have received at least one dose of a coronavirus vaccine. Lower shares of Republicans

ages 50 to 64 (62%), 30 to 49 (57%) and 18 to 29 (52%) say the same (Tyson & Funk, 2022). Republicans with a post graduate degree are 24 times more likely to get a COVID-19 vaccine than those Republicans with a high school education (81% to 57%) while the margins among those some demographics among Democrats are less noticeable (Tyson & Funk, 2022).

The literature stated that despite federal efforts to release public information about COVID-19 in a timely manner, the interpretation of that information varied once the information trickled down to the state level. Oftentimes, social media accounts spread misinformation as well. The coordinated spreading of the China bioweapon conspiracy theory made over 5 million impressions on Twitter users (Graham, Bruns, Zhu, & Campbell, 2020) and represented a concerted effort to spread misinformation. This misinformation impedes a concerted effort for citizens to come together to lessen the effects of a pandemic like COVID-19 and creates separations and stigmatizations. The World Health Organization (WHO) recommended that science-based data be shared with the public (WHO, 2020) to lessen the impacts of misinformation being passed along to citizens. Given these guidelines and the overwhelming presence of misinformation, it was imperative that states' messaging reflected science based accurate information about COVID-19, free of politics and misinformation that had become part of the flow of information, according to the literature.

This study seeks to delineate if there are links between the public policy related to COVID-19 between March and December 2020 and COVID-19 vaccination and death rates. Specific messaging may have impacted citizens' health decisions and created

vaccine hesitancy. Peretti-Watel et al., (2015) how clarifying a theoretical framework for vaccine hesitancy can be challenging. Vaccine hesitancy is considered an ambiguous notion (Peretti-Watel, et al., 2015) so finding a corresponding theory is challenging. The Theory of Planned Behavior (TPB) provides a practical conceptual framework for dealing with the complexities of human social behavior (Ajzen, 1991). It is frequently used to explain behavioral patterns and better understand how individuals make behavioral decisions (Xiao &Wu, 2008). Ajzen (1991) indicated that the precedent of any behavior is the formation of an intention towards that behavior.

Previous studies citing the theory of planned behavior indicated Covid -19 vaccination hesitancy was associated with the notion that the seriousness of Covid-19 has been inflated. Those studies stated that the theory of planned behavior explained how vaccination hesitancy has been linked to fear, the notion that infection will not happen, attitude, knowledge, the perception of being at risk and prior vaccinations for other diseases, including influenza (Ghaddar et al., 2021). State officials adhering to this idea may have inadvertently put their citizens at an elevated risk from COVID-19. The correlation between states with inadequate health literacy and lower education may also be contributing factors in states that have high COVID-19 death rates and low vaccination rates.

Other studies from the past two years indicate a rise in conspiracy theories and misinformation about the effectiveness of vaccines. Many of the groups that have low vaccination rates also have measurable socioeconomic factors and more conservative political inclinations. Kruglanski, et al., (2019) discuss the three pillars of radicalization

as needs (the need for personal significance), narrative (the narrative of the group that guides the individual's quest for significance) and lastly, networks (which provide the validation of the individual and provide respect and rewards). While Kruglanski et al., used these methods to identify terrorist groups, these same principles apply to the rapid rise of rabid misinformation—misinformation that was also spread by state officials. Previous research literature that explored the nuances of conspiracy theories throughout time provided a conceptual and historical context at how these theories gain popularity and momentum. Given this background and the plethora of information readily available to citizens, this study will seek to explore if state officials were also subject to presenting conspiracy theories as reliable information.

Conspiracy theories may have played a role in messaging by state public officials. Van Prooijen and Douglas (2018) view conspiracy theories as a social psychological phenomenon. They also note limitations on studying the impact of conspiracy theories, however, due to the field lacking a solid theoretical framework that puts previous findings in context and allows for future predictions. The Adaptive Conspiracism Hypothesis is an emerging theory cited in the Van Prooijen and Douglas (2018) study. Conspiracy theories have gained traction using social media. Prior to 2019, there was no real governing or policy related to the spread of misinformation on social media (Pertwee, et al., 2022). The Center for Countering Digital Hate estimates that there are 58 million followers on misinformation sites that represent a billion-dollar-a-year industry.

Conspiracy theories may have impacted states' messaging regarding COVID-19. Mississippi's highest ranking health official during COVID-19, Dr. Thomas Dobbs,

received threats to himself and his family for suggesting COVID-19 vaccination was the key to fighting the COVID-19 pandemic. A conspiracy theory of his getting compensation for every vaccine led to scrutiny and was denounced as false by Dobbs (Pettus, 2021). In South Carolina, GOP Leader Pressley Stutts, died from COVID-19 after vocally calling Covid an illusion. Stutts continued to push conspiracy theories regarding Covid on his deathbed, calling COVID-19 a bioweapon (Etienne, 2021). Stutts also spoke out against Vice President Harris' efforts in South Carolina to increase COVID-19 vaccinations.

Additionally, the spread of conspiracy theories and misinformation by some elected officials while managing COVID-19 may have created a unique belief system that the pandemic was not a wicked problem and not a significant issue. The misinformation provided by some state officials was not only a threat to public health but also a threat to a democracy that has relied for centuries on a basic construct of trust in government (Flynn & Harbridge, 2016). That trust may be eroded when government officials cannot be trusted to provide citizens with truthful and science-based information. State officials have a moral and ethical obligation to adhere to information that is not editorialized or politicized during crisis scenarios and wicked problem situations (Funtowicz & Ravetz, 1990). Even states with high vaccination rates were not immune to conspiracy theories. Vermont's Chelsea Green published information that sided with conspiracy theories about COVID-19 (Edgar, 2022) and state officials were powerless to stop the distribution. Chelsea Green took the stance that the publications had the right to be incorrect about COVID-19.

The literature found that often citizens do not express concern over COVID-19 vaccination status. Leonhardt (2022) found that a large portion of those unvaccinated against Covid-19 do not express much concern over their unprotected status. Vaccination against Covid-19 appears to be a choice and that any bad outcomes from contracting Covid would not happen to those that remain unvaccinated against Covid-19. Pertwee, et al., (2022) found that one fifth of Americans believe the Covid-19 vaccine includes governmental tracking devices. State officials in South Carolina and Mississippi indicated that getting the vaccine was a personal decision and downplayed the positive community impacts largescale vaccination would provide. Arizona officials issued executive orders that COVID-19 vaccination information was private and that employers could neither require nor ask about COVID-19 vaccination status.

The theory relates to the present study by asking how social constructivism and the creation of identifiable realities impact effective and ineffective messaging by state officials during COVID-19. Communication from state officials may have impacted citizens' COVID-19 vaccination and death rates. Additionally, the information provided by political leaders at the federal level at the onset of COVID-19 may have caused states to both embrace and rally against information designed to protect the welfare of United States citizens.

Global leaders created the COVID-19 policy that was not solely based in the health sector but involved every aspect of a global economy, including finance, law, foreign relations, tourism, and industry. (Mukherjee, 2021). Mukherjee also intoned that COVID-19 could be defined as a wicked problem, per the parameters set forth by Rittel

and Webber's tame and wicked problems from 1973. Before information regarding COVID-19 could trickle down to the state level, information was initially available as only a global notion. Mukherjee (2021) relied on the theory of social constructivism in understanding the decisions made by world leaders during the early days of Covid-19. Mukherjee (2021) concluded that trust in government was key to protecting citizens during the Covid-19 pandemic. Ingram, et al., believed citizens respond in a certain way to policy (Ingram, et al., 2007). If that policy is inherently ineffective, as may have been the case for specific states during the initial days of COVID-19, citizen health and well-being is directly impacted.

Literature Review

Rittel and Webber's (1973) theory of wicked problems has been applied to COVID-19 by many scholars. Those authors include Klasche (2021) and Schiefloe (2021). Schieflo2e (2021) indicated that any possible resolution for COVID-19 might have adverse repercussions, thus defining COVID-19 as a wicked problem. Klasche (2021) referenced the issues government officials had in defining COVID-19 as an economic or health crisis—and which of those took priority—resulting in COVID-19 being a wicked problem.

COVID-19 was defined as a wicked problem by other researchers. Baltzersen (2022) reiterated that government officials were challenged in creating public policy to protect citizens worldwide. Angeli (2021) also referred to COVID-19 as a wicked problem and discussed how the same information could be used to create inconsistent and conflicting guidance both in the scientific community and in public policy. Opposite

viewpoints concerning the definition of COVID-19 as well as the resolutions needed to mitigate it are consistent with a wicked problem, according to Angeli (2021), citing Alford and Head (2017). Alford and Head (2017) also emphasized the need for cooperation among stakeholders during a wicked problem occurrence. That cooperation did not happen among different states within the United States, creating messaging by state officials that was conflicting and hard to interpret. Public policy may be able to utilize these factors to improve COVID-19 vaccination rates in states where numbers remain below the national average.

Covid-19 has also been defined as a critical problem that requires timely decisions. Mukherjee (2021) indicated that the social construction of a global health emergency required expedited use of authority—an authority that the United Sates was slow to enact. Mukherjee (2021) utilized the theory of Rittel and Webster's tame and wicked Problems (1973). The lack of quick leadership on behalf of President Trump to act on Covid-19 as a wicked problem because he had no real answers during an emerging pandemic and was wary of asking citizen stakeholders to step up and do their part to curb the pandemic. Trump failed to ask citizens to get vaccinated for the greater good and to create an ongoing effort in the fight against Covid-19. Mukherjee's (2021) analysis indicated a slow response on COVID-19 by President Trump, when compared to other nations.

Researchers have approached the COVID-19 pandemic in a plethora of ways. The strength of the research is that it is plentiful and varied. There are many attempts to understand Covid19 vaccine hesitancy and many reasons cited. The weakness of the

research is that it is ongoing and evolving. There is little information on how states impacted citizen health decisions while there is research on government distrust being a viable factor in COVID-19 vaccine decisions.

The U.S. COVID-19 vaccination rate is 67.7% (Johns Hopkins, 2022). As of July 2022, there have been over a million deaths in the United States, according to the New York Times as cited by Becker Hospital review (2022). The death rate from COVID-19 in South Carolina is the 13th highest in the United States while being rated 23rd in terms of population (Johns Hopkins, 2022). 58.5% of South Carolina citizens have been fully vaccinated against COVID-19 (Covid 19 data explorer, 2022).

Another state that has experienced high COVID-19 death rates is Mississippi, with over 12,000 deaths. The vaccination rate for Mississippi is 52.4%, also below the national average for the United States (Covid 19 data explorer, 2022). Arizona has a COVID-19 vaccination rate of 63.6% (Covid 19 data explorer, 2022) higher than both Mississippi and South Carolina. However, the COVID-19 death rate in Arizona is 30,768 (Covid 19 data explorer, 2022). High death and low COVID-19 vaccine rates in Arizona, Mississippi, South Carolina create a community welfare issue.

By comparison, Vermont has experienced high COVID-19 vaccination rates with 82.1% of its citizens being vaccinated (Covid 19 data explorer, 2022). Vermont has had only 693 COVID-19 related deaths among its citizens (Covid 19 data explorer 2022). Similarly, Hawaii has a COVID-19 vaccination rate of 79.1% (Covid 19 data explorer, 2022). There are 1568 Hawaiian citizens that have died due to COVID-19 (Covid 19 data explorer, 2022). This research will explore what messaging and measures these two states

have taken compared to Arizona, Mississippi, and South Carolina to manage COVID-19 effectively.

The states governments of Arizona, Mississippi, and South Carolina's opposition to the federal mandates of the Biden Administration may have impacted its citizens' decisions to seek Covid-19 vaccinations. Van Prooijen and Douglas (2018) indicated that beliefs that are based on uniformed or flawed information produces behavior that has an impact on citizens. The lack of COVID-19 vaccination has real consequences: deaths due to Covid-19. Exploring the behavior of these states elected officials as it relates to not getting vaccinated against COVID-19 is the key to understanding and addressing ways to keep more citizens safe and healthy.

Meanwhile, the Healthcare Association of Hawaii (HAH) endorsed and embraced the Federal mandate requiring all healthcare workers to be vaccinated against COVID-19 (HAH, 2020) even as that mandate was being challenged in Federal Appeals Court. Similarly, Vermont enacted a Stay Home, Stay Safe campaign and proactively stated that information would be continually updated as more information came from the Center for Disease Control (CDC) and the World Health Organization (WHO) so citizens were aware that new information would be forthcoming (Novel coronavirus, 2020). The transparency of Vermont officials, stating that information would be updated and changed as needed, was a positive communication tool and eliminated the notion that initial information was not incorrect but evolving.

Initial data sources indicate that some of the selected state officials put emphasis on COVID-19 vaccinations being a personal choice. In a mixed method study conducted

by Bennett, et al., the participants that were vaccinated against COVID-19 stated that choosing the vaccine strongly correlated with their religious and personal beliefs (Bennett, et al., 2022). The unvaccinated participants identified as neutral when asked to rank this (Bennett, et al., 2022). By September 2020, Americans were nearly equally divided on whether or not they would seek out the COVID-19 vaccination, with 51% stating they were in favor of the vaccine and 49% saying they were opposed to the vaccine (Tyson & Funk, 2020).

It is also possible that feelings of superiority, both personal superiority and party superiority, are prominent in citizens in creating Covid-19 vaccine hesitancy as specific groups feel as if their personal knowledge is superior to that of public health officials. Harris and Van Bavel (2021) studied political party feelings of superiority and indicated that those feelings of superiority could impact decisions. The citizens that remain unvaccinated against Covid-19 may be actively discouraged by the actions of elected officials, seeking to downplay the effectiveness and severity of the Covid-19 pandemic.

Messaging from elected officials, both at the onset of Covid-19 and continuing through proposed legislation which impacts employers' ability to seek Covid-19 vaccinated employees, may have contributed to high death rates and low vaccine rates for citizens. COVID-19 remains a controversial subject, which is a novel concept for a global pandemic. Basic health measures, such as masking, have become a subject of debate among state officials. Johansson (2021) indicated that masking the general population may lessen the spread of COVID-19 but, state officials questioned whether this practice was effective, especially in schools. There is current conversation in South Carolina to

limit the wearing of masks as Covid wanes, as some criminals are utilizing masks to not be identified while perpetrating crimes. As COVID-19 is ongoing, the ongoing flow of information from state officials still impacts the well-being of its citizens. There is an ongoing need to study how policy and communication from state officials impacts citizens' health decisions regarding COVID-19.

The approach to this study is meaningful in identifying how social constructivism and the creation of identifiable realities impacted effective and ineffective messaging by state officials during COVID-19. Communication from state officials impacted citizens' COVID-19 vaccination and death rates. Additionally, the information provided by political leaders at the federal level at the onset of COVID-19 caused states to both embrace and rally against information designed to protect the welfare of United States citizens.

Summary and Conclusions

Historically, a pandemic in the United States is not a new experience or novel notion. The Spanish Flu outbreak of 1918-1919 killed 675,000 Americans (Louie, 2005). The government required mandatory mask wearing and limits on social gatherings during that time. Additionally, violators were fined and even imprisoned (Louie, 2005). In 2004-5, the threat of A1 (Bird) Flu was very real. Louis (2005) referenced the threat of A1 (Bird) Flu as a global pandemic—and that global health experts agreed that the potential for a dire situation was there. Yet in 2005, people worldwide rushed to get relatively new and untested vaccines to prevent illness and possible death from A1. Government and media coverage about the possible pandemic of A1 had some limitations as minute-by-

minute updates were not widely available. However, vaccine rates skyrocketed to nearly 70% according to the CDC. Among Veterans Health Administration patients, those numbers were even higher for those over age 65: nearly 80% of those patients received the flu vaccine during that time (Kahwati et al., 2007). The demand even surpassed the availability of the A1 vaccine, creating shortages and priority dosing. Patients younger than age 65 surveyed by the Veterans Health Administration expressed the desire for the vaccine but cited ineligibility and supply shortages as reasons that did not happen (Kahwati et al., 2007).

By contrast, COVID-19 represents the first pandemic in which citizens had up to the minute access to media and worldwide health sites that updated information constantly. Baltzersen (2022) identified this unlimited media access and noted that this direct access meant that citizens received regular updates via press conferences, social media posts, and through traditional periodicals, such as newspapers, during the early days of COVID-19. Like the A1 Flu vaccine there was initially priority given to groups that were more at risk. The vaccination rate for A1 Flu remains higher than the vaccination rate for COVID-19, where more information, more product to distribute, and more ongoing issues are occurring.

Each state that will be utilized in this study is unique in their handling of COVID-19. Murphy (2022) said there were many variables that converge to impact individual states death rate from COVID-19. These include public policy regarding health, the general welfare of the states' citizens and vaccination rates. Lack of COVID-19 vaccines create a community welfare issue by creating additional stress on the healthcare system,

school systems, and government agencies. Previous research has studied COVID-19 vaccine hesitancy but the messaging by specific states has not been explored. Misinformation impacting public health as well as the politicization of life saving COVID-19 vaccines needs to be further explored. There are many quantitative studies that seek answers about COVID-19 through data statistics. The comparison of states that effectively managed COVID-19 (as measured by vaccination and death rates of citizens) compared to states who experience low COVID-19 vaccination rates, and high COVID-19 death rates represents a gap in the literature. Exploring the messaging and public polices of these states can be utilized in creating nationwide public policy regarding vaccine mandates that more of the population will embrace, thus protecting society against a global pandemic. The comparison of states that effectively managed COVID-19 (as measured by vaccination and death rates of citizens) compared to states who experience low COVID-19 vaccination rates, and high COVID-19 death rates represents a gap in the literature. Exploring the messaging and public polices of these states can be utilized in creating nationwide public policy regarding vaccine mandates that more of the population will embrace, thus protecting society against a global pandemic.

