Media Coverage of COVID-19 Pandemic during the Trump and Biden Administrations

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Abstract

This research explored media coverage of the pandemic in the United States across two different administrations. The study revealed that both Fox News and MSNBC discussed the pandemic and utilized the five listed attributes, but the salience of these attributes varied for each media outlet. Key findings from examining individual sources showed the nuances of the media's coverage and the differences in framing the pandemic across the two administrations.

Keywords

Agenda-Setting, Media Coverage, COVID-19, Trump, Biden

1. Introduction

Over the span of more than three years, the world has suffered significant loss of life, economic downturn, and dramatic change to our way of life. The international pandemic, Coronavirus 2019, or COVID-19 is one of the deadliest diseases in recent history, with over 6.5 million reported deaths worldwide (Johns Hopkins University & Medicine, 2022); the United States leads with over a million deaths reported (Centers for Disease Control and Prevention [CDC], 2022).

Throughout the distressing timeline of 2020, nations worldwide encountered negative GDP growth rates, with significant declines in sectors such as tourism, hospitality, retail and manufacturing (International Monetary Fund [IMF], 2020a). Further, to control the spread of the virus, governments implemented strict lockdown measures and social distancing guidelines. These measures led to the closure of schools, business and public spaces, dramatically altering daily routines and limiting social interactions (IMF, 2020b).

This virus has changed the interactions between people and their health precautions. With so many unknown variables, individuals turned heavily to news

and social media to remain updated on the virus as it moved through the United States and across the globe. That is why it is crucial to provide credible and reliable information about the pandemic, which has affected the lives and livelihoods of many people (Basch et al., 2020b).

The mass media has a proven history of providing audiences with critical information about crises locally, nationally, and internationally (CDC, 2017). When public health crises, natural disasters, or other significant events happen, the media is there to help "guide the public attention" (Moon, 2011), which is one of the media's many roles. In a time when the mass media could have unified as a collective to persuade citizens to take preventive measures, the media seemingly fractured and became more polarized. Rahtz, Schulrz, and Sirgy (2022) stated that the media is intertwined with the dysfunction of the political system in the United States which has "created, facilitated and/or supported the polarization" (p. 580).

Extant literature on the pandemic ranges from the polarization of mask-wearing on social media (Lang, Erickson, & Jing-Schmidt, 2021) to media coverage and the behavior of financial markets (Haroon & Rizvi, 2020). Some research also focuses on the political and media polarization of the pandemic response of the United States government (Kerr & van der Linden, 2021). There is research regarding how the media framed the pandemic (Hubner, 2021) and the propagation of misinformation surrounding COVID-19 coverage in the United States (Chen et al., 2021; Motta, Stecula, & Farhart, 2020). Other research regarding the pandemic examines how big-city news coverage influences rural viewers (Kim, Shepherd, & Clinton, 2020). There is research investigating conservative-leaning media coverage of the pandemic (Romer & Jamieson, 2021). However, there is limited research into how the liberal-leaning media portray COVID-19. The current studies do not address how traditional partisan media has contributed to fracturing public perception of the coronavirus pandemic.

Past research on how the media covered the United States federal government's response to other public health crises including the H1N1 outbreak (Mesch, Schwirian, & Kolobov, 2013; Plough et al., 2011) or natural disasters like Hurricane Katrina (Birkland & Waterman, 2008; Sommers et al., 2006) helps to inform this research on the media's power to shape the audience's thoughts about the events. Research into media coverage of other countries' government responses to emergency events, for example, The Netherlands' Enschede Firework Disaster (Kuttschreuter, Gutteling, & de Hond, 2011) and a comparison of China's media coverage to the United States (Fu et al., 2012) are also explored.

This research seeks to examine how partisan media informed the public about the pandemic and discussed the federal administration in charge at that time by conducting a content analysis based on the second-level agenda-setting theory, which focuses on defining an issue through media frames (Coleman & Wu, 2010). This exploration can contribute to an understanding of two different media styles, which in this research refers to the partisan media ideological tendency in the United States, using two different media types (refers to news presenta-

tions such as newspaper, broadcast, etc.). The media styles used in this research are liberal- and conservative-leaning. It also has the potential to reveal how the liberal-leaning media and the conservative-leaning media separate in times of tumultuous public health crises.

The second-level agenda-setting theory is utilized to examine the potential split between the two media styles. The limited research on how the partisan media covered the government response and pandemic in the United States calls for a study to begin addressing the gap in the literature.

2. Literature Reviews

2.1. Agenda-Setting Theory

The agenda-setting theory focuses on how the media sets the public's agenda. As the media broadcast certain subjects, the audience should reflect and learn more about them (Moon, 2011). The agenda-setting theory's core premise is that the media agenda's importance of items influences their salience on the public opinion (Buturoiu & Gavrilescu, 2021). The concept of the theory is that the mass media presents an issue in great frequency and prominence that the public (audience) believes the broadcasted issue is more important than the other issues. Therefore, the more the issue is covered, the more significant it seems to people.

The first-level agenda-setting theory focuses on "the amount of coverage of an issue" (Wu & Coleman, 2009) and "exploring the media role in deciding what issues the public will be aware of" (Coleman & Wu, 2010). Essentially, this nominal level tells people what to think about through the media. The Chapel Hill study conducted by McCombs and Shaw in 1972 demonstrates that "the prominence of issues highlighted by the media could be transferred to the public's mind" (Buturoiu & Gavrilescu, 2021). The coronavirus media coverage has caused prominence of issue salience to many people in the United States, regardless of political ideology.

Through the seminal research conducted by McCombs and Shaw in 1972, the researchers found a significant correlation between the amount of media coverage and the rankings of importance by media consumers (Roberts, Wanta, & Dzwo, 2002), finding that issue salience is influenced heavily by the news media. McCombs (1992) states that the easy fit of the "agenda-setting metaphor" to issues provides a "strong, explicit theoretical link between mass communication and public opinion."

2.2. Second-Level Agenda-Setting

The second-level agenda setting is also called attribute agenda setting (Balmas & Sheafer, 2010; López-Escobar et al., 1998; Meraz, 2011), which focuses on how the media frames impact the public agenda (McCombs et al., 1997). Second-level agenda setting concentrates on defining the issue (Coleman & Wu, 2010) by exploring the impact of attribute salience, the elements describing objects or people in the news (Wu & Coleman, 2009). This is a shift from the media in-

fluencing the public on *what to think about* to the function of telling the audience *how to think about* subjects (Balmas & Sheafer, 2010). The mass media emphasize specific attributes while describing issues to draw attention to those properties, so attribute salience is present when individuals consider or talk about those issues (Camaj, 2014).

This level can divide into two dimensions: substantive, the considerable qualities like appearance, and affective, the emotional (tonal) qualities of the attributes, and proposes that the object's attributes are transferable from the media to the public in a similar way to the salience of issues (Wu & Coleman, 2009). Research done on candidate images in Spanish elections by McCombs et al. (1997) found indications of second-level agenda-setting effects on the "substantive and affective dimensions of voters' candidate descriptions" with the strongest effects on the affective dimension.

2.3. Media Coverage of Heath Crises and COVID-19 Pandemic

Research has extensively examined the relationship between mass media and health crises, such as H1N1, Ebola, and SARS outbreaks (Mesch et al., 2013; Plough et al., 2011; Klemm, Das, & Hartmann, 2016; Pieri, 2019). Media attention has been found to correlate with public worry (Mesch et al., 2013) and can affect vaccination rates, particularly in marginalized communities (Plough et al., 2011). Media portrayal of crises can shape societal attitudes, such as the portrayal of Hurricane Katrina survivors as refugees or evacuees (Gilens, 1996; Sommers et al., 2006) and can highlight failures in government response (Birkland & Waterman, 2008).