Making sense of how state officials presented COVID-19 to their citizens is in alignment with the way data within social constructionism is gathered and processed. Different demographic groups in the five states that will be studied make up groups that construct social constructivism's paradigms (Patton, 2015, p 121) which, in this case, would be COVID-19 vaccine hesitancy and deaths. In the processing of the state messaging, Patton (2015) asked if social constructivism influenced the idea of citizens

creating their own reality—a reality that ultimately had a direct effect on COVID-19 vaccination and death rates. That constructed reality and, the consequences of that created reality, impacts more than just those states' citizens (Patton, 2015).

This study will explore the messaging trends and information for states that effectively saw high COVID-19 vaccination rates, and low COVID-19 death rates, compared to states who saw low COVID-19 vaccination rates and high death rates due to the pandemic. The identification of effective communication practices can help guide public policy during the initial stages of a wicked problem emergency. This guidance can protect communities regardless of geographical and demographic differences. It is important to note that state information is only as good as the federal information that is provided so policy must be tiered to be uniformly distributed. Officials must be aware that their words have a direct impact on community welfare. In 2022, President Biden announced on *60 Minutes* that COVID-19 was over (Sullivan &Stein, 2022). This surprise announcement-- that was not supported by his administration's health teams-- has the potential to impact the future of Americans' health decisions, including COVID-19 booster shots since President Biden indicated the pandemic was over. The importance of accurate messaging during wicked problem scenarios like COVID-19 cannot be underestimated. Knowing what key phrases work—and do not work—are an intrinsic part of keeping citizens alive. The public policy of Arizona, Mississippi, South Carolina, Hawaii, and Vermont during March-December 2020 may have contributed to citizens health decisions. This study will identify keys phrases from reviewing press conferences and published information from the five states' health departments and compare those

phrases to how citizens responded to COVID-19 by examining COVID-19 vaccination and death rates.

Chapter three will provide the data gathering methodology and analysis for responding to the research question that I will address in this study: How did social constructivism and the creation of identifiable realities impact effective and ineffective messaging by state officials during COVID-19. A table of preliminary coding based on the literature review and preliminary data sources will be included. An appendix of preliminary data sources for each of the five states that will be explored in the study will also be included to demonstrate the availability of data sources. Chapter three will provide a roadmap of how the messaging by state officials will be explored to identify patterns and trends that may have played a role in the way citizens reacted to COVID-19.

Chapter 3: Research Method

The purpose of this qualitative study was to determine how state official messaging may have impacted citizens in Arizona, Mississippi, South Carolina, Vermont, and Hawaii, resulting in different COVID-19 vaccination and death rates. The research question was the following: What role did social constructivism play in COVID-19 messaging to citizens by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020? Some of these states represented some of the lowest vaccine rates in the United States and created their own reality regarding COVID-19 information, ignoring traditional guidance and protocols during a global pandemic. Exploring the common state official messaging factors that were shared by these different states, each with unique different demographic segments within the populations, could be an indicator of ongoing COVID-19 vaccine hesitancy. Exploring these states messaging may identify ways to contradict misinformation and increase COVID-19 vaccine rates, widely considered by the CDC (2020) and WHO (2020) to help curb the spread of COVID-19 and reduce deaths from it. Increasing the COVID-19 vaccination rates may have improved death rates due to COVID-19 in Arizona, Mississippi, and South Carolina.

No study is viable without indicating the steps that were taken to ensure credibility. Especially relevant to the current study was triangulation of methods, sources, and context (see Burkholder et al., 2020). The findings obtained may have transferability because contextual descriptions were provided. Details about data collection and

participant selection and recruitment are provided so other researchers can follow this protocol to replicate the study in different states.

Following these steps ensured that the study adhered to dependability standards, which include describing enough details for future replication. The research must also reflect the perceptions and ideas of the participants, rather than those of the researcher. Confirmability refers to every measure being made to ensure that bias is eliminated. I sought to provide a better understanding of COVID-19 messaging by public officials in Arizona, Mississippi, South Carolina, Vermont, and Hawaii from a public policy perspective. It was not my job to judge these personal perceptions and decisions but to record and study them so a better understanding of the causes could be provided.

Comparing the messaging of state officials from Arizona, Mississippi, South Carolina to the more effective state communication of Hawaii and Vermont, based on COVID-19 vaccination and death rates, may identify measures that worked to prevent deaths and illness due to COVID-19. For the purpose of the current study, effective communication was defined as the messaging of state officials to keep death rates due to COVID-19 low and vaccination rates for COVID-19 high within the state. Population was not a measurable factor because these states ranked from the 14th most populated state to the 49th most populated state (United States Population by State, 2021).

The idea of social constructivism is that ideas and notions do not come from individuals but from coordination with others, which in turn creates a unique belief system. This may have been happening in Arizona, Mississippi, and South Carolina regarding vaccination hesitancy. Meanwhile, state officials in Hawaii and Vermont

encouraged their citizens to get vaccinated. Hawaii used Earth Day as a marketing tool to get citizens vaccinated. Vermont was lauded for making getting a COVID-19 vaccine so easy (Milligan, 2021). Vaccines are proven effective against the spread of a global pandemic (Centers for Disease Control [CDC], 2020a). Lack of vaccination is not only a public health threat but also a threat to a democracy that has relied for centuries on a basic construct of trust in government (Ghaddar, et al., 2022). The spread of conspiracy theories and misinformation by elected officials about vaccines is especially troublesome (Lynas, 2020). Public policy needs to reflect a standard of truthful and science-based information that those in power have a moral and ethical obligation to adhere to and cannot walk away from (Gregersen, 2020).

Chapter 3 addresses the specifics of how the study was conducted. The research design and rationale are presented, as well as the role of the researcher. The methodology for the study is explained, including the sampling strategy and data collection and analysis tools. This chapter also outlines how validity for the study was established.

Research Design and Rationale

The research question that I addressed in this study was the following: How might social constructivism impact COVID-19 messaging by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020? Communication from state officials may have impacted citizens' COVID-19 vaccination and death rates. Additionally, the information provided by political leaders at the federal level at the onset of COVID-19 may have caused states to both embrace and rally against information designed to protect the welfare of United States citizens. This study focused on what was

said at official press conferences and what was published in official press releases and on the selected states websites so no media bias would be present. Studying only the content, free of media narratives and commentary, was intended to lead to a better understanding of what was being said without network interpretation.

The phenomenon that was relevant to this study was how different U.S. states may have used social constructivism to create their own realities about the handling of COVID-19. Those realities may have impacted COVID-19 vaccination rates, and in turn COVID-19 death rates. The identification of keywords that proved effective and ineffective may provide insight into effective messaging during future crises that impact all citizens.

This research may provide insight into the communication by state officials that may have contributed to high COVID-19 death rates and vaccine hesitancy among citizens in Arizona, Mississippi, and South Carolina. That communication was compared to the messaging from state officials in Hawaii and Vermont, states that had high COVID-19 vaccine rates, compared to the national average, and low COVID-19 related deaths. Understanding these factors may help public administrators implement more effective pandemic plans in the future. Communication by government officials is linked to how communities respond to wicked problems. The most effective way to communicate with citizens during a pandemic is to help formulate decisions in the initial policy planning of how to manage a pandemic.

The methodological approach that was used in the current study was a qualitative content analysis of data from state official press conferences, press releases, and

websites. Exploration of state press conferences, news briefings, and press releases helped me determine whether the theories explored were present in the messaging. The idea of social constructivism is that ideas and notions do not come from individuals but from coordination with others, which in turn creates a unique belief system (Schreiber & Valle, 2013). This unique belief system by state officials may have created messaging that directly impacted COVID-19 vaccination decisions from March to December 2020. I directed my inquiry by focusing on states with high COVID-19 deaths and low COVID-19 vaccination rates compared to other states that had high vaccination rates and lower deaths due to COVID-19. There was a gap in literature about how states communicated information to citizens during the COVID-19 pandemic to effectively manage the pandemic.

Role of Researcher

I was both an observer and an instrument in this study. I observed and identified common trends in the way COVID-19 was presented to the public. I did not participate in supplying any official information regarding COVID-19 to any citizen on any official level.

I did not have any personal relationships with the elected officials related to the archival information for Arizona, Mississippi, Hawaii, or Vermont. As the former director of operations for a former South Carolina gubernatorial candidate and former Congressman, I had professional relationships with elected officials throughout the state of South Carolina. However, those relationships did not extend to any official state

mandates regarding COVID-19. I did not supply any information regarding COVID-19 in any official capacity on any level.

Bias was managed by adhering to the idea that my job was to seek information and not to judge. Recognizing that I believe everyone should be vaccinated against COVID-19 helped me mitigate any bias. I also acknowledged that I believe conspiracy theories and feelings of party superiority have no place in health decisions. I used *epoche*, meaning the researcher does not judge and remains detached as a tool to suspend judgment (Creely et al., 2021).

I had to be mindful of confirmability because I did have a personal agenda in ensuring that every citizen is protected from avoidable harm or death from COVID-19. Given previous research, I was not alone in the desire to protect the public from a continued public health crisis brought on by the willful negligence of specific groups. However, I recognized that these personal health decisions are at the sole discretion of the individual (see Bennett et al., 2022).

Methodology

State Selection Logic

This study initially began as an exploration of South Carolina COVID-19 death and vaccination rates. South Carolina is where I have resided for the past 18 years and is the state I consider to be my home. I was concerned about the low vaccination rates and high death rates from COVID-19 and wondered why this was the case. I began to explore other state statistics about COVID-19 and did preliminary research to determine which states had low COVID-19 vaccination rates high COVID-19 vaccination rates. This

information was readily available from a variety of sources including John Hopkins University (2022) and the CDC (2022). Appendix B provides charts from the CDC showing cases and death rates for each selected state from March-December 2020.

I wanted to include South Carolina in the study because my preliminary focus had been there. In researching other states with statistics similar to South Carolina, I was able to broaden my focus to Arizona and Mississippi, which were statistically close to South Carolina in terms of COVID-19 vaccinations and deaths. Knowing which states were statistically equal in low COVID-19 vaccination rates and high COVID-19 death rates would not have been sufficient to compare messaging by state officials. The study needed a comparison to see which states had high COVID-19 vaccination rates and low COVID-19 death rates.

The study was then expanded to include Hawaii and Vermont as states that effectively managed COVID-19 based on vaccine trackers. The US coronavirus vaccine tracker was used to guide these findings (US coronavirus vaccine tracker, 2022). Hawaii had a COVID-19 vaccination rate of 92% in 2022 according to the US coronavirus tracker. Vermont had a vaccination rate of more than 95% based on the same data. I wanted to know what these two states had done that resulted in citizen protection against COVID-19. Furthermore, I wanted to investigate whether the higher vaccination rates in those states led to lower COVID-19 death rates.

I concluded that an adequate sample size could be achieved by comparing five U.S. states. Data saturation was achievable because five states represent 10% of the overall United States. The purposive sample of the five states provided enough data to

compare the states. Theoretical saturation, meaning no additional insights can be gleaned from the data, was harder to achieve because the data on vaccination rates are constantly evolving and, as variants rise, more citizens may choose to get vaccinated even if they had not done so initially. There was also a lack of theory on self-reporting COVID vaccination rates, according to Siegler et al. (2021).

The five states were selected after researching statistics that indicated the states either had high or low death and vaccination rates for COVID-19. Data collection sources included archival press conferences from print releases and video from the official press conference of the sample states. 2022 vaccination rates among Arizona, Hawaii, Mississippi, South Carolina, and Vermont citizens were compared to the national population, providing a framework of groups showing the lowest vaccination rates.

Once the search terms were established, I did a preliminary search of the five selected states' health department publications and official press releases to ensure enough sources would be available. I also searched archival press conferences using search terms related to *important Covid 19 milestones* including *shutdowns*, *mask mandates,* and *school closures* based on the COVID-19 timeline from the CDC (CDC, 2023b). The exploration of states' COVID-19 messaging led to a search of *Covid 19 conspiracy theories* to determine whether the public officials' messaging might include common conspiracy theories and to determine whether patterns emerged that may be relative to the study.

A search was used to determine the top COVID-19 conspiracy theories in 2020. Lynas (2020) created a list of the top 10 conspiracy theories in April 2020. This list was

relevant to the current study because the time frame for this study was March-December 2020:

1. COVID-19 can be blamed on 5G.
2. Bill Gates is to blame for Covid.
3. The virus broke out from a Chinese laboratory.
4. COVID-19 was created as a biological weapon.
5. The U.S. Military was responsible for bringing the COVID-19 virus into China.
6. COVID-19 can be blamed on GMOs.
7. COVID-19 is actually nonexistent.
8. The "Deep State" is controlling COVID-19.
9. COVID-19 is a plot created by Big Pharma.
10. COVID-19 death rates are inflated and manipulated.

Using this list provided guidance on conspiracy theory search terms including *Covid 19 conspiracy theories* and *Covid 19 as a hoax*. Other search terms included *Covid 19 as a lab experiment gone wrong* and *Covid 19 as a biological weapon*. I also used *conspiracy theory related* to *the actual existence of Covid 19.* Further conspiracy theory searches included *Covid 19 as a deep state manipulation to make then President Trump look bad*. I then determined whether these common conspiracy theories were present in public officials' messaging to citizens.

The messaging by state public officials also led to initial term searches, indicated in italics. Terms regarding political party superiority and states' response to COVID-19

federal mandates were explored. Other searches included school shutdowns pertaining to the five states that will be studied. Mask mandates and ongoing COVID-19 legislation of the five selected states were also search terms. There is much information about COVID-19 available, including current COVID-19 research. If anything, the availability of an abundance of information made limiting the study challenging. As COVID-19 continues to impact society, more information is available daily. I have attempted to research initial responses by states in the early days of Covid. Early days are defined as the period around March 2020, when states first addressed COVID-19 as an emerging pandemic under the Trump administration (Mukherjee, 2021) until December 2020. COVID-19 has not had a finite end date and is still ongoing. Updated information from the Biden administration and states' reaction to mandates post 2021, when President Biden took office, are also notable milestones for this study. It should be noted that all vaccinations rates cited in this proposal reference 2022 statistics while the messaging from state officials that will be explored is from March-December 2020. COVID-19 vaccination rates and death rates continue to be updated by state officials as the pandemic has not been fully eradicated.

As more variants begin to emerge in COVID-19, understanding the urgency of answering these questions–and combating them–was a crucial undertaking. Criteria for applying or developing theory to the dissertation that must be appropriate, logically interpreted, well understood, and align with the question at hand (Lovitts,2005) (Grant & Osanloo, 2014). This application was a good choice for my dissertation. It also provided

credibility, which Ravitch and Carl (2017) define as including sampling strategies to contribute to an authentic rendering of the context (Ravitch & Carl, 2017).

Instrumentation

Data was collected and recorded in both Google and Word documents, as well as in folders designed to keep sources and insights in a manageable way. There were no active participants that required participant debriefs. Only archival information, readily available in the public sphere, was used. Future studies may include how Global, then Federal, information was distributed that in turn tickled down to the state level, where the impacts had direct impact on citizen well-being.

Sources from archival footage of state press conferences, state websites, and periodicals that showed official press releases were reviewed. Sources were solely from mandates, press releases, and press conferences released by the selected states. There was no exploration of any associated media or editorial content as only the official messages were reviewed and studied. There was more than enough adequate data and data sources to provide the information needed for this study as news conferences and press releases were readily available from all the selected states and were issued on a regular and frequent basis. I reviewed an official press releases or new conferences per state, per month, from March-December 2020. Data points totaled fifty. These preliminary sources are listed in Appendix A. I attempted to correlate increases and decreases of COVID-19 rates to the press conferences and/or press releases. COVID-19 cases and deaths are listed in Appendix B.

Additional data sources included transcribing recorded audio of the news conferences. Both verbatim transcription and note taking formats were used. Notes from these secondary sources, including physical observations of the participants, were also included, where applicable. Data was collected from publicly available archival print and video coverage from the sample states. Data collection was expected to take thirty to forty-five days. As the variety of sources will come exclusively from the selected states official messaging, they will be free of liberal or conservative news bias. Public Broadcasting network archives from each state had press conferences available for every state except Hawaii. These sources were reviewed with protocol that would parallel an actual interview to provide the framework for data collection.

Data Analysis Plan

Document analysis of archival materials, specifically, data from official press conferences, press releases, and state websites, was reviewed for this study. Reviews of official news briefings by state officials were used to provide insight to the factors that have contributed to COVID-19 death and vaccination rates and noted which officials and attendees were present—and their demeanor and behavior—when possible. Footage and press releases from the early days of the COVID-19 pandemic from these states' officials helped to identify trends in language and sentiment that could have influenced their citizens. Quantitative studies were used as background research, citing statistics and demographics from previous studies about COVID-19 deaths and vaccine hesitancy. Document review protocol was utilized and can be found in Appendix C.

This study explored how state official messaging impacted Arizona, Mississippi, and South Carolina citizens, resulting in low COVID-19 vaccination rates and high COVID-19 death rates compared to Hawaii and Vermont, which experienced high vaccination rates against COVID-19 and low death rates. This study sought to answer what identifiable messaging trends from state officials impacted states to effectively or ineffectively manage COVID-19, based on vaccination and death rates. During qualitative research, themes and patterns should begin to emerge as data is collected. Burkholder, et al., (Burkholder, et al, 2012) identified several types of coding that researchers may find useful. These include a priori coding framework to sort initial data and open coding to identify initial trends and concepts. Axial and selective coding will also be useful in this study. Axial coding involves reviewing previously recorded data within the confines of the new research. Selective coding relates directly to the researcher's research question and answers the questions or problems posed there.

Coding using a qualitative data analysis software program was a viable option when transcripts were available of the press conference data sources. Transcriptions were created for those that were not already transcribed. There was a need for additional software to be utilized to track common phrases and themes in the data sources. Initial review of data sources and the literature review suggested there may be common themes that would emerge. I was able to include other emerging codes.

A qualitative data analysis software program was utilized to track codes. The codes were easily identified by using the first few letters of the responses, thus identifying the trends and similarities. For example, Fake News was be coded as FN. The

initial responses correlated to the articles and periodicals I have found on the subject. There was ample opportunity for even more codes to be added as they emerged.

It was also important to note the attendees during the state press conferences. It was noted if officials wore masks and who participates in the news conferences within the March-December 2020 parameters of the study. I believed there may be an indication of support or opposition to the policy being discussed, based on the official attendees. However, the demeanor and behavior of the officials and attendees was difficult to record as camera angles focused on the official speaking and not the attendees. These were among the observations I expected to be coding for but, did not. I expected to see trends emerge as the data was further explored that required other coding and that did happen.

I created a preliminary code list that is based on the literature related to the conceptual framework for this study as well as other elements important to the research question (see Table 1). That list included some of the conspiracy theories from the literature based on preliminary video footage reviewed. I had familiarity with the subject and was able to note those similarities, in real time, for comparison afterwards. It is important to note that this was a preliminary coding guideline and that I anticipated other codes to emerge during the data analysis phase.

Table 1

Preliminary Coding Chart

Category	Subcategory	Code	Abbreviation
Common phrase		Fake news	FN
		Liberal conspiracy	LC
		Flu-like	FL
		Economic impact	EI
		Mask mandate for	+MM
		Mask mandate against	-MM
		Conspiracy theory noted	CTN
		Prayers before press conference	PBPC
Theory related	Social constructivism	Party superiority noted	PS
		Question national policy	QNP
		Question WHO guidance	QWG
		Question CDC guidance	QCDC
		Vaccination considered a choice	VacC
		Embrace national policy	ENP
		Embrace WHO guidance	EWG
		Embrace CDC guidance	ECDC
		Vaccination for greater good	VFG
	Wicked problem	Clarabot mentioned	CM
		Economic issues acknowledged	ECA
		Social distancing guidelines in place	SDP
		Business hours/operations guidance issued	BOP
		Tourism impact	TIM
		School closures for	SCF
		School closures against	SCA
Other		Public forums	PF
		Private forums	PrF
		Impacts acknowledged	IA

Research identified specific conspiracy theories with aligned coding. Lynas' work on Covid-19 conspiracy theories provided ten conspiracy theories (Lynas, 2020). I believe that some of those previously identified conspiracy theories would be present in some states' messaging.

While this preliminary coding provides some general terms, I found in the archived press conferences and press releases, actual data collection sometimes resembled interview questions that would be asked of human participants, as reporters

asked questions. These archival documents were in essence my subjects. I posed a series of 10-12 questions about scenarios that may have impacted COVID-19 vaccination rates within the selected five states in reviewing the archival materials. These initial 10-12 questions led to other applicable, emerging trends among the subjects. These queries included:

- Was there a prayer before the press conference? Who said it?
- Did press conference participants wear masks? What organizations did mask wearers or non-mask wearers come from?
- What participants were present?
- What participants gave updates?
- Did press conference participants stand 6 feet apart?
- Were there any references to lack of trust in Federal COVID-19 protocol?
- Were there any references to COVID-19 having flu-like symptoms?
- Were any conspiracy theories mentioned?
- Was CDC guidance embraced or questioned or challenged?
- Is any political party superiority referenced?

Trustworthiness

Credibility was established by using resources among archival material that is readily accessible. Patton states credibility is attained by suitable data collection and analysis, confirming transparency procedures and clarity (Patton, 1999). Additionally, procedures should be utilized to ensure the quality of the research (Patton, 1999). This study exhibits transferability, meaning it can be applied to other situations, with

significant details being noted in data collection to provide thick descriptions (Libguides, 2023) to any state in the United States and, with minor modification, be applied to smaller nations internationally. The smaller nations should have a centralized policy messaging system in place versus independent, regional, policy makers. Dependability that provides immersive details of the study procedures and analysis methods so the study can be reproduced (Libguides, 2023) was established by utilizing a template as each state is reviewed. The strategy to have conformability, procedures asserting that the data and findings are not influenced by researcher bias (Libguides, 2023) required me to continue to be mindful of my own beliefs that citizens should be vaccinated against COVID-19 and that state officials should do everything possible to make that happen.

Ethical Procedures

There were no active participants. Archival information, readily available in the public sphere, was used. Future studies may include follow-up interviews with individuals and politicians. Those possible future participants will be addressed at that time. A variety of sources was utilized so a well- rounded view, free of liberal or conservative news bias, was used. Preliminary research indicated that press conferences from the five states being explored were readily available through each states' public broadcasting system archives available through YouTube and from other YouTube and Facebook sources. These press conferences were cross referenced with the closed captioning provided. Institutional Review Boards (IRB's) also ensured ethical procedure was being followed. Walden University Institutional Review Board (IRB) approval was granted for this study on 1-6-23, with approval number 11-06-23-1048821

Summary

Chapter 3 presented how data will be collected and analyzed. The role of the researcher and ethical considerations were explored. The methodology was outlined to provide a roadmap of how the research would be conducted. Appendix A provided a brief list of preliminary data sources for the proposed study. The press conferences were readily available in the public forum. Ten months of press conferences (March-December 2020) were reviewed for the research phase, seeking to identify key phrases and messaging trends that could have impacted those states' citizens' decisions on COVID-19 vaccinations. This appendix only included press conferences from March 2020 from each of the five states have been noted, using a variety of sources from public broadcast stations (available on YouTube) to Facebook Live permalinks, to news outlets. Appendix A sources were designed to demonstrate the availability of comparative press conferences from the five different states included in the study. Initial press conferences from March averaged approximately one hour. In total, approximately 50 hours of press conferences from the five states will be reviewed. Additionally, briefings from each states' public health advisories and Health Department websites will be reviewed and studied for messaging trends that may have further impacted COVID-19 vaccination decisions. Chapter 4 provides the specific data related to the study through data collection and analysis, culminating in the results of the study.

Chapter 4: Results

This chapter presents an analysis of the archival data examined from official press conferences and press releases from Arizona, Hawaii, Mississippi, South Carolina, and Vermont. This chapter also addresses the study's findings. I sought to discover whether the messaging of those states elected officials impacted COVID-19 vaccination numbers. However, I found that COVID-19 vaccination data were not available until late December 2020, and then only to limited populations. Nevertheless, the findings indicated that the social construction realities created by some of the selected states still impacted COVID-19 rates, hospitalizations, and death rates.

I analyzed official press conferences and press releases from the state officials of Arizona, Hawaii, Mississippi, South Carolina, and Vermont. This official messaging came primarily from those states' governors. Hawaii's lieutenant governor's messaging was included when there was no messaging from the governor readily available for that month.

Setting

I used archival data from the selected states' official press conferences and official press releases available in the public domain. No permissions were required to access the information from states' websites, Facebook pages, or YouTube channels. Because of the nature of the study and data, there was evidence of organizational conditions, which are reported in the results section. Conflicting views among various state agencies were part of these organizational conditions. Although these organizational conditions did not influence my study in any way, these experiences were important to

note. Officials may not have always been aligned with official messaging, despite appearances. The views and policies of the state officials may not have accurately reflected the expertise or advice of their COVID-19 teams.

I sought to determine how press conference attendees had interacted with each other and any specific and outward signs of disagreement among the official attendees. These observations proved difficult because faces were often obscured by masks and cameras focused primarily on the person speaking, not on the other attendees. Additionally, some of the archival sources were transcripts, so observations of interactions was impossible.

Demographics

Archival data from official press conferences and press releases were used for this study. Public messaging was primarily presented by the selected states' governors. The governors from the five selected states of Arizona, Hawaii, Mississippi, South Carolina, and Vermont were male with an average age of 61.6 years in 2020. I did not seek to correlate the personal demographic makeup of the states' governors to the public messaging in official press conferences and press releases.

These states were selected after researching statistics from the CDC (2020) that indicated the states that had high or low death and vaccination rates for COVID-19. Data collection came from archival press conferences, including print press releases and video from the official press conference of the sample states. All data were collected from publicly available sources. The vaccination rates from the CDC 2020 statistics for Arizona, Hawaii, Mississippi, South Carolina, and Vermont citizens were compared to

the national population, providing a framework of groups showing the lowest vaccination rates (Centers for Disease Control [CDC] 2023a) .

Data Collection

Data collection occurred by collecting and compiling official press conferences or press releases from the five selected states of Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020. A total of 50 official press conferences or press releases were collected from the selected states over a 10-month period from March-December 2020. One press conference or press release was collected from each state for each month in the study. Each of the selected states had 10 entries. Many of those official press conferences had transcriptions available. Those that did not have transcriptions were transcribed using Microsoft Word. The transcriptions varied in length, with some being as short as 2–3 minutes and others being nearly 2 hours long. Some states had multiple agencies presenting information during their press conferences while others had only the governor providing a statement, without any other attendees and with no question-and-answer opportunities from the press. For the 10-month period of March-December 2020, this study included an official, transcribed press conference from each of the five states, resulting in 50 data entries. Appendix E provides a complete list of the sources that were used for the data that were transcribed and coded. Specific data samples related to the transcription sources are cited in this study as state name and month/year. For example, Arizona, March 2020 refers to the press conference or press release for Arizona in March 2020 (see Appendix E).

Data were added to Delve qualitative data analysis software, by state and by month, to be coded. There were no changes to data collection from the plans presented in Chapter 3, although verbatim transcription was used rather than note taking. The transcriptions did not include physical observations of the participants. There was no observation protocol in place for this study. However, the results section indicates that stakeholder participation did not always mean that there was agreement among the attendees.

Data were collected from publicly available archival print and video coverage from the sample states. Data collection was expected to take 30 to 45 days, and that was an accurate time frame. Only the press conferences or press briefings were included in the data, ensuring they were free of liberal or conservative news bias. The question-and-answer portions of the press conferences led to further investigation of stakeholder attendee agreement, which is discussed in the results section. Public Broadcasting Service (PBS) network archives from each state had many press conferences available, except Hawaii, whose briefings were mainly found on YouTube channels. More information regarding the official press conferences used for this study will be addressed later and can be found in Figure 3 and Appendix D.

There were no unusual circumstances encountered in data collection except for the lack of official press conferences for some of the states in the later months of October, November, and December 2020. Data were collected from other archival sources during that time to accurately reflect the official messaging that was being presented to citizens by other means during those months. Public television networks in

each of the five selected states were contacted via phone and email to attempt to ascertain the number of official press conferences and press releases broken down by month and state. No interviews were conducted when contacting these resources. The stations were used in the same way a librarian would have been used to verify sources or give guidance on where to find information. The stations were contacted only as an avenue to access the archival materials this study was bound by IRB guidelines to use.

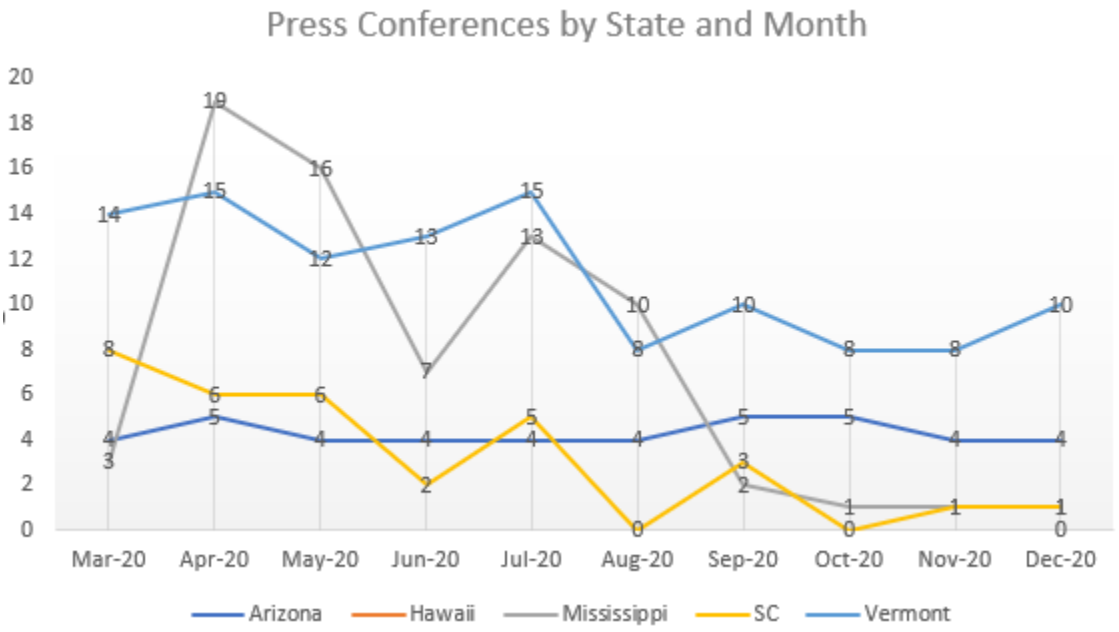
There was a limitation of knowledge because no information regarding the number of press conferences, from any source, was available for Hawaii. PBS Hawaii indicated via email that PBS Hawaii did not air any official press conferences during March-December 2020. Attempts to cite this information from the governor's office of Hawaii, YouTube channels that ran press conferences, and local national television affiliates proved futile. The governor's office of Hawaii indicated via email that former Governor Ige had not left any information regarding COVID-19 press conferences in the state archives. Attempts to contact former Governor Ige or through former staff were unsuccessful. The Communications Office of Hawaii was also contacted on December 20, 2023, as directed by the governor's office, but no information from that office was forthcoming, despite repeated attempts. These stations were contacted to confirm an adequate amount of data had been collected to ensure that data saturation had been achieved.

The number of press conferences and official press briefings varied from the other selected states. Arizona Governor Scott indicated in November 2020 that he had provided 40+ press conferences since March—an average of 4.5 per month (Arizona, November

2020). The numbers for South Carolina were provided by SCETV via email. They provided links to all YouTube airings of press conferences, which were then tallied by month. Mississippi press conferences were estimated in the same manner: tallying links on the Mississippi Public Television YouTube channel. Mississippi Vermont Public Television indicated (via a general email query) that Vermont Governor Scott gave three press conferences per week until late July 2020 when he reduced the number of press conferences to two per week. Vermont PBS does not have these press conferences in their archives. The number of press conferences indicated on Figure 3 for Vermont is the best estimate based on the information provided by Ty Robertson of Vermont PBS via email. None of the selected states had any official records regarding the number of official press conferences and official press briefings for March-December 2020. Figure 3 represents a best guess estimate because there were no archival data on this subject. Hawaii is excluded because no press conference tally was available from any source, despite efforts to collect this information. I determined that it was important to note estimated variances among states and to note when information was not being provided to the citizens in a timely manner. The number of press conferences for the selected states, excluding Hawaii, is estimated in Figure 3 from March-December 2020:

Figure 3

Press Conferences by State and Month



The number of press conferences regarding COVID-19 declined from March to December 2020 for the states of South Carolina and Mississippi while Arizona and Vermont remained steady. There are no data available for the number of press conferences presented by Hawaii Governor Ige despite repeated efforts made to gather this information. It was impossible to accurately correlate the number of official press conferences or press releases for Hawaii because Governor Ige used many diverse communication methods to convey information about COVID-19 to the public from official televised briefings to podcasts to radio talk shows. During question-and-answer sessions that were part of the transcripts, reporters often questioned the lack of press conferences regarding COVID-19. Notably, South Carolina's Governor McMaster declined to give any COVID-19 press briefings from September 10 to November 22,

2020, a period of over 2 months without official messaging. Reporters similarly questioned Governor Reeves of Mississippi for his lack of COVID-19-related press briefings in late 2020. Appendix E provides the resources used for Figure 3. Appendix E also contains a complete list of the data transcription sources used for this study.