The mass media plays a significant role in shaping public attention during disease outbreaks (López-Escobar et al., 1998) by providing information to the public (Allan, 2002, as cited in Melki et al., 2022) and directing their attention (Moon, 2011). During uncertain times, the media serves as a bridge between science and society (Pearman et al., 2021), but often reports the spread of pandemics in exaggerated tones (Bomlitz & Brezis, 2008), which can cause fear and worry among the public (Alcabes, 2009, as cited in Mesch et al., 2013). In the case of COVID-19, the media primarily focused on informing the public about the disease, its symptoms, and preventative measures (Davidson & Wallack, 2004; Melki et al., 2022), but missed opportunities to promote health-sustaining behaviors (Basch et al., 2020a) and framed the pandemic as a threat to lifestyles (Kim et al., 2020). Local news coverage still influences public health behaviors in rural areas (Kim et al., 2020).

2.4. Political Influence during the Media COVID-19 Coverage

Political polarization has accelerated in the United States in the twenty-first century, partly due to partisan online news outlets (Rahtz et al., 2022; Vargo & Guo, 2016; Meraz, 2011). Selective exposure reinforces individuals' beliefs and limits exposure to opposing opinions, leading to increased polarization (Camaj,

2014; Stroud, 2007). The media has a significant role in shaping the public agenda for deliberation and consensus building, but partisan media can fragment the public agenda and hinder democracy (Hopmann et al., 2010; Chan & Lee, 2014). Partisan selective exposure can motivate citizens to contribute effort and resources to political parties they support, but it can also lead to attitude polarization and inhibit consensus building (Dilliplane, 2011; Stroud, 2010). The current political environment is characterized by information abundance, which may lead politicians to ignore issues and information sources that do not align with their predispositions and goals (Zoizner et al., 2017).

Effective leadership and communication from the federal government are crucial during a national crisis such as a pandemic, but Rahtz et al. (2022) found a failure of leadership negatively impacted national mitigation efforts. The early framing of the COVID-19 pandemic in the United States focused on societal concerns rather than individual health, potentially causing people to prioritize their way of life over their health (Hubner, 2021). Right-leaning media outlets spouted hoaxes and conspiracy theories, causing a divide in the information their followers are willing to consume and potentially leading to less trust in medical professionals (Motta et al., 2020).

Indeed, media sources covered the coronavirus differently, with conservative-leaning media emphasizing China's role in the virus's spread (Zhang & Trifiro, 2022) and left-leaning media providing more exposure and warning coverage (Mach et al., 2021). News coverage also contributed to political polarization regarding COVID-19, with conservative-leaning media more likely to promote misinformation (Motta et al., 2020) and endorse Trump's strategy of downplaying the pandemic (Gollust et al., 2020). This can lead to delayed protective behavior and a lower perception of risk of the virus among conservative political ideology (Kerr et al., 2021). During the onset of the pandemic, media coverage focused on former President Trump's policies and messaging, with left-leaning media refuting misinformation while right-leaning media propagated it (Gollust et al., 2020).

2.5. Research Questions & Hypotheses

Based on the purposes of this current study and past literature, the following research questions and hypotheses are proposed:

RQ1: What are the similarities and differences in media coverage of COVID-19 by media outlet?

RQ2: Which attributes were made salient in a) liberal- and b) conservative-leaning media coverage of COVID-19?

RQ3: How did this coverage differ during the Trump versus the Biden administration?

RQ4: How did partisan media coverage of Trump's response to COVID-19 differ from coverage of Biden's response?

H1a: Left-leaning media coverage will more positively cover Biden's response

to COVID-19.

H1b: Left-leaning media coverage will more negatively cover Trump's response to COVID-19.

H2a: Right-leaning media coverage will more positively cover Trump's response to COVID-19.

H2b: Right-leaning media coverage will more negatively cover Biden's response to COVID-19.

3. Research Method

3.1. Population and Sample

To ensure the focus of the research on COVID-19, specific keywords were used to search for articles on NexisUni database, namely COVID, COVID-19, coronavirus, and pandemic. The additional keywords of President Donald Trump and President Joe Biden were used to distinguish the two time periods analyzed in the study, March 1, 2020, to September 30, 2020, and March 1, 2021, to September 30, 2021, respectively. By using both liberal-leaning and conservative-leaning media, the study aimed to identify any political bias in their reporting of COVID-19. MSNBC and USA Today were chosen as the liberal-leaning media, while Fox News and The Daily Caller were selected as the conservative-leaning media. The population size of the media outlets was 2842 in 2020 and 1327 in 2021, and a systematic random sample of 634 articles and transcripts was selected to ensure the reliability of the results. While there was a drop in published content on COVID-19 from the specified media in 2021 compared to 2020, the number of articles was adjusted for each year's population size.

3.2. Coding Categories

We analyzed five different attribute saliences in the media about the coronavirus and the two administration responses.

Several patterns emerged from this process, such as death count or toll, number of hospitalizations, partisan language, emergency relief, vaccine, or vaccination rate, etc. Five categories contain similar ideas: partisan language, prevention/protection, COVID-related statistics, and positive and negative. The attribute sentiment is provided only for prevention or protection and COVID-related statistics.

Partisan language. Partisan language refers to language that is biased towards a particular political party or group, often used to persuade, or appeal to a specific audience. We coded for the presence of this variable when media coverage contained words and expressions about the two dominant political parties in the United States, such as "The Left fear mongering" "Republicans promoting ivermectin," and "partisan divide."

Prevention/Protection. In this study, prevention/protection refers to taking measures to avoid or stop the spread of COVID-19 viruses to safeguard against harm, damage, or danger. We coded for the presence of this variable when me-

dia coverage contained information from reputable sources (CDC, WHO, FDA, etc.) about preventative measures against the virus, such as "wearing a mask," "social distancing of 6 feet," and "self-isolation." If media coverage exhibited the prevention attribute, we also analyzed the sentiment of the media, whether it was positive or negative.

COVID-related Statistics. This variable refers to information about the corona virus hospitalizations, death toll, testing, and vaccinations, including "death count or toll" "55% of the country vaccinated," and "FEMA testing sites." If the media coverage displayed the COVID-related Statistics attribute, then we also analyzed the sentiment of the media, whether was positive or negative.

Positive. In media coverage of the government's response to COVID-19, the term "positive" refers to a tone of articles that are optimistic, hopeful, confident, or affirming, indicating the presence of desirable qualities or features. We coded for presence of positive when media coverage contained words or phrases that praise the government's response to COVID-related details, such as "sent PPE to much-needed areas" and "provided much-needed COVID relief for citizens."

Negative. In media coverage of the government's response to COVID-19, the term 'negative' refers to a tone of articles that are pessimism, doubt, cynicism, or opposition, indicating the absence or lack of a desirable quality or feature. We coded for presence of negative when media coverage contained words or phrases that criticized the governmental response to COVID-related details, such as "COVID relief package is not enough," and "Hydroxychloroquine is not a preventative measure for COVID."

Media type by political tendency and administration. The code for the combined media by political tendency is as follows: 1) Conservative-leaning and 2) Liberal-leaning. For a more specific look at the presidential eras and media political leaning, the codes are listed as follows: 1) Trump Conservative, 2) Trump Liberal, 3) Biden Conservative, and 4) Biden Liberal.

3.3. Intercoder Reliability

Three coders (the researcher and two additional coders) were trained to test for intercoder reliability. The coders analyzed approximately 12 percent of the sample (n = 80) in determining reliability. Krippendorff's Alpha (α) was calculated for variables involving judgment coding (Krippendorff, 2004). The coefficients are listed as follows: partisan language (α = 0.74), prevention/protection (α = 0.80), and the attribute sentiment (α = 0.89), COVID-related statistics (α = 0.94), and sentiment (α = 0.86), positive (α = 0.87), and negative (α = 0.71). All coefficients are within acceptable ranges.

4. Results

4.1. Similarities vs. Differences in Coverage of COVID-19 by Media

Research question one (*RQ*1) asks about the similarities and/or differences in the coverage of the media.