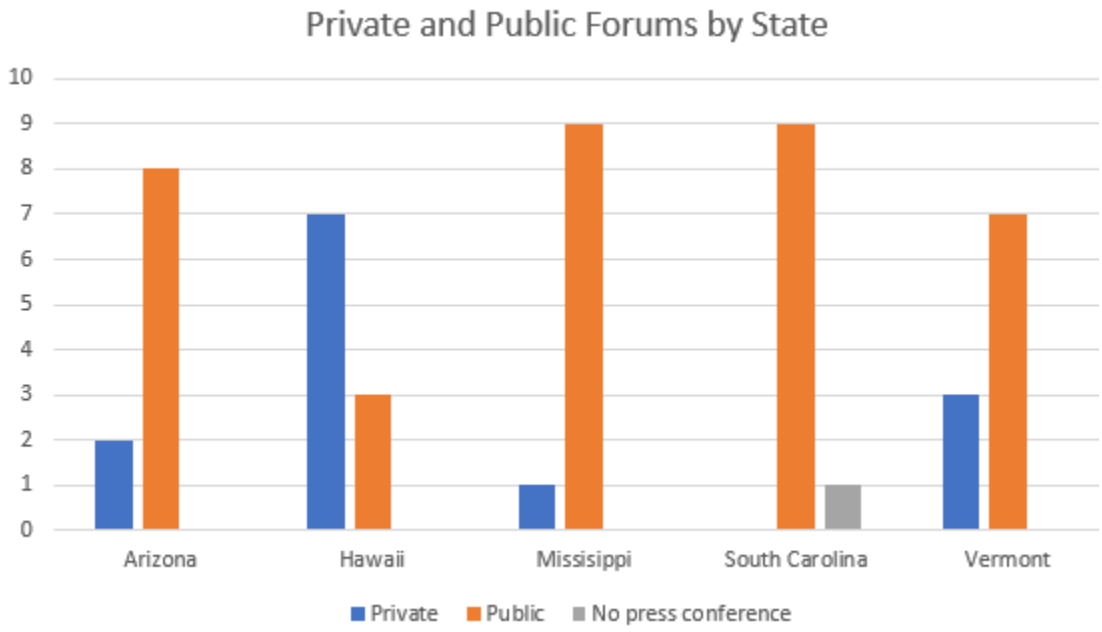
Data Analysis

The data were initially analyzed by coding the data sets using Delve software. Initial codes that might have indicated trends in the language of the messaging of the selected state officials were used. These initial codes were amended as other trends in the press conferences and press briefings emerged. These codes were then grouped to represent themes.

Data sets including private forums (such as press releases and memos from the Governor's office) and public forums (such as press conferences and published interviews) were analyzed. These data sets were created by accessing the transcripts of press conferences of the selected states. A complete list of the sites used for data transcription sources may be found in Appendix E. Many of the press conferences had transcriptions available. Those that did not were transcribed using the dictation feature of Microsoft Word. Private forums represented 14 data sets while public forums represented 36 data sets (see Figure 4).

Figure 4

Private and Public Forums by State



South Carolina had no official press conferences or press releases available in October 2020. The information transcribed was gleaned from footage from news reports. Only the footage was used, not commentary from the newscasters. December was noted as a private forum for Mississippi. This was because Governor Reeves was quarantined because his daughter had tested positive for COVID-19. Hawaii had the largest number of private forum press conferences in which information was provided without press interaction such as question-and-answer sessions.

The codes used for this study were designed to highlight meaning, tone, and innuendo of the messaging of the state officials in the five selected states. Codes were derived from the literature review related to the theories and the research question.

Several codes emerged as the process of coding the transcripts occurred, including verifying whether Bible verses quoted were correct, defense of then-President Trump, and the idea that increased COVID-19 testing meant an increase in positive cases. Table 2 contains the codes that were used throughout the study with the aggregate frequency noted. The emerging codes appear in bold.

Table 2

Codes Used with Definitions and Aggregate Frequency

Code	Definition	Aggregate frequency
ECDC	Embrace CDC guidance	141
BOP	Business hours/operations guidance issued	107
SDP	Social distancing guidelines in place	72
PS	Party superiority noted	71
CTN	Conspiracy theory noted	52
FA	**Faith**	**39**
TIM	Tourism impact	37
SCA	School closures against	36
VFG	Vaccination for greater good	33
-MM	Mask mandate against	25
+MM	Mask mandate for	23
QCDC	Question CDC guidance	22
CR	**Constitutional right**	**22**
TD	**Trump defense**	**21**
ES	**Embrace science**	**20**
MTMC	**More testing/more cases**	**18**
FL	Flu-like	17
EWG	Embrace WHO guidance	15
QWG	Question WHO guidance	12
LC	Liberal conspiracy	12
FN	Fake news	12
TC	**Trump concerns**	**12**
ENP	Embrace national policy	10
CS	**Common sense**	**10**
IA	Impacts acknowledged	8
PBPC	Prayers before press conference	7
QNP	Question national policy	4
VacC	Vaccination considered a choice	4
USA	**America USA**	**3**
IBQ	**Incorrect Bible quotations**	**3**
SCF	School closures for	2
UNA	**Unborn lives/Abortion references**	**2**
CBQ	**Correct Bible quotation**	**2**
COB	**Critical of Biden**	**1**
NNL	**No nationwide lockdown under Biden**	**1**
CM	Clarabot mentioned	0

Discrepant sampling is defined as one that refines a theory. Patton defines discrepant sampling as cases, (or in this study, states) that are deliberately and knowingly chosen to help solidify the theory in discrepant sampling (Patton, 2015). These five states were selected after researching statistics that indicated the states either had high or low death and vaccination rates for COVID-19. There was no discrepant sampling as I had no knowledge of what the findings from the archival data would be.

The state selection process was discussed in depth in Chapter 3. I did preliminary research to determine which states had low COVID-19 vaccination rates as well as states with high COVID-19 vaccination rates. This information was available from various sources including John Hopkins University (2022) and the CDC (2022). Appendix B provides information from the CDC showing cases and death rates for each selected state from March-December 2020. I wanted to include South Carolina in the study as my preliminary focus had been there. In researching other states with statistics like South Carolina, I was able to broaden my focus Arizona and Mississippi, which were statistically close to South Carolina in terms of COVID-19 vaccinations and deaths. Knowing which states were statistically equal in low COVID-19 vaccination rates and high COVID-19 death rates would not have been sufficient to compare messaging by state officials. The study needed a comparison to see which states had high COVID-19 vaccination rates and low COVID-19 death rates.

The study was then expanded to include Hawaii and Vermont as states that effectively managed COVID-19 based on vaccine trackers, including USA Facts (USA Facts, 2022). Hawaii currently had a COVID-19 vaccination rate of 92% in 2022,

according to USA facts. Vermont has a vaccination rate of more than 95% in 2022, based on that same data. I wanted to know what these two states had done that resulted in citizen protection against COVID-19 and if those states' messaging had impacted vaccination rates that would be proven to be outside the timeline of this study.

Evidence of Trustworthiness

Credibility was established by using resources among archival material that is readily accessible. Patton stated that credibility is attained by suitable data collection and analysis, confirming transparency procedures and clarity (Patton, 1999). Also, procedures should be used to ensure the research's quality (Patton, 1999). This study exhibits transferability, meaning it can be applied to other situations, with significant details being noted in data collection to provide thick descriptions (Libguides, 2023) to any state in the United States and, with minor modification, be applied to smaller nations internationally. The smaller nations should have a centralized policy messaging system in place versus independent, regional, policy makers. Dependability provides immersive details of the study procedures and analysis methods so the study can be reproduced (Libguides, 2023) was established by utilizing a coding template as each state was reviewed. The strategy to have conformability, procedures asserting that the data and findings are not influenced by researcher bias (Libguides, 2023) required me to constantly continue to be mindful of my own beliefs that citizens should be vaccinated against COVID-19 and that state officials should do everything possible to make that happen.

Results

I examined if there was a link between the official messaging of state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont and COVID-19 rates between those states in this study. I wanted to investigate if these selected state officials created their own realities and narratives about COVID-19 and how those may have impacted their citizens. Specifically, the research question that I addressed in this study was: *What role did social constructivism play in Covid 19 messaging to citizens by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020?*

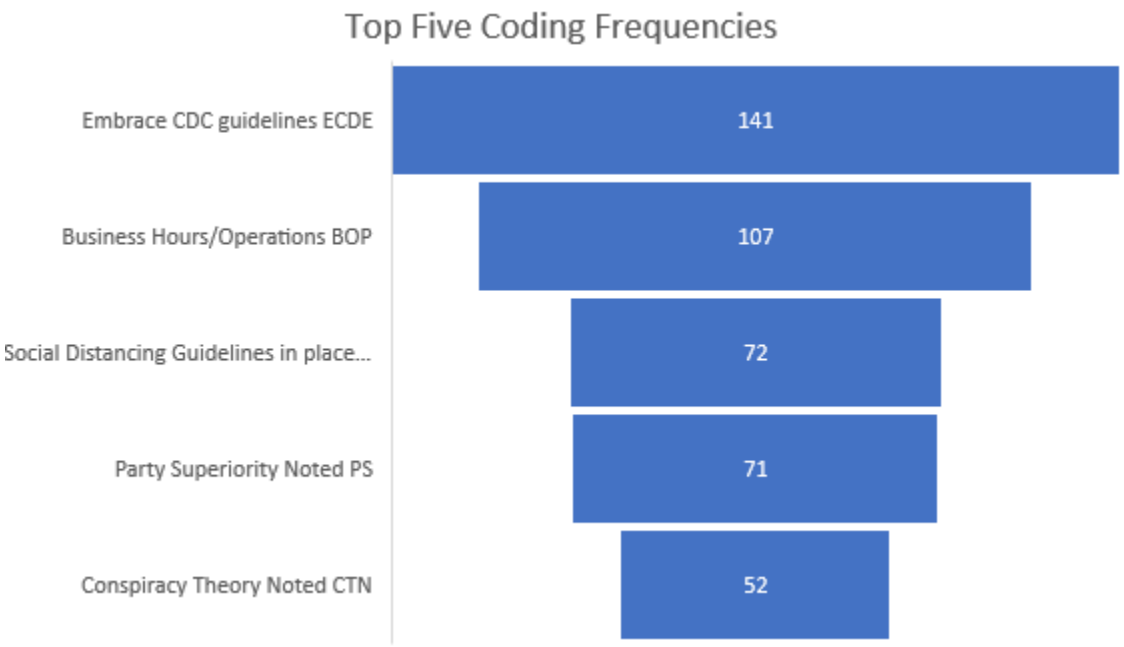
The full press conference or press release information, and URLs for each are found in Appendix E. Appendix E was created to indicate the way the press conferences or press releases were recorded in the Delve software. For simplification in the results section, quotations and snippets will be referenced by indicating the state/month/year of those press conferences and briefings found in Appendix E versus the complete citation.

The official press conferences and press releases from the selected states indicated a strong embrace of CDC guidelines using code ECDC (f =141). This category was designed to include mentions of social distancing, hand washing, and face masks. Governor McMaster of South Carolina said in June 2020 that masks and social distancing were how we stop this virus (South Carolina, June 2020). Similarly, Arizona Governor Ducey asked citizens to mask up (Arizona, June 2020). This trend was indicated in every state over the course of March-December 2020.

The dominance of codes for Business Hours/operations guidance (BOP) (*f=107),* Social Distancing Guidelines in place (SDP) (*f=72),* Party Superiority noted (PS) (*f=71)* and, Conspiracy Theory Noted (CTN) *(f*=52) support the theme of social constructivism and created realities being a significant factor in these official messages that will be discussed in Chapter 5. There was little consistency in the messaging amongst the selected states, with each of the officials interpreting the information for their selected states. Each state had unique messaging that was indicated through the analyzing of the official press conferences and press releases (see Figure 5).

Figure 5

Top Five Coding Frequencies



Beginning in March 2020, each of the selected states in the study created public policy that reflected CDC guidelines from that time. Embracing CDC guidelines (ECDC) was the top code cited in this study at *f*=141. Vermont Governor Phil Scott issued "Stay

at home, stay safe" orders and closed all non -essential businesses (Vermont, March 2020). Similarly, Hawaii's Governor Ige ordered departments to have all non- essential staff to stay at home (Hawaii, March 2020). In April 2020, Governor McMaster of South Carolina would say that data indicated social distancing and staying home was saving lives (South Carolina, April 2020). McMaster would continue this same messaging in June 2020 when addressing issues in rural health saying it was inherently important for all South Carolina citizens to embrace disease prevention methods (South Carolina, June 2020).

Vermont Governor Scott applauded partnerships on the federal level and at the CDC in the September press conferences transcribed for this study (Vermont, September 2020). Hawaii Governor Ige would remain consistent in messaging that embraced CDC guidelines throughout March- December 2020. In October 2020, Governor Ige was still encouraging citizens to wash hands, use hand sanitizer, and social distance to protect the health and safety of the community (Hawaii, October 2020). Arizona Governor Ducey would cite CDC mask guidance updates in his November address (Arizona, November 2020).

In May 2020, Mississippi Governor Reeves enacting policy to keep citizens in their vehicles for appointments so they were not gathered in large groups (Mississippi, May, 2020). By June, Governor Reeves was asking Mississippi citizens to honor and respect social distancing (Mississippi, June 2020). Mississippi would go on to partner with the CDC in August 2020, a clear indication CDC guidelines were being embraced (Mississippi, August 2020).

Arizona Governor Ducey would announce in July 2020 that 90% of citizens were wearing masks within the state (Arizona, July 2020). As autumn began and students headed back into the classroom, Governor Ducey said that masks, hand washing, social distancing and common sense had contributed to students returning to in person instruction (Arizona, October 2020). Governor McMaster of South Carolina urged citizens to properly wear masks in September 2020 to keep COVID-19 mitigated (South Carolina, September 2020). Mississippi Governor Reeves would require students in classrooms to wear masks and be socially distanced (Mississippi, September 2020).

By the end of the year in 2020, Governor Ducey was still asking Arizona citizens to follow health guidelines, wear masks, and wash hands frequently (Arizona, December 2020). Hawaii Governor Ige had reopened the state for outside visitors utilizing strict testing and quarantine measures to keep citizens safe (Hawaii, December 2020). Vermont Governor Scott would thank citizens of Vermont for making sacrifices over Thanksgiving that reflected in lower COVID-19 case numbers in December 2020 (Vermont, December 2020).

Business hours and operations (BOP) were the second most coded term for this study with f=107. Hawaii began to limit business operations in March 2020, when events at the Aloha Stadium and Convention Center were cancelled for the next thirty days (Hawaii, March 2020). South Carolina Governor McMaster would issue orders limiting business operation in April 2020, including that retail outlets limit the number of customers shopping at any given time (South Carolina, April 2020). Mississippi

Governor Reeves cited both his family's and his business operations as a means to provide insight to effective COVID-19 operations in May 2020 (Mississippi, May 2020).

By June 2020, South Carolina Governor McMaster began to question if shuttering businesses was an effective deterrent to COVID-19. He said that if closing businesses was the answer to COVID-19 numbers decreasing then cases should have been disappearing (South Carolina, June, 2020). Meanwhile in June 2020, Arizona Governor Ducey issued Executive Orders limiting operations of bars, gyms, movies, waterparks, and pools (Arizona, June 2020). Vermont Governor Scott touted more citizens being able to return to in person work in August 2020, while continuing to mandate curfews for bars and clubs (Vermont, August 2020).

The selected states were still issuing guidance about Business Hours and Operations (BOP) in the fall of 2020. Hawaii Governo Ige said in September 2020 that the state would be lessening restrictions on restaurants (Hawaii, September 2020). South Carolina Executive Order 2020-63 enacted by Governor McMaster lifted all restrictions on restaurants, effective immediately in October 2020 and said South Carolina was officially open for business (South Carolina, October 2020). Arizona would re-open gyms at 25% occupancy in November 2020 (Arizona, November 2020). Governor Scott would ask Arizona restaurants to increase outdoor dining options by December 2020, as COVID-19 cases continued to rise in that state (Arizona, December 2020).

The third most coded term for this study was Social Distancing guidelines in place (SDP) with $f = 72$. Social Distancing guidelines were coded as an independent notion outside of embracing the broader embracing of CDC Guidelines (ECDC). In

March 2020, Governor McMaster of South Carolina said citizens should continue to practice social distancing (South Carolina, March 2020). Governor Reeves of Mississippi asked his citizens to honor social distancing (Mississippi, March 2020). Hawaii Governor Ige thanked his citizens for being proactive about social distancing, citing that experts agreed it was the most effective way to avoid getting infected with COVID-19 (Hawaii, March 2020). In April 2020, Governor Ducey of Arizona said that social distancing not only protected individuals; it also protected the population at larger(Arizona, April 2020). In July 2020, Governor Scott of Vermont cited social distancing as one of the factors in decreased COVID-19 rates in his state (Vermont, July 2020).

The fourth most coded terms was Party Superiority (PS) with an aggregate frequency of f= 71. There was a marked level of pride from several of the selected states, beginning in March 2020. Even in prayers, South Carolina officials cited South Carolina for being strong and proud (South Carolina, March 2020). South Carolina Governor McMaster said that President Trump wanted businesses re-opened quickly and indicated that he and the then-President Trump were in agreement on this subject (South Carolina, March 2020). Mississippi Governor Reeves asked his citizens not to be critical of elected officials as they mitigated COVID-19 and offered praise for other Republican governors, like New York's Governor Cuomo (Mississippi, March 2020).

In April 2020, Arizona, Mississippi, and South Carolina all praised the Trump administration—and Mr. Trump himself-- for the way COVID-19 was being mitigated on a national level, all citing the outstanding job that was being done by the then-President and his team of experts (Arizona, April 2020, Mississippi, April 2020, South Carolina,

April 2020). These Governors also cited their own great leadership in how their states were handling COVID-19. By May 2020, Arizona Governor Ducey was embracing the White House guidance that gave states the flexibility to do what worked best for the individual state (Arizona, May 2020). By June 2020, Vice President Pence would make an official visit to Arizona to signify unity between the White House, Trump Administration, and Arizona's policies (Arizona, June 2020).

Mississippi Governor Reeves indicated that then-Vice President Pence was pleased with the handling of COVID-19 in Mississippi in his July press conference (Mississippi, July 2020). Governors in Arizona, Mississippi, and South Carolina all said that the public had put their faith in their decisions, as elected officials, and should not question their decisions (Arizona, July 2020, Mississippi, July 2020, South Carolina, July 2020). By November 2020, both South Carolina Governor McMaster and Mississippi Governor Reeves were praising then President Trump and his administration for their effective handling of COVID-19 (Mississippi, November 2020, South Carolina, November 2020). In 71 snippets, over 10 months, party superiority was never noted from the governors or, other state officials, of Hawaii or Vermont.

The last of the top five most coded terms was Conspiracy Theories Noted (CTN) with f=52. Chapter 3, Table 4, provided a list of the Top Ten Conspiracy Theories regarding COVID-19 (Lynas, 2020). Using these 10 conspiracy theories as guidelines and parameters, this study proved that the selected states referenced ideas from this conspiracy theory checklist with a f=52. Governor McMaster spoke of fictitious elevations of COVID-19 numbers in South Carolina (South Carolina, March 2020).

Similarly, Governor Reeves questioned if COVID-19 cases really existed in Mississippi (Mississippi, March 2020). Governor McMaster asked in April 2020 if COVID-19 data was being manipulated to inflate infection and death rates (South Carolina, April 2020). Similarly, Governor Ducey of Arizona questioned the reliability of data regarding COVID-19 (Arizona, April 2020). Governor Reeves inferred that Covid data was being manipulated by the Deep State (Mississippi, August 2020). In 52 snippets, there was no mention of any conspiracy theory from Governor Ige of Hawaii or from Governor Scott of Vermont. Conspiracy theories were only noted by the governors of Arizona, Mississippi, and South Carolina—all states that had high COVID-19 infection rates and deaths in 2020 (CDC, 2020).

Many of the selected states spoke of faith and God during their official press conferences and in their official press releases with f=39. The Bible was quoted a total of 5 times in the archival data. Two of those quotes were correct in terms of chapters and verses while three of those quotes did not correlate to the chapter and verse cited. Governor Reeves of Mississippi said that Mississippi was a state in which faith was important (Mississippi, April 2020). Governor McMaster of South Carolina asked for community prayers to combat COVID-19 (South Carolina, April 2020). Governor Reeves cited Biblical references in addressing COVID-19 protocol in Mississippi prisons and in prison reform (Mississippi, April 2020). Governor Ducy of Arizona would ask for a moment of prayer and reflection for those lost to Covid in his state (Arizona, November, 2020).

Other coding examples of note not present in the top five aggregate frequencies included the emerging code of Constitutional Right (CR) with *f*=22. South Carolina Governor McMaster expressed concern about protecting citizens while also protecting their constitutional rights (South Carolina, April 2020). This constitutional right would encompass the right for gun stores to be considered an essential business in South Carolina citing the Second Amendment (South Carolina, April 2020). In May 2020, Governor Reeves of Mississippi would cite the constitution as a reason that the government could not shut down during a pandemic (Mississippi, May 2020). Governor Reeves would go on to cite religious freedom, a First Amendment Right, as a reason churches should be allowed to continue to offer in person services, despite COVID-19 guidance that suggested large crowds helped spread the disease (Mississippi, May 2020).

Another notable emerging code of interest was More Testing/More Cases (MTMC) with *f*=18. Governor McMaster said that more testing equaled more cases (South Carolina, June 2020). Governor Ducey of Arizona agreed with this notion (Arizona, June 2020). McMaster vocally complained about the days of limited testing, saying everyone was getting tested now-- and that the marked increases reflected a positive percentage rose as more people had access to tests (South Carolina, June 2020). In contrast, Governor Ige of Hawaii, was praising the availability of more tests and hoped to expand COVID-19 testing throughout the state (Hawaii, June 2020).

States cited using Common Sense (CS) to combat the spread of COVID-19 with *f*=10. Every one of the five selected states of Arizona, Hawaii, Mississippi, South Carolina, and Vermont encouraged their citizens to use a common sense approach to

mitigating COVID-19. Governor Scott of Vermont indicated COVID-19 guidance was common sense (Vermont, September 2020). Governor Ducey of Arizona also said that the guidance provided was pure common sense (Arizona, November 2020).

Clara Bot was introduced by the CDC in April 2020 as a way for citizens to check their possible COVID-19 symptoms. Designed to be a tool to lessen the burden on healthcare workers by providing COVID-19 information through a series of questions, Clara Bot was not a replacement for medical advice but, a way to gain COVID-19 information before reaching out to a human healthcare worker (CDC Clara Bot, 2020). Not one of the five selected states mentioned this valuable tool throughout the course of ten months of the archival data cited in this study.

Summary

Chapter 4 summarized the findings from researching the data from the official messaging from Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020. The study found that the social construction realities created by state officials did play a role in COVID-19 positive rates and death rates. The study was not successful in determining if the official messaging presented by state officials during this time impacted COVID-19 vaccinations, as the vaccine was not widely available to the general public until 2021. In order to accurately provide this information, the study would have to be expanded. COVID-19 continues to be a widespread wicked problem issue as there is not a definitive end date or resolution to it. Chapter 5 will provide discussion, conclusion, and recommendations for the mitigation of COVID-19.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to explore what common factors, through selected state official messaging, appeared to contribute to citizens' health decisions in five states during the early days of the COVID-19 pandemic. Document analysis from archival materials, including data from media and state websites, was conducted. Reviews of official news briefings by selected state officials were used to provide insight into the factors that may have contributed to COVID-19 death and vaccination rates. This study may help state officials create more effective messaging during the onset of future pandemics or other emergency situations that require public cooperation for the greater good.

The nature of the study was qualitative to address the research question. I explored the selected states' official press conferences and press releases from selected samplings that coincided with the major milestones of COVID-19 between March and December 2020 from the CDC (2023a) COVID-19 timeline. I explored the official state responses of Arizona, Hawaii, Mississippi, South Carolina, and Vermont to COVID-19 in the face of a public health crisis. Videos of archival press conferences as well as state websites and official press releases were analyzed. Reviews of official news briefings by state officials were used to provide insight into the factors that may have contributed to COVID-19 death and vaccination rates. Footage and news articles from the early days of the COVID-19 pandemic from these states' officials helped me identify trends in language and sentiment that may have influenced the citizens. The nature of COVID-19

as a wicked problem, which impacted health, society, and the economy, was noted in the coding of these official state messages.

Despite a plethora of global information about the virus being available from late December 2019, President Trump continued to hold gatherings and rallies. He indicated the United States had the virus under control and cited economic issues as reasons not to mandate a shutdown (Mukherjee, 2021). Following the lead of President Trump, South Carolina Governor McMaster downplayed the effects of COVID-19 during its early days. As a staunch supporter of President Trump, Governor McMaster relied on guidance from Washington, which often resulted in conflicting and confusing messaging. Like President Trump, Governor McMaster viewed COVID-19 as an inconvenience that required little leadership or policy. Mississippi Governor Reeves indicated that COVID-19 was being used to create a politically driven panic (Porter, 2021). Governor Reeves cited calls with Trump and Pence in his early press conferences. Arizona governor Doug Ducey did not have much to say about COVID-19 in the early days. His March private forum press brief was only 2 minutes, 20 seconds long. Governors McMaster, Reeves, and Ducey are all Republican governors, and the states of South Carolina, Mississippi, and Arizona were among the states with the lowest COVID-19 vaccination rates and highest death rates due to COVID-19 in the United States (CDC, 2022).

In contrast, Governor Ige of Hawaii and Governor Scott of Vermont offered shorter and more concise press conferences but provided regular press releases that outlined relevant COVID-19 information and provided resources in writing. Hawaii Governor Ige is a Democrat. Vermont Governor Phil Scott is a Republican. Hawaii and

Vermont have been cited as having some of the highest COVID-19 vaccination rates and lowest death rates in the United States (CDC, 2022).

An increase in COVID-19 vaccinations and boosters may help lower the death rate from COVID-19 in the United States, although there are conflicting views on this matter. The conflicting views on the COVID-19 vaccine may indicate how politicized the issue has become. Institutions such as the CDC (2020), Johns Hopkins (2021), and the WHO (2023) published articles on COVID-19 vaccine myths and realities. Kricorian et al. (2021) noted that citizens who believed myths about the COVID-19 vaccine were less likely to get it. Kricorian et al. also emphasized the importance of communication that was applicable to a wide range of citizens with diverse socioeconomic and educational backgrounds. The lessons learned from the early days of COVID-19 could positively impact messaging related to ongoing COVID-19 vaccination boosters. Recognizing communication failures and successes may impact future public policy to manage cohesive COVID-19 and future pandemic messaging more effectively for the greater good.

The current study was conducted to ascertain what role social constructivism played in COVID-19 messaging to citizens by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020. Findings indicated that Arizona, Mississippi, and South Carolina created their own realities regarding COVID-19 from March-December 2020 that resulted ineffective management of COVID-19 with high positivity rates, high hospitalization rates, and high death rates. The states of Hawaii and Vermont put strict science-based restrictions, mask mandates,

and contact tracing measures in place that resulted in effective management of COVID-19.

Themes Related to the Theoretical Framework

The examination of the official messaging resulted in the emergence of certain themes as the data were coded. The CDC (2020) made recommendations during this time to social distance, wash hands, and wear masks. This notion would be repeated by all of the selected states repeatedly, according to the coded data, as the most frequently mentioned idea in the official messaging of the five selected states (f = 141). That frequency and embracing of CDC guidelines created a theme of social constructivism and created realties, especially in Arizona, Mississippi, and South Carolina, as the months wore on. These state officials spoke about the CDC guidelines in their press releases and press conferences while their statewide public policy did nothing to ensure these guidelines were mandated. These decisions were left to individual counties within those states, and the county decisions and policy often were at odds with those of state officials.

Another theme that emerged was the idea of the states being open for business as usual. Arizona, Mississippi, and South Carolina reopened their states quickly while Hawaii and Vermont took more stringent approaches to business hours and operations. The theme of party superiority was noted in code PS (f = 71) and became the third theme for this study. The last theme I identified was how the official messaging of the selected states was linked to social constructivism, Schneider and Ingram (1993), and the wicked problem design.

These themes indicate a link to the official messaging being at odds with public policy and with factual information about COVID-19 numbers. These themes suggest that officials created their own realities using social constructivism during this time. The themes further indicate that these realities had a direct impact, both positively and negatively, on citizens' health decisions during this time and that the role of the state officials was taken seriously by the public. The public followed the example of these elected officials. In Chapter 5, I present each theme with supporting data.

Embracing CDC guidelines (ECDC)

Throughout the 10 months studied, CDC guidelines that included distancing, handwashing, and masks were mentioned 141 times. In March 2020, Mississippi, a state with high COVID-19 infection and death rates, had Governor Tate Reeves stating that the state was "in compliance with the recommendations given to us by the CDC" (Mississippi, March 2020). States with low infection and death rates, such as Hawaii, also embraced CDC guidelines. Hawaii Governor Ige said that "following the CDC guidelines, all bars and clubs should be closed" (Hawaii, March 2020). By July, each of the selected states linked fall school reopening to CDC guidance.

As the COVID-19 pandemic continued, Arizona, Mississippi, and South Carolina were among the 12 states that did not issue statewide mask mandates, although some communities and counties did require the use of face coverings (Phillips, 2020). South Carolina Governor McMaster said in June 2020 that it was "vitally important for all South Carolinians to adhere to these disease prevention methods" (South Carolina, June 2020) while failing to institute a statewide mandate. Similarly, Governor Ducey of

Arizona said in June 2020 that he wanted to “remind Arizonians to please wear a mask” (Arizona, June 2020). That same month, Mississippi Governor Reeves said that Mississippi citizens should “wear a mask as appropriate” (Mississippi, June 2020). These three states continued to remind citizens to wear masks but did not create any statewide public policy to make wearing masks a statewide requirement.

It is possible that the lack of statewide mask mandates contributed to a large number of COVID-19 illnesses and deaths in these three states. The messaging of those public officials was inadequate to persuade the public to embrace regular mask wearing to mitigate COVID-19 infections. Citizens may have viewed the comments regarding masks by these governors as suggestions only. Often the comments regarding mask wearing were presented in lengthy, hour-plus long press conferences that may have failed to elicit a sense of urgency from the public regarding masking. The lack of public policy to correspond with the messaging may have further contributed to elevated COVID-19 statistics in these three states. Mississippi Governor Reeves said in November 2020 that citizens should “continue to wear a mask when in public, particularly when indoors and working together” (Mississippi, November 2020).

A month later in December 2020, however, Governor Reeves was photographed at holiday gatherings without a mask and without social distancing. December 2020 was the deadliest month for COVID-19 deaths in the state of Mississippi. Similarly, in December 2020, South Carolina had only six of 36 counties in a downward trend of COVID-19 positivity rates. Two of the highest days of cases were noted in South Carolina in December 2020. Arizona’s Governor Scott noted Arizona was going in the

wrong direction in his December 2020 press conference, referencing a 15% positivity rate for COVID-19.

Hawaii and Vermont each had statewide mask mandates. Hawaii would not end its statewide mask mandate until March 2022 (Hubbard, 2022). Similarly, Vermont would not ease its statewide mask mandate until May 2021, and only for those citizens who were COVID-19 vaccinated (Scott, 2021).

Although the current study focused on messaging from March-December 2020, it is important to note how rapidly the stance on masking would radically change in 2021. In 2021, South Carolina Governor Henry McMaster sought to completely ban mask mandates for schools, resulting in federal court interventions (American Civil Liberties Union, 2021). Mississippi would also ban all mask mandates in the state in 2021 (Haselhorst, 2021).

Linking the role of social constructivism in COVID-19 CDC guidance messaging to citizens by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020 was achievable in the current study. Each of the selected states cited compliance with CDC guidelines even as the number of positive infections and deaths did not support this in Arizona, Mississippi, or South Carolina. The information presented regarding CDC guidelines from these three states was filled with false positivity about the management of COVID-19 and how well the citizens were facing the challenges of COVID-19. Had these governors been more realistic about not only the public's success but also their own success rates, positive cases, death rates, and vaccination rates may have been different. The refusal of Arizona, Mississippi, and South

Carolina to issue statewide mask mandates also shows how the reality of embracing CDC policy failed to be achieved through public policy mandates. The messaging supporting masks and other CDC guidance was present, but the policy was not.

Business Hours/Operations (BOP)

Business hours and operations was an additional theme in this study. This category also encompassed how businesses would function during the early days of the COVID-19 pandemic in the selected states. Every one of the selected states set protocol about how businesses, including churches, would open. There was a considerable amount of confusion around these guidelines as many of the states failed to recognize what constituted essential services. Both Mississippi and South Carolina considered gun stores essential services, citing Second Amendment rights. Hawaii canceled all events at the Aloha Stadium and Convention Center in March 2020 (Hawaii, March 2020) while Vermont advised citizens that all businesses not exempted in the executive order must halt in-person operations (Vermont, March 2020).

By June 2020, Governor McMaster started to question business closures saying that if business closures were an effective tool in deterring COVID-19 that other states would have seen a decrease in COVID-19 number (South Carolina, June 2020). This would become a common theme in the official messaging for South Carolina as Governor McMaster sought to quickly reopen the businesses in the state not only for the citizens but also for tourists. By October 2020, Governor McMaster would issue an executive order lifting all occupancy restrictions on restaurants in South Carolina. Governor McMaster said in December 2020 that the protocols used by South Carolina had resulted

in the successful reopening of businesses, schools, and government agencies, but the December 2020 COVID-19 statistics do not confirm this perception. The highest number of cases in South Carolina since the pandemic began were recorded in December 2020 (CDC, 2020). The messages being presented by Governor McMaster were not accurate but were his own reality. That messaging would continue to haunt South Carolina into 2024, where the CDC cited lack of COVID-19 boosters and lack of flu shots for a large number of South Carolina illnesses (Corwin, 2024). COVID-19 hospitalizations increased 49% from December 16, 2023, to January 2024 according to data, even as South Carolina stopped posting this information in June 2023 (Corwin, 2024). Arizona Governor Ducey would issue an executive order that same month calling for the closure of bars, gyms, movie theaters, and waterparks (Arizona, June 2020) while Governor Reeves of Mississippi would sign an executive order to remove curfews on bars and restaurants there (Mississippi, June 2020).

As COVID-19 vaccinations became more widespread in 2021, the race began to reopen states to offset the economic impacts that were caused by shutdowns. South Carolina was quick to end its COVID-19 state of emergency, with a complete reopening of the state in June 2021. As the SCDHEC director pleaded for more citizens to get vaccinated against COVID-19 in an ongoing effort to keep the pandemic controllable, Governor McMaster refused to incentivize vaccines and indicated the state of South Carolina would neither force nor coerce its citizens into COVID-19 vaccinations. Governor McMaster was an outspoken opponent to school mask mandates by August 2021, ending the requirement for masks to be worn in schools that same month.

Mississippi Governor Tate Reeves had hesitated to shut the state down, citing the economic impacts from closing beaches during spring break (Moser, 2020). Reeves further asked Mississippi citizens to trust in the power of prayer and said citizens did not fear COVID-19 because they believed in eternal life (Porter, 2021).

The information presented regarding business hours and operations varied greatly from state to state. The messaging regarding business hours and operations was present but the public policy regarding business hours and operations was often murky, filled with loopholes, and often contradictory. The press conferences cited state officials being asked specific questions about bars (and requirements that bars serve food to be open) gyms, bowling alleys, and movie theaters---all nonessential businesses that were hoping to become operational. Linking the role of social constructivism in COVID-19 business hours and operations messaging to citizens by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont from March-December 2020 was achievable in this study. South Carolina Governor McMaster noted early on—in March 2020—that President Trump wanted to get as much of the economy reopened as soon as possible (South Carolina, March 2020).