When analyzing the partisan language attribute under the four different sources, the attribute is further split by the most prominent news outlets. As shown in Table 1, the finding revealed the media outlets, Fox News (96.4%, n = 134) and MSNBC (96.3%, n = 130), reporting often contained partisan language, over the other media types, *The Daily Caller* (32.9%, n = 46) and *USA Today* (10.7%, n = 15) (χ^2 = 331.67, p < 0.01).

Table 2 shows the results for the prevention attribute by source. Media outlets Fox News (88.5%, n = 123), MSNBC (82.2%, n = 93), and *USA Today* (66.4%, n = 93) informed their audiences of preventative measures against the corona virus. Only 32.1% (n = 45) of *The Daily Caller* articles suggested preventive and protective measures against the virus (χ^2= 120.41, p < 0.01).

As shown in Table 3, the finding indicates that broadcasts from MSNBC (91.1%, n = 123) and Fox News (74.1%, n = 103) informed their respective audiences of COVID-related statistics including the death toll, vaccine rates, etc. These reports are higher than *USA Today* (42.1%, n = 59) and *The Daily Caller* (28.6%, n = 40) informing their audiences of the same (χ^2 = 140.31, p < 0.01).

As revealed in Table 4, reporting from Fox News (59.0%, n = 82) and MSNBC (48.9%, n = 66) praises the administrations' response to the coronavirus statistically more than reporting *The Daily Caller* (25.0%, n = 35) and *USA Today* (21.4%, n = 30) (χ^2 = 58.85, p < 0.01). When examining the negative sentiment, Table 5 shows that reporting from MSNBC (59.3%, n = 80) and Fox News (54.0%, n = 75) criticizes the administrations' response to the coronavirus statistically more than *USA Today* (30.7%, n = 59) and *The Daily Caller* (25.7%, n = 36) (χ^2 = 47.14, p < 0.01).

When analyzing the sentiment from article and transcript sources (Table 6), the media outlets, MSNBC (65.0%, n = 80), *USA Today* (84.7%, n = 50), Fox News (80.6%, n = 83), and *The Daily Caller* (77.5%, n = 31) were more negative when reporting COVID-related statistics to their audiences (χ^2 = 11.36, p < 0.05). The media outlets MSNBC (87.6%, n = 99) and *USA Today* (76.6%, n = 72) reported prevention/protection measures more positively than their conservative-leaning counterparts which were more negative, Fox News (73.2%, n = 90) and *The Daily Caller* (73.9%, n = 34) (χ^2 = 121.83, p < 0.01).

To summarize, Fox News and MSNBC were similar in covering the topics while *USA Today* and *The Daily Caller* were less likely to cover the attributes during the pandemic. When examining the dependent variables individually, MSNBC and Fox News are more likely to report on the attributes. *USA Today* joined the two television outlets in reporting the prevention or protection attribute. The examination of the positive and negative attributes shows that MSNBC and Fox News were more inclined to praise and criticize the administrations' response to the coronavirus pandemic. *The Daily Caller* was less likely to report on all five attributes listed. Furthermore, the analysis of the two attribute sentiments (prevention sentiment and COVID-related statistics sentiment) shows that there are differences in the coverage of promoting prevention

Table 1. Partisan language by source.

		MSNBC	USA Today	Fox News	Daily Caller
Partisan Language	Present	130 (96.3%)	15 (10.7%)	134 (96.4%)	46 (32.9%)
	Absent	5 (3.7%)	125 (89.3%)	5 (3.6%)	94 (67.1%)
	χ^2 (3, n = 554) = 331.67, $p < 0.01$				

Table 2. Prevention/protection by source.

		MSNBC	USA Today	Fox News	Daily Caller
Prevention Protection	Present	111 (82.2%)	93 (66.4%)	123 (88.5%)	45 (32.1%)
	Absent	24 (17.8%)	47 (33.6%)	16 (11.5%)	95 (67.9%)
	χ^2 (3, n = 554) = 120.41, $p < 0.01$				

Table 3. COVID-related statistics by source.