Arizona, Mississippi, and South Carolina were quick to lift business hours and occupancy limitations put in place during COVID-19 despite COVID-19 statistics regarding positivity rates, death rates, and hospitalizations. The general consensus seemed to be that it was more important to get back to pre-COVID-19 normal business operations, even when data indicated measures to protect the citizens should have remained in place. These states utilized social constructivism to create and justify a new

reality that COVID-19 had plateaued or declined in a way that would support businesses being fully opened without limitations on occupancy or mask use. None of these three states saw significant COVID-19 declines from March-December 2020, with December 2020 being the then-deadliest month for COVID-19 related deaths in Mississippi and increased positive cases and deaths in Arizona and South Carolina.

Hawaii and Vermont adjusted business hours and operations only after certain benchmarks in COVID-19 positivity rates and marked decreases in hospitalizations due to COVID-19 occurred. Both Hawaii and Vermont also instigated strict travel and contact tracing programs. Vermont required restaurants to track patrons with contact information should a COVID-19 positive case have happened after a restaurant visit. This policy was designed to be a way to notify citizens of possible exposure so safety measures, including testing and quarantines, were implemented. Hawaii limited inter-Island travel as well as limiting travel from the mainland. Later, it would require COVID-19 pre-tests to show visitors were not COVID-19 positive to even board a plane to the Islands. By December 2020, Vermont touted 14 weeks in a row in which new COVID-19 case growth had slowed (Vermont, December 2020). Similarly, Hawaii reported no spikes in COVID-19 by the end of December (Hawaii, December 2020). This was in marked contrast to what the states of Arizona, Mississippi and South Carolina were experiencing. These statistics show that the social construction realities created by Arizona, Mississippi, and South Caolina regarding business hours and operations increased COVID-19 positive rates and COVID-19 deaths in those states.

Party Superiority (PS)

The theme of Party Superiority was noted in this study because of an aggregate frequency of *f=71*. For the duration of this study period of March-December 2020, Trump was the president. Arizona, Mississippi, South Carolina, and Vermont all had Republican governors during this period while Governor Ige of Hawaii was the lone Democrat.

Governor McMaster of South Carolina said in November 2020 that citizens should thank the Trump Administration for the good news regarding COVID-19 (South Carolina, November 2020). Governor Reeves of Mississippi similarly thanked President Trump and Vice President Pence for their Operation Warp Speed (Mississippi, November 2020). Governor Reeves would also authorize a flotilla on the Ross B. Barnett Reservoir in support of President Trump in September 2020, despite warnings of COVID-19 impacts when large crowds were gathered (Mississippi, September 2020). Arizona Governor Ducey was asked about having a direct line of communications with President Trump in his September 2020 press conference (Arizona, September 2020).

Arizona, Mississippi, and South Carolina touted their own leadership throughout the duration of this study from March-December 2020. In April 2020, Mississippi Governor Reeves said that President Trump was adamant that COVID-19 policy be at the discretion of governors (Mississippi, April 2020). This was echoed by Arizona Governor Ducey who in May 2020 would state that the White House had given states the flexibility to decide what worked best for the individual state (Arizona, May 2020). Governor Reeves of Mississippi said that he was doing what he was elected to do in August 2020.

There were defenses of President Trump (TD/ *f=21)* from these three states with Arizona Governor Dulcey indicating his December 2020 conversations with the then President regarding election results were confidential (Arizona, 2020). Meanwhile, Hawaii's Governor Ige had expressed concerns that President Trump would try to divide the United States over the handling of COVID-19 (Hawaii, June 2020).

Party Superiority and unity among stakeholders within the selected states was not always achieved. Participants in these press conferences may have been influenced by the leadership present and may have felt an obligation to agree with the governors. A noted case of this is in South Carolina, where internal emails from Dr. Linda Bell, the state's epidemiologist, noted in June internal emails that Governor McMaster's staff had portrayed her silence in press conferences as agreement with what Governor McMaster was saying (Associated Press, 2020). She was quoted as saying Governor McMaster's staff portrayed her participation in press conferences with Governor McMaster as complicity with his position on COVID-19—a position that she disagreed with. (Associated Press, 2020). Additionally, Governor McMaster's spokesperson, Brian Symmes, was questioned about Dr. Bell's support of Governor McMaster's plans to re-open restaurants. He suggested repeatedly that Dr. Bell and Governor McMaster were not in disagreement about this policy, as Dr. Bell was standing next to Governor McMaster. Dr. Bell would later adamantly deny that her presence at the press conferences indicated an acquiescence to the policy that Governor McMaster was putting into place. Similarly, the South Carolina State Superintendent of Education, Molly Spearman, did not attend the press conference addressing the back-to-school plan for the state.

South Carolina was not the only state in this study that had published accounts of disagreements between press conference attendees. Liz Sharlot, a representative for the Mississippi Department of Health, publicly contradicted Governor Tate Reeves vocally attributing the rise of COVID-19 in Mississippi to the media and protests in June 2020. Dr. Thomas Dobbs, Mississippi's State Health Officer, also disagreed with Governor Reeves about where the increase in COVID-19 cases was coming from, disagreeing that the media and protests were responsible (Bologna, 2020).

Similarly, Hawaii's Governor Ige and the Lieutenant Governor, Josh Green (who is now governor of Hawaii) clashed over the handling of COVID-19 in a series of private meetings. Lt. Gov. Green, a doctor with an extensive knowledge of public health, was left out of critical meetings regarding COVID-19 and how Hawaii would mitigate the pandemic. The public's vocal objections to Lt. Gov. Green being left out of COVID-19 discussions led to Governor Ige including Lt. Gov. Green in several press conferences and to utilize his knowledge productively (Blair, 2020).

The last theme I explored was how the official messaging of the selected states is linked to the theory of this study as noted by Vygotsky and Schneider & Ingram as well as wicked problem design. State officials create public policy for their citizens. Ideally, this policy should be for the common welfare, safety, and prosperity of its citizens. The realities these selected states created using social constructivism impacted the way their citizens mitigated COVID-19 from March-December 2020. The citizens learned their information from their leaders—and those leaders were the keystones of COVID-19 information provided to the citizens. Vygotsky had indicated that learning was a social

and communitive endeavor in which knowledge is shared and understandings are constructed in culturally formed environments (Vygotsky & Cole, 1978).

Like Vygotsky (1978), Schneider and Ingram (1993) wrote about the shared characteristics and cultures of populations related to targeted populations. The idea that social constructivism influenced public policy is reflected in this study as well. The social constructivism influence on public policy consequently affects the citizens that ae subject to that policy. In this study, that policy was reflected in the way elected officials chose to embrace CDC Guidance and Business Hours and Operations.

Social construction has a strong influence on public officials. Schneider and Ingram (1993), who believed that social construction becomes intertwined with public officials' messaging, embraced this idea. This study was able to confirm this as well. Schneider and Ingram suggested the policy of public officials affected the participation patterns of its citizens (1993). The COVID-19 infection rates of the selected states proves this to be accurate. Hawaii and Vermont enacted strict COVID-19 protocols for March-December 2020. By December 2020, Hawaii had no spikes in COVID-19 cases (Hawaii, December 2020). Similarly, December data indicated Vermont had the 14th week in a row of new case growth slowed. Arizona, Mississippi, and South Carolina did not enact public policy for significant periods of time between March-December 2020 to protect its citizens. December 2020 indicated a 15% COVID-19 positivity rate for Arizona, with Governor Ducey telling citizens the state was moving in the wrong direction in mitigating COVID-19 (Arizona, December 2020). December 2020 was the deadliest month on record for Mississippi (Mississippi, December 2020). South Carolina had the largest

number of cases since the pandemic began in December 2020 (South Carolina, December 2020).

Schneider and Ingram believed elected officials created public policy to primarily ensure their reelection. Cited in their 1993 study, reelection was noted by Schneider and Ingram as the primary driver for elected officials with addressing public problems as a secondary concern. This study supports the notion as Arizona Governor Ducey remained in power until 2023. Hawaii Governor Ige was replaced by Governor Green (who had served as Lt. Governor under Governor Ige) in 2022. Mississippi Governor Reeves is still in office, as is South Carolina Governor McMaster, and Vermont Governor Scott.

COVID-19 as a wicked problem was cited in a number of previous studies and had an aggregate frequency of WP *f=23* in this study. Rittel and Webber's checklist for wicked problems was found in Chapter 2, Table 3 and COVID-19 has demonstrated those characteristics of a wicked problem. Modern authors, such as Baltzersen (2020), have also applied this checklist to COVID-19 resulting in COVID-19 being defined as a wicked problem. Rittel and Webber's 1973 design included the notion that wicked problems have no specific indication of completion or an indication that they are solved (Rittel & Webber, 1973). Arizona Governor Ducey said in June 2020 that he woke up to new COVID-19 problems every day (Arizona, June 2020). COVID-19 is still a significant health issue and, was the third leading cause of death in the US in 2023 (CDC, 2023). There is no clear completion date, aligning it with this Rittel and Webber checklist item (CDC, 2023). Also applicable to this study was the idea that resolutions and steps towards the resolution of a wicked problem are endless, according to Rittel and Webber's

checklist (Rittel & Webber, 1973). Governor Reeves of Mississippi said in August 2020 that the choice of options was chaos versus blanket mandates (Mississippi, August 2020). The resolutions offered from March-December 2020 by the state officials of Arizona, Hawaii, Mississippi, South Carolina, and Vermont reflected the wide range of possible solutions. The policy and resolutions offered by the selected states also indicated how another item on Rittel and Webbers checklist is applied: wicked problems are often linked to other issues (Rittel & Webber, 1973). COVID-19 impacted not only the health of citizens; it also impacted politics, economics, and education around the globe. The official press conferences and press releases from March -December 2020 showed that elected officials were dealing with a myriad of issues from economies to schools, to correctional institutions-even storms and hurricanes (Mississippi, April 2020).

For this study, the last item on Rittel and Webber's checklist was the most impactful. They said that planners and officials mitigating a wicked problem, such as COVID-19, have no room for error. Rittel and Webber indicated that planners are responsible for the resolutions they create; their actions can greatly affect those who are impacted by their decisions (Rittel & Webber, 1973). From March-December 2020, the decisions the state officials were making regarding COVID-19 had a direct impact on their citizens. From business and school closures to the way the state officials approached keeping citizens protected against COVID-19, the messaging had a direct impact on the day to day lives of their citizens.

It is important to note that communication from state officials about COVID-19 continued past December 2020. Directives about COVID-19 protocol and how to move

forward varied among the selected states. Several of the selected states, including South Carolina and Mississippi were outspoken about the Federal requirements set forth by the Biden Administration, after January 2021 and vocally opposed the guidance of the post-Trump administration.

Notably, Governor Henry McMaster issued Executive Order 2021-38, a ban that applies to the 19 state agencies that make up the governor's cabinet on November 4th, 2021. The governor's executive order directed every agency in state government to notify the Office of the Governor and the Office of the South Carolina Attorney General of any communication or directives from the Biden Administration concerning COVID-19 vaccination requirements. Governor McMaster's tweet from that day says, "It's hard to believe the overreach we've seen from the Biden Administration. Blatantly unconstitutional vaccine mandates keep coming from the White House that are forcing South Carolinians to choose between a vaccine and their jobs."

Another South Carolina bill: 2021-2022 Bill 24848 states "any representative of a public, private, or nonprofit entity…who inquires about Covid-19 vaccination status…must be fined not more than $14,000 or imprisoned not more than one year." This proposed South Carolina State law effectively said that if employers complied with Federal mandates those employers could face jail time. For entities like hospitals succumbing to a South Carolina bill, such as this proposed one could result in the loss of millions of dollars in Federal aid. Sponsors were being added to this bill into 2022 but, it has yet to pass. When these types of directives are coming from the highest offices of the

South Carolina government, continued impacts on Covid-19 vaccines and boosters are possible.

Discrepant sampling is defined as sampling that has the goal of refining a theory. Cases, or in this study, states, are deliberately and knowingly chosen to help solidify the theory in discrepant sampling (Patton, 2015). These five states were selected after researching statistics that indicated the states either had high or low death and vaccination rates for COVID-19. There was no discrepant sampling as I had no knowledge of what the findings from the archival data would be.

Interpretation of the Findings

COVID-19 as a wicked problem was affirmed by this study after verifying the vast array of entities COVID-19 impacted in the selected states from March-December 2020. Schools, storms, budgets, prisons, business, and vaccines were all cited in the data sources. Baltzersen (2020) also considered the global political and economic factors of COVID-19 and defined COVID-19 as a wicked problem (Baltzersen, 2020). Angeli, et al., (2021) referenced the contradictory ideas among the scientific collective regarding COVID-19 helped define it as a bona fide wicked problem and the states very different approaches to COVID-19 displayed this contradictory nature among the scientific collective by demonstrating how differently the states mitigated CDC guidelines and other science- based information to manage COVID-19.

The conceptual framework guided this study was outlined in Chapter 2. It included Rittel and Weber's wicked problems theory (1973) as well as Vygotsky's social constructivism theory (Vygotsky & Cole, 1978). I also utilized Schneider and Ingram's

(1997) social constructivism theory of target populations. Reality is often considered a social construct and as such, forms public policy by state officials that may have impacted citizen health decisions. Theories of social constructivism, wicked problems, and citizens responses to public policy based on Schneider and Ingram's ideas formed the conceptual framework for this study. Please note that Rittel and Webber (1973) did not specifically reference COVID-19 as a wicked problem; Rittel and Webber did, however, provide the first definition of a wicked problem. The notion of COVID-19 as a wicked problem is based on their framework, and cited by many later authors, such as Baltzersen (2022).

Both social constructivism and the definition of COVID-19 as a wicked problem related to this study and the research question. The exploration of the messaging that state officials provided during COVID-19 created a flow of information from state to state that impacted the citizens' health decisions during that time. Different states created different realities that correlated with COVID-19 vaccination and death rates. Citizens had to trust the information that was provided to them by state officials even as COVID-19 was defined as a wicked problem with numerous challenges.

Limitations of the Study

There are traditionally conditions that a researcher cannot control during their research. Limitations are the factors of design and methodology that impact a researcher's study outcome (Abbadia, 2022). There are potential shortcomings of this study based on state selection and those states' political climates. The states selected have

a variety of political party traditions that may have contributed to the tone of official messaging.

Using only five states with diverse geographical and population demographics limited the study. Identifying common messaging trends by state officials in the distribution of information regarding COVID-19 from within these unique states helped mitigate these limitations. Utilizing archival media and periodicals also had its limitations as no individual subjects were utilized. This methodology required the identification of key words and phrases with no consideration to the way individuals felt about the information that public officials were providing. Those feelings and interpretations may be viable for future studies to determine what public official communication efforts were best received by the public during a wicked problem scenario.

Known bias was managed by exploring states outside of my home state of South Carolina. Exploring additional states that I was not familiar with provided the opportunity to see if common themes emerged that may have impacted COVID-19 vaccination rates and, consequently, COVID-19 death rates. The selection of states based on COVID-19 vaccine and death rates was undertaken with consideration to not limiting the selection to specific geographic regions. Some regions may have had disproportionately high COVID-19 death rates and low COVID-19 vaccine rates so, every effort has been made to provide a selection of states with different geographical locations to provide an unbiased overview of public officials messaging during the early days of COVID-19.

This study sought to address COVID-19 vaccine hesitancy from March-December 2020. However, the vaccine was not readily available to the general public during that

time period. The first COVID-19 vaccines were not available until December 2020 under Emergency Use Authorizations (EUA's) while FDA approval would not happen until August 2021 (HHS, 2023). There is a limitation in correlating this study to COVID-19 vaccinations due to these factors. The study does address how social constructivism may have impacted COVID-19 positivity rates and death rates from March-December 2020, but the timeframe of the study made it impossible to apply it to COVID-19 vaccination hesitancy as the vaccine was not readily available for this period.

Recommendations

This study found that citizens need more accurate information, free of bias, in an understandable and concise manner during wicked problem scenarios like COVID-19. Kricorian, et al., (2022) agreed that issuing COVID-19 policy in an easier to understand format may discourage citizens from seeking information from fake news sites, reducing misinformation, and increasing COVID-19 vaccinations (Kricorian, et al., 2022). Citizens were inundated with information that was inconsistent from state to state with the additional burden of state officials creating their own realities about mitigation successes as COVID-19 numbers rose.

The literature reviewed in Chapter 2 indicated that there was an endless array of factors that may have impacted COVID-19 vaccine hesitancy. As a wicked problem, it is impossible to limit increased vaccination acceptance to one factor with one solution. The official messaging of state officials, while a contributing factor in the embrace or hesitation of COVID-19 vaccinations is not the sole determining factor in why citizens chose COVID-19 vaccination or not.

Future studies are imperative as COVID-19 continues to be an issue. Effective measures regarding COVID-19 public policy must be taken to curtail citizen weariness that result in apathy. State officials must continue to engage with citizens, creatively engaging them long term and without creating a false sense of security that the pandemic has ended. Stating that the worst is over by state officials does not make it so. State officials must remain vigilant and engaged to increase COVID-19 vaccines and boosters within their states to keep citizens safe. States must continue to provide accurate data and continue reporting Covid numbers to make citizens aware that COVID-19 remains a viable concern for public health.

Implications

The founders of Walden University were specific in their desire for positive social change, stating their goal is to have students make a difference by addressing challenges where they live. This message of social change can be found throughout Walden's mission (Walden University Social Change, 2020). One of the biggest challenge to society in recent history has been the mitigation of Covid-19, as the global pandemic affected every aspect of society and every demographic group. At the core of the challenges of Covid-19 is vaccine hesitancy. Citizens' perception of COVID-19 factors that contributed to COVID-19 vaccine hesitancy can help shape public policy in the future. Safeguarding populations most effectively is a public policy necessity, should another pandemic occur. As Covid-19 continues to shape the world, understanding the why's of Covid-19 vaccine hesitancy can provide vital insight to prevent more hospitalizations and deaths.

Safeguarding populations through a wicked problem pandemic can also be improved by utilizing Social determinates of health (SDOH). The CDC embraced social determinates of health (SDOH) as part of their policy in 2021 (see Figure 6).

Figure 6

CDC SDOH Guidelines

This graphic shows the six pillars of CDC's work to address SDOH, which is depicted as the interplay of social and structural conditions, and that SDOH is one factor that contributes to overall equity.

The interconnected factors of the SDOH are similar to the issues that COVID-19 represents as an ongoing wicked problem. The connections of social and structural conditions and their impact on COVID-19 health decisions may be more effectively addressed in the future by applying SCOH standards more stringently. This study did not address citizen education levels or poverty rates among the selected states but, equalizing those factors may have a positive impact on citizen health decisions as the SDOH factors are considered and embraced.

The notion of social constructivism and state officials creating their own realities is not something that can be effectively managed and creates a wicked problem scenario in its own right. Misinformation, party superiority, and conspiracy issues remain concerns as the United States enters the 2024 election cycle. There is little way to reestablish faith in the scientific community with regards to COVID-19 as the pandemic continues, even as many state officials have declared an end to the pandemic.

Citizens must hold elected officials accountable for misinformation and for created realities but that is unlikely to happen as political divisiveness remains at an all-time high. I do not foresee any resolution to the issues discussed in this study and believe that the mitigation of COVID-19 will only become more divided, less based in science, and an imminent threat to public health and wellbeing.

Conclusions

The purpose of this qualitative study was to determine what role social constructivism played in COVID-19 messaging by state officials in Arizona, Hawaii, Mississippi, South Carolina, and Vermont. Arizona, Mississippi, and South Carolina represent some of the lowest vaccine rates in the United States and had created their own social construction reality regarding Covid-19 information and mitigation, creating a phenomenon of ignoring traditional guidance and protocols during a global pandemic. Exploring the common state official messaging factors that are shared by these different states, each with unique different demographic segments within the populations, was an indicator of ongoing COVID-19 vaccine and booster hesitancy within these states. Exploring these states messaging identified ways to contradict misinformation and

increase Covid-19 vaccine rates. Increasing the COVID-19 vaccine rates would improve death rates due to Covid-19 in Arizona, Mississippi, and South Carolina. Comparing the messaging of these state officials to the more effective state communication of Hawaii and Vermont, based on COVID-19 vaccination and death rates, identified measures that worked to prevent deaths and illness due to COVID-19. For the purpose of this study, effective communication was defined as the messaging of State officials to keep death rates due to COVID-19 low and vaccination rates for COVID-19 high within the state.

Understanding the official messaging by State officials and, in turn, how that messaging impacted citizen perceptions of COVID-19 is the key to keeping the population protected during a global pandemic. The purpose of this qualitative study was to explore what common factors, through State official messaging regarding COVID-19, impacted citizens in five diverse states.

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Appendix A: Examples of Preliminary Data Sources

Arizona

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YouTube. (2020, July 23). *Covid-19 news conference 07-23-2020*. YouTube. https://www.youtube.com/watch?v=bOogN0Ys4dM

Hawaii

Covid-19. Healthcare Association of Hawaii. (2021). Retrieved October 5, 2022, from https://www.hah.org/covid19

Dennison, D. (2020). *Hawaii covid-19 Joint Information Center Daily News Digest, Sept. 24, 2020*. Hawaii COVID-19 Joint Information Center Daily News Digest, Sept. 24, 2020. Retrieved September 12, 2022, from https://governor.hawaii.gov/newsroom/latest-news/hawaii-covid-19-joint-information-center-daily-news-digest-sept-24-2020/

March 31, 2020: Covid-19 news conference: By office of the governor of hawai'i. Facebook. (2020, March 31). Retrieved January 26, 2023, from https://www.facebook.com/watch/live/?ref=watch_permalink&v=247648943055409

Mississippi

MS Public Broadcasting. (2020, March 24). *MPB live: Governor Tate Reeves covid-19 response (3/24/2020)*. YouTube. Retrieved January 26, 2023, from https://www.youtube.com/watch?v=RTWGMQ02Bs4

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Porter, T. (2021, August 29). Mississippi's *governor says people in the state are less scared of covid-19 because they 'believe in eternal life'*. Business Insider. Retrieved August 1, 2022, from https://www.businessinsider.com/mississippi-governor-belief-eternal-life-reduces-fear-of-covid-19-2021-8

South Carolina

S.C. Executive Order 2021-38. (November 4, 2021). Retrieved from https://governor.sc.gov/sites/default/files/Documents/Executive-Orders/2021-11-04%20F

South Carolina ETV. (2020, March 17). *Governor's update on Coronavirus (COVID-19) | March 17, 2020*. YouTube. Retrieved January 26, 2023, from https://www.youtube.com/live/hmFB142WyLw?feature=share

Vermont

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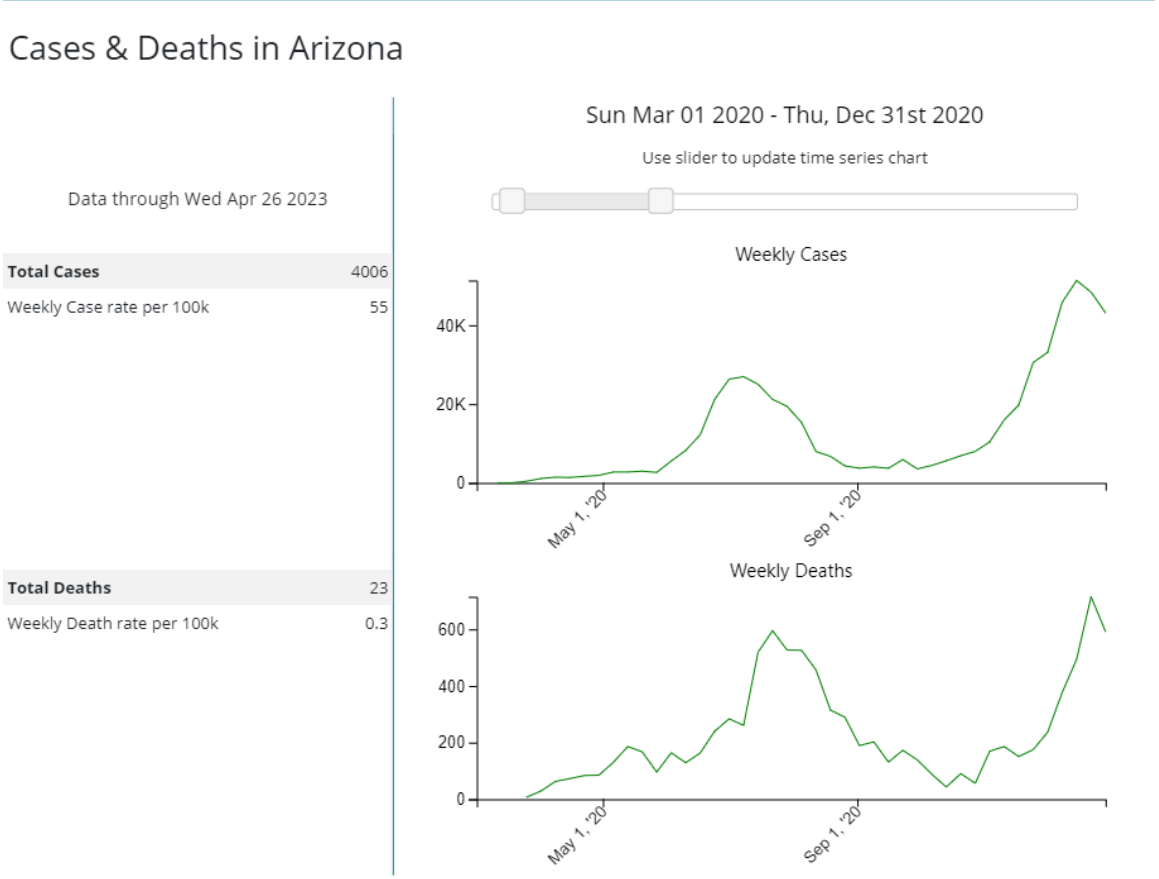
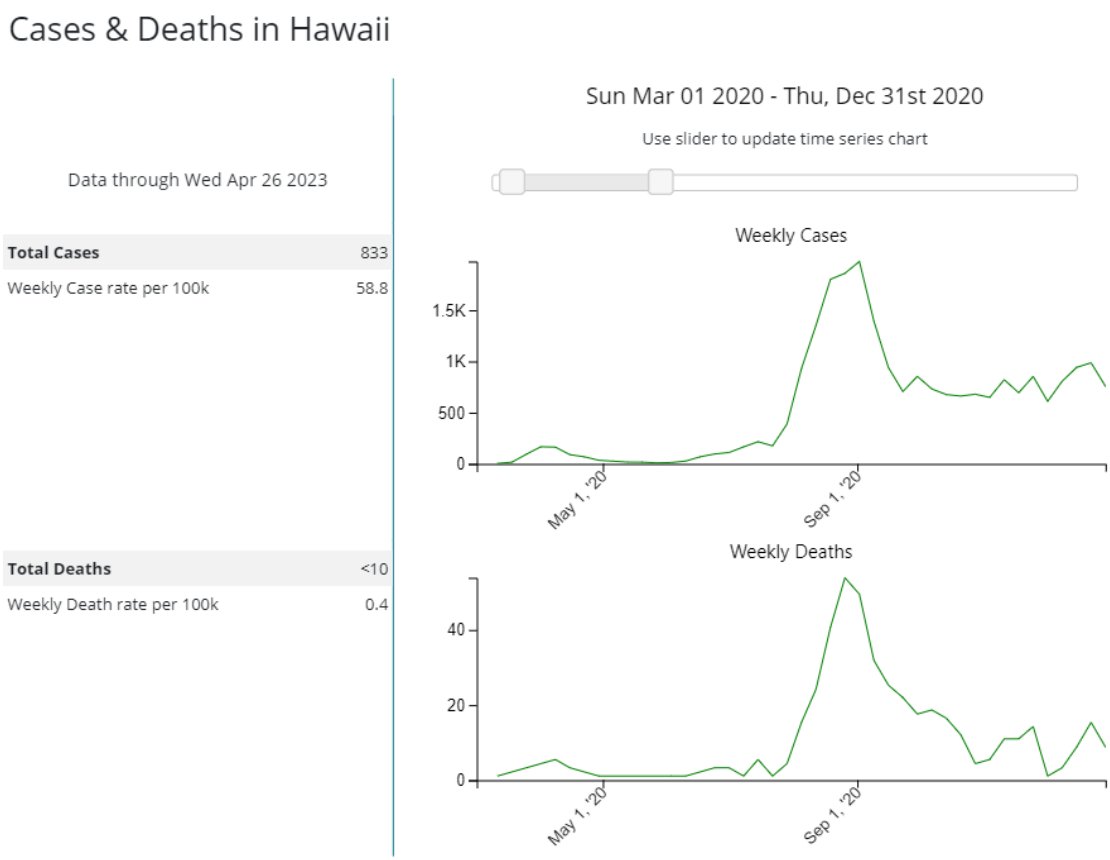
Novel coronavirus (COVID-19): Vermont state response & resources. Novel Coronavirus (COVID-19): Vermont State Response & Resources | Office of Governor Phil Scott. (2020). Retrieved October 5, 2022, from https://governor.vermont.gov/covid19response

Vermont governor Scott issues stay-at-home order through April 15. C. (2020, March 25). Retrieved January 26, 2023, from https://www.c-span.org/video/?470686-1%2Fvermont-governor-scott-issues-stay-home-order-april-15

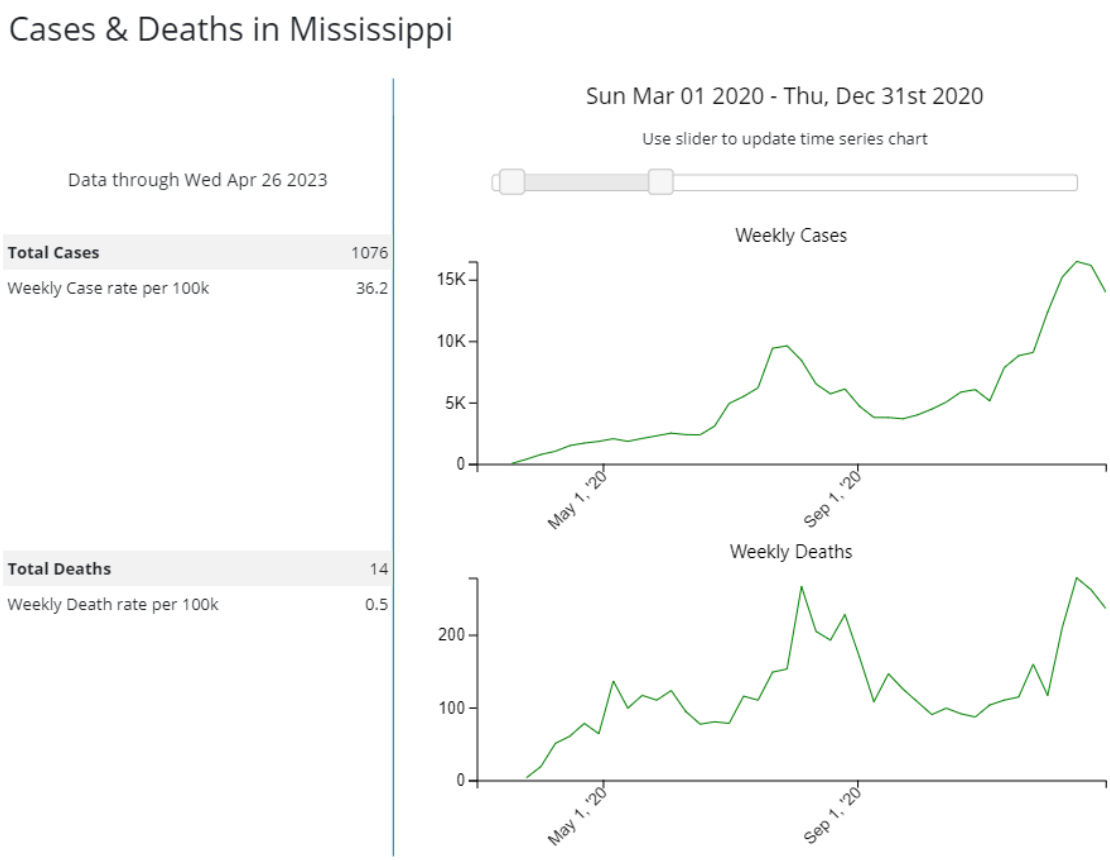
Appendix B: Cases and Deaths for Selected States March 1, 2020, to December 31, 2020



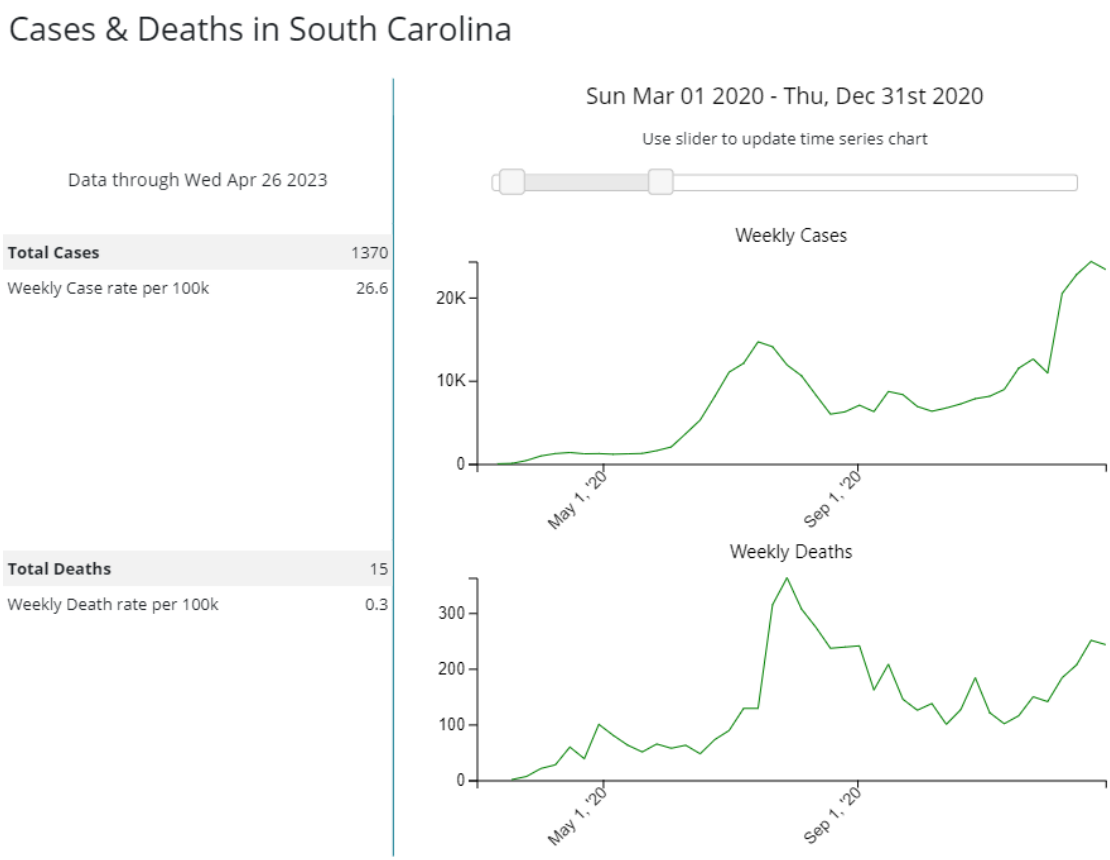
(CDC, Covid data tracker, 2020)