		MSNBC	USA Today	Fox News	Daily Caller
COVID-related Statistics	Present	123 (91.1%)	59 (42.1%)	103 (74.1%)	40 (28.6%)
	Absent	12 (8.9%)	81 (57.9%)	36 (25.9%)	100 (71.4%)
	χ^2 (3, n = 554) = 140.31, $p < 0.01$				

Table 4. Positive sentiment by source.

		MSNBC	USA Today	Fox News	Daily Caller
Positive	Present	66 (48.9%)	30 (21.4%)	82 (59.0%)	35 (25.0%)
	Absent	69 (51.1%)	110 (78.6%)	57 (41.0%)	105 (75.0%)
	χ^2 (3, n = 554) = 58.85, $p < 0.01$				

Table 5. Negative sentiment by source.

		MSNBC	USA Today	Fox News	Daily Caller
Negative	Present	80 (59.3%)	43 (30.7%)	75 (54.0%)	36 (25.7%)
	Absent	55 (40.7%)	97 (69.3%)	64 (46.0%)	104 (74.3%)
	χ^2 (3, n = 554) = 47.14, $p < 0.01$.				

Table 6. Attribute sentiment by source.

		MSNBC	USA Today	Fox News	Daily Caller
CrS Sentiment	Positive	43 (35.0%)	9 (15.3%)	20 (19.4%)	9 (22.5%)
	Negative	80 (65.0%)	50 (84.7%)	83 (80.6%)	31 (77.5%)
	χ^2 (3, n = 325) = 11.36, $p < 0.05$				
Prevention Sentiment	Positive	99 (87.6%)	72 (76.6%)	33 (26.8%)	12 (26.1%)
	Negative	14 (12.4%)	22 (23.4%)	90 (73.2%)	34 (73.9%)
	χ^2 (3, n = 376) = 121.83, $p < 0.01$				

Note: CrS = COVID-related Statistics.

measures to their various audiences that can be broken down by media style and article sources.

4.2. Attribute Saliency by Political Tendency of Media

The second research question (RQ2) sought to determine the saliency of the five attributes in the two different media styles.

As shown in Table 7, there is a higher percentage of partisan language used in the reporting in conservative-leaning media (64.5%) than in liberal-leaning media (52.7%) ($\chi^2 = 7.94$, $p < 0.01$).

Using the combined categories, the prevention/protection attribute was analyzed. This attribute looks at whether the media suggested recommendations from reputable sources such as CDC, FDA, WHO, etc. As revealed in Table 8, liberal-leaning media (74.2%, n = 204) are significantly more likely to suggest preventive or protective information to use against the virus than conservative-leaning media (60.2%, n = 168) ($\chi^2 = 12.25$, $p < 0.01$).

Reporting information concerning COVID-related statistics such as the death toll, vaccine rates, virus cases, etc. keeps the public informed about the spread of the pandemic in the United States and potentially elsewhere. Results shown in Table 9 revealed that liberal-leaning media (66.2%, n = 182) are statistically more likely to report COVID-related statistics to their audience than conservative-leaning media (51.3%, n = 143) ($\chi^2 = 12.73$, $p < 0.01$).

In terms of media style, there is no statistical difference in sentiment when reporting from conservative-leaning and liberal-leaning media about COVID-related statistics ($\chi^2 = 2.94$, $p = 0.09$). As shown in Table 10, in terms of tone of sentiment towards preventive measures, conservative-leaning media had a negative sentiment towards preventive measures (77.5%, n = 124) while liberal-leaning media was more positive (79.2%, n = 216) ($\chi^2 = 119.28$, $p < 0.01$).

As shown in Table 11, there is not a significant difference when comparing media styles (conservative- and liberal-leaning) for praising the administrations' response to COVID-19 ($\chi^2 = 2.89$, $p = 0.09$). Furthermore, Table 12 shows there is not a significant difference when comparing media styles (conservative- and liberal-leaning) for criticizing the administrations' response to COVID-19 ($\chi^2 = 1.39$, $p = 0.24$).