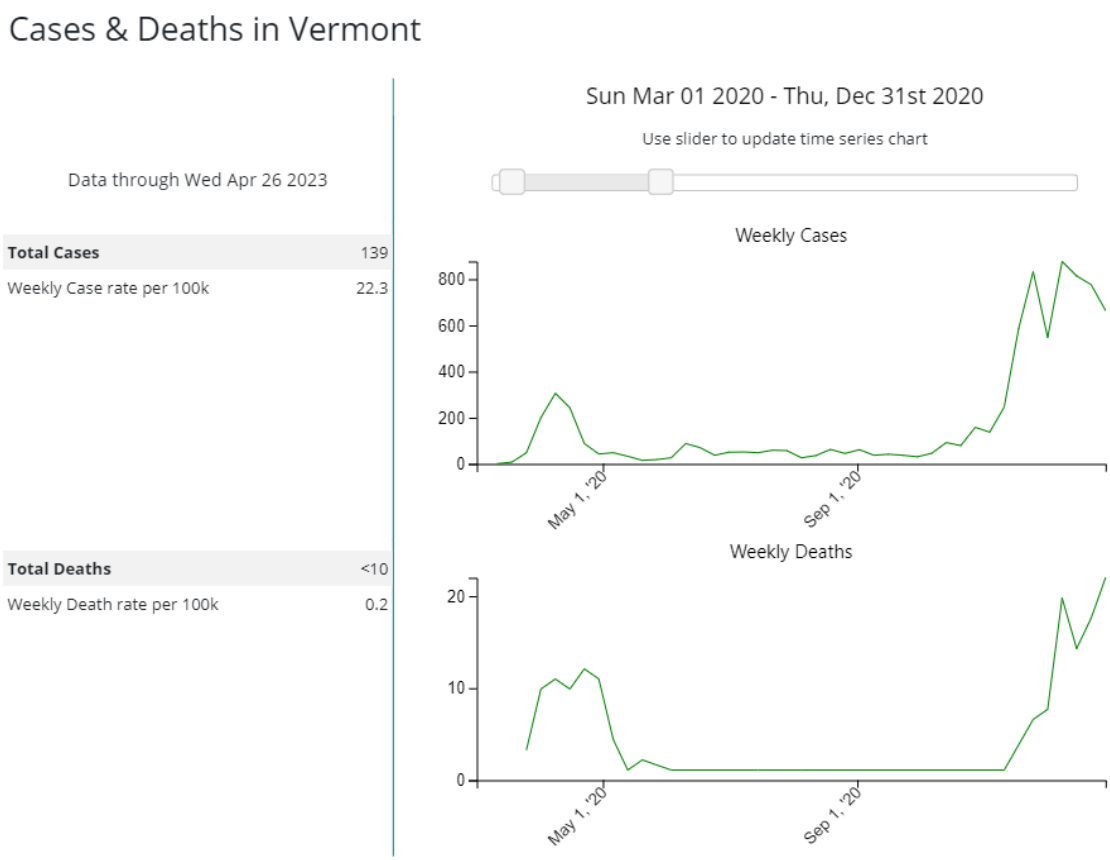
(CDC, Covid data tracker, 2020)



(CDC, Covid data tracker, 2020)



(CDC, Covid data tracker, 2020)



(CDC, Covid data tracker, 2020)

Appendix C: Document Review Protocol

Document Review Protocol will include:

1. Any necessary introduction statement
2. Any relative background, including spikes and declines in Covid 19, if possible
3. Documentation of the references
4. Document coding tools utilized

I will be querying the materials using the following protocol:

-Was there a prayer before the press conference? Who said it?

- Did press conference participants wear masks? What organizations did mask wearers or non-mask wearers come from?

-What participants were present?

-What participants gave updates?

-Did press conference participants stand 6 feet apart?

-Were there any references to lack of trust in Federal Covid 19 protocol?

-Were there any references to Covid 19 having flu-like symptoms?

-Were any conspiracy theories mentioned?

-Was CDC guidance embraced or questioned or challenged?

-Is any political party superiority referenced?

Appendix D: References for Figure 3

Arizona:

Arizona Governor Scott indicated in November 2020 that he had provided 40+ press conferences since March—an average of 4.5 per month.

Hawaii:

12/20/23 via email

Hi Barclay,

No press conferences were aired by PBS Hawaii.

Thank you

Nelson Hirata

Security Lobby Receptionist, PBS Hawai'i

315 Sand Island Access Road, Honolulu, HI 96819-2295

T: 808.462.5005

Big Island News Video was contacted via Facebook messenger on 12/20/23 as many of Governor Ige's press conferences could be found on the Big Island News Video YouTube channel.

The Governor's office *verbally indicated* that former Governor Ige had not left any information in the archives on 12-20-23. Attempts to contact former Governor Ige were unsuccessful. The Communications office of Hawaii was also contacted @ gov.communications@hawaii.gov on 12/20/23 as directed by the Governor's office. No response as of 1-29-24

Mississippi:

The number of press conferences was estimated by tallying YouTube and Facebook entries for March-December 2020

South Carolina:

Aimee Crouch

News Director

South Carolina ETV and Public Radio

1041 George Rogers Boulevard | Columbia, S.C. | 29201

Provided the link https://www.youtube.com/@SouthCarolinaETV/streams

This link was used to access and tally the number of press conferences aired by SCETV.

Vermont:

Ty Robertson

Audience Experience Associate

Vermont PBS

Ms. Robertson indicated on 12/21/23 that Vermont Governor Scott gave 3 press conferences per week until late July 2020 when he reduced the number of press conferences to 2 per week. Vermont PBS does not have these press conferences in their archives. The number of press conferences indicated on the graph is a best estimate based on the information that was provided by Ty Robertson via email.

Appendix E

Transcription Data Selection Sources

Citation Name	Link Title	URL	Date accessed
South Carolina, March 2020	South Carolina Governor Henry McMaster and Senator Lindsay Graham Coronavirus Briefing Transcript March 27	https://www.rev.com/blog/transcripts/south-carolina-governor-henry-mcmaster-and-senator-lindsay-graham-coronavirus-briefing-transcript-march-27	11-27-23
Arizona, March 2020	**Governor Doug Ducey Issues Declaration of Emergency, Executive Order to Combat Continued Spread Of COVID-19**	https://goyff.az.gov/news/governor-doug-ducey-issues-declaration-emergency-executive-order-combat-continued-spread-covid	11-27-23
Mississippi, March 2020	**MPB LIVE: Governor Tate Reeves COVID-19 Response (3/24/2020)**	https://www.youtube.com/watch?v=RTWGMQ02Bs4	11-27-23
Vermont, March 2020	**GOVERNOR PHIL SCOTT ISSUES A "STAY HOME, STAY SAFE" ORDER, DIRECTS ADDITIONAL CLOSURES**	https://governor.vermont.gov/press-release/governor-phil-scott-issues-%E2%80%9Cstay-home-stay-safe%E2%80%9D-order-directs-additional-closures	11-29-23
Hawaii, March 2020	**Hawaii Governor Holds Press Conference (Mar. 17, 2020)**	**https://www.youtube.com/watch?v=C_dRqfB3RBY**	11-29-23
South Carolina, April 2020	**South Carolina Governor Henry McMaster COVID-19 Briefing April 6**	https://www.rev.com/blog/transcripts/south-carolina-governor-henry-mcmaster-covid-19-briefing-april-6	11-29-23
Mississippi, April 2020	MPB LIVE: Governor Tate Reeves COVID-19 Update (4-20-20)	https://www.youtube.com/watch?v=A0nH3Fwtnio	11-29-23
Arizona, April 2020	**Governor Ducey, Health Services Director Dr. Christ, Major General McGuire Share COVID-19 Updates**	https://www.youtube.com/watch?v=MbebMQzELgk	11-29-23
Vermont, April 2020	Governor Phil Scott State of Emergency	https://governor.vermont.gov/press-release/governor-phil-scott-extends-state-emergency-vermont	11/29/23
Hawaii, April 2020	**HAWAII COVID-19 DAILY NEWS DIGEST** **APRIL 20, 2020**	https://health.hawaii.gov/news/covid-19/hawaii-covid-19-daily-news-digest-april-20-2020/	12/4/23
South Carolina, May 2020	**South Carolina Gov. Henry McMaster COVID-19 Press Conference Transcript May 20**	https://www.rev.com/blog/transcripts/south-carolina-governor-henry-mcmaster-covid-19-briefing-may-20	12/4/23
Mississippi, May 2020	**MPB LIVE: Governor Tate Reeves COVID-19 Update (5/20/2020)**	https://www.youtube.com/watch?v=asO0wjQUpME	12/4/23

Arizona, May 2020	**Arizona schools and youth sports leagues can open, Ducey says**	https://www.azcentral.com/story/news/local/arizona-health/2020/05/28/arizona-gov-ducey-covid-19-update-may-28/5277459002/	12/4/23
Hawaii, May 2020	**Gov. Ige press conference to discuss coronavirus response**	https://www.hawaiinewsnow.com/video/2020/05/11/gov-ige-press-conference-discuss-coronavirus-response/	12/4/23
Vermont, May 2020	**Governor Scott Press Conference May 6, 2020**	https://www.wcax.com/content/news/Gov-Scott-press-conference-on-COVID-19-570232821.html	12/4/23
South Carolina, June 2020	**South Carolina Governor McMaster Coronavirus News Conference**	https://www.c-span.org/video/?472968-1/south-carolina-governor-mcmaster-coronavirus-news-conference#	12/5/23
Mississippi **June 2020**	**Governor Tate Reeves COVID-19 Update (6/10/2020)**	https://www.youtube.com/watch?v=_qwwGC-YlzE	12/7/23
Arizona, June, 2020	**Arizona COVID-19 Briefing with Governor Ducey, Dr. Christ, Maj. Gen. McGuire - June 29, 2020**	https://www.youtube.com/watch?v=Z4ibtVVPDR0	12/7/23
Vermont, June 2020	**Vermont Governor's Press Conference: COVID-19 Update 6/22/2021**	https://www.youtube.com/watch?v=_Lh1rwV9jUo	12/7/23
Hawaii, June 2020	**Gov. David Ige: Announcing lifting of Inter-Island Quarantine from 16 June 2020**	https://www.youtube.com/watch?v=sFd_2jdq3-8	12/7/23
South Carolina, July 2020	**SC Governor Henry McMaster COVID-19 Press Conference Transcript July 15**	https://www.rev.com/blog/transcripts/sc-governor-henry-mcmaster-covid-19-press-conference-transcript-july-15	12/7/23
Mississippi **July 2020**	**MPB LIVE: Governor Tate Reeves COVID-19 Update (7/15/2020)**	https://www.youtube.com/watch?v=sFIW5NxClC4	12/7/23
Arizona, July 2020	**Arizona COVID-19 Briefing with Governor Ducey, Dr. Christ, Maj. Gen. McGuire - July 30, 2020**	https://www.youtube.com/watch?v=H5vFFsXyuyQ	12/7/23
Vermont, July 2020	**Governor Phil Scott, Health and Education Experts Address School Reopening and Announce Universal School Opening Date**	https://governor.vermont.gov/press-release/governor-phil-scott-health-and-education-experts-address-school-reopening-and-announce	12/7/23
Hawaii, July 2020	**Hawaii Governor Gives an Update To House COVID-19 Committee (July 13, 2020)**	https://www.youtube.com/watch?v=750PFydu5DA	12/7/23
South Carolina, August, 2020	**Fact Check: SC Governor claims current COVID-19 surge not worse than summer 2020**	https://wpde.com/news/local/fact-check-sc-governor-claims-current-covid-19-surge-not-worst-than-summer-2020	12/11/23
Mississippi, August 2020	**MPB LIVE: Governor Tate Reeves COVID-19 Update (8/4/2020)**	https://www.youtube.com/watch?v=-nANrvFCYzQ	12/11/23
Arizona, August 2020	**Media Briefing on Flu Plan of Action with Governor Ducey & Dr. Christ - August 31, 2020**	https://www.youtube.com/watch?v=1tM8njdKj7k	12/11/23
Vermont, August 2020	**Governor Scott's COVID-19 Response Remarks - August 14, 2020**	https://governor.vermont.gov/governor-update-august-14-2020	12/11/23
Hawaii, August 2020	**Hawaii Lt. Governor on the state's reinstatement of Covid-19 restrictions**	https://www.youtube.com/watch?v=QICResUmggY	12/11/23

South Carolina, September 2020	**Governor's Media Briefing September 1, 2020**	https://www.youtube.com/watch?v=YMybzpjh-So	12/11/23
Mississippi, September 2020	**MPB LIVE: Governor Tate Reeves COVID-19 Update (9/10/2020)**	https://www.youtube.com/watch?app=desktop&v=IN5xrI52sfE	12/12/23
Arizona, September 2020	**Media Briefing on Completing the 2020 Census with Governor Ducey - September 17, 2020**	https://www.youtube.com/watch?v=OKkApN4NJyo	12/12/23
Vermont, September 2020	**Press Conference - Governor Scott and Administration Officials COVID-19 Update 9/15/2020**	https://www.youtube.com/watch?v=axG1eJfXn00	12/7/23
Hawaii, September 2020	**Hawaii COVID update by Gov. David Ige**	https://www.youtube.com/watch?v=szmFOkJ-7KY	12/12/23
South Carolina, October 2020	**Gov. Henry McMaster Lifts Restaurant Occupancy Limits Statewide**	https://governor.sc.gov/news/2020-10/gov-henry-mcmaster-lifts-restaurant-occupancy-limits-statewide	12/12/23
Mississippi, October 2020	**MPB LIVE: MEMA Hurricane Delta Briefing**	https://www.youtube.com/watch?v=V9Kt8SGawXY	12/12/23
Arizona, October 2020	**Gov. Ducey is holding a news conference to discuss Arizona's rising COVID-19 cases and response**	https://www.youtube.com/watch?v=j7OCbnmDKVI	12/12/23
Vermont, October 2020	**Press Conference - Governor Scott and Administration Officials COVID-19 Update 10/2/2020**	https://www.youtube.com/watch?app=desktop&v=TczxBclyyQ8	12/12/23
Hawaii, October 2020	**HAWAIʻI COVID-19 DAILY NEWS DIGEST OCTOBER 15, 2020**	https://health.hawaii.gov/news/covid-19/hawaii-covid-19-daily-news-digest-october-15-2020/	12/12/23
South Carolina, November 2020	**S.C. Gov. McMaster urges residents to get tested for COVID-19 before Thanksgiving**	https://wlos.com/news/local/sc-gov-mcmaster-urges-residents-to-get-tested-for-covid-19-before-thanksgiving	12/12/23
Mississippi, November 2020	**12 November 2020 COVID-19 Update**	https://www.facebook.com/MiloLand24/videos/1082061922197912	12/12/23
Arizona, November 2020	**Arizona Gov. Doug Ducey held a press conference on November 18**	https://www.rev.com/blog/transcripts/arizona-gov-doug-ducey-covid-19-press-conference-transcript-november-18	12/12/23
Vermont, November 2020	**Press Conference - Governor Scott and Administration Officials COVID-19 Update 11/27/2020**	**https://www.youtube.com/watch?v=u1yvv31kMgA**	12/7/23
Hawaii, November 2020	**HAWAIʻI COVID-19 DAILY NEWS DIGEST NOVEMBER 19, 2020**	https://health.hawaii.gov/news/covid-19/hawaii-covid-19-daily-news-digest-november-19-2020/	12/12/23
South Carolina, December 2020	**Governor's Update on Coronavirus (COVID-19) December 9, 2020**	https://www.youtube.com/watch?v=YSY_zlYpStQ	12/11/23
Mississippi, December 2020	**LIVE: Governor Tate Reeves December 1, 2020**	https://www.facebook.com/tatereeves/videos/301264984442946	12/12/23

Arizona, December 2020	**Briefing with Governor Doug Ducey, Dr. Cara Christ & Maj. Gen. Michael McGuire – December 2, 2020**	https://www.youtube.com/watch?v=kFkffKTj16A	12/12/23
Vermont, December 2020	**Press Conference - Governor Scott and Administration Officials COVID-19 Update 12/1/2020**	https://www.youtube.com/watch?v=2i80YqxMXjg	12/7/23
Hawaii, December 2020	**Gov. David Ige COVID-19 update**	https://www.youtube.com/watch?v=mnOctDLguF4	12-12-23

These transcripts are referenced in the Findings and Results section of Chapter 4 by month and by state. For example, findings from Hawaii in April 2020 are cited as (Hawaii, April 2020).