To summarize, the attributes most salient in liberal-leaning media are preventive or protection measures and COVID-related statistics. However, the most salient attribute in conservative-leaning media is partisan language. The conservative-leaning media provides more negative coverage of preventive measures while the liberal-leaning media provides more positive coverage. The attribute salience of COVID-related statistics sentiment was not significant. Since the media did not either favor or critique the administrations' pandemic response, there was no evidence of either positive or negative sentiments.

4.3. Media Coverage of COVID-19 by Trump & Biden Administrations

The focus of research question three (*RQ*3) is to analyze how media coverage of

Table 7. Partisan language by political tendency of media.

		Conservative-Leaning Media	Liberal-Leaning Media
Partisan Language	Present	180 (64.5%)	145 (52.7%)
	Absent	99 (35.5%)	130 (47.3%)
	χ^2 (1, n = 554) = 7.94, p < 0.01.		

Table 8. Prevention/protection by political tendency of media.

		Conservative-Leaning Media	Liberal-Leaning Media
Prevention/Protection	Present	168 (60.2%)	204 (74.2%)
	Absent	111 (39.8%)	71 (25.8%)
	χ^2 (1, n = 554) = 12.25, p < 0.01.		

Table 9. COVID-related Statistics by political tendency of media.

		Conservative-Leaning Media	Liberal-Leaning Media
COVID-related Statistics	Present	143 (51.3%)	182 (66.2%)
	Absent	136 (48.7%)	93 (33.8%)
	χ^2 (1, n = 554) = 12.73, p < 0.001.		

Table 10. Attribute sentiment by political tendency of media.

		Conservative-Leaning Media	Liberal-Leaning Media
CrS Sentiment	Positive	29 (35.8%)	52 (64.2%)
	Negative	114 (46.7%)	130 (53.3%)
	χ^2 (1, n = 325) = 2.94, p = 0.09		
Prevention Sentiment	Positive	45 (20.8%)	171 (79.2%)
	Negative	124 (77.5%)	36 (22.5%)
	χ^2 (1, n = 376) = 119.28, p < 0.01		

Note: CrS = COVID-related Statistics.

Table 11. Positive sentiment by political tendency of media.

		Conservative-Leaning Media	Liberal-Leaning Media
Positive	Present	117 (41.9%)	96 (34.9%)
	Absent	162 (58.1%)	179 (65.1%)
	χ^2 (1, n = 554) = 2.89, p = 0.09.		

Table 12. Negative sentiment by political tendency of media.

		Conservative-Leaning Media	Liberal-Leaning Media
Negative	Present	111 (39.8%)	123 (44.7%)
	Absent	168 (60.2%)	152 (55.3%)
	χ^2 (1, n = 554) = 1.39, p = 0.24		

the pandemic differs under the Trump and Biden administrations. Three different attributes such as partisan language, prevention/protection and sentiment, and COVID-related statistics and sentiment were observed under two different administrations.

In terms of the administrations, the results are provided in Table 13 COVID-related statistics under the Trump administration were statistically more negative (75.3%, n = 61) than under the Biden administration, where the sentiment was more positive (74.2%, n = 181) (χ^2 = 63.12, p < 0.01). Prevention was addressed in the media under the Trump administration as statistically more positive (71.8%, n = 155) than in 2021 (χ^2 = 7.61, p < 0.01).

When analyzing the use of partisan language by administration (Table 14), 2020 and 2021, there is not a significant difference in the use of the media (χ^2 = 0.72, p = 0.40). Media reporting in 2020 (74.3%, n = 246) was more likely to discuss preventive or protective protocols to mitigate the spread of the virus than in 2021 (56.5%, n = 126) (χ^2 = 19.18, p < 0.01).

The chosen media outlets have no statistical significance in the difference between the time periods of 2020 and 2021 and reporting COVID-related statistics (χ^2 = 1.44, p = 0.23).

The findings showed that there is no significant difference between the two different time periods in terms of their praise for the administrations' response to COVID-19 (χ^2 = 0.238, p = 0.63). There is not a significant difference when comparing the 2020 and 2021 time periods and the negative sentiment of the articles and transcripts for the administrations' response to the coronavirus (χ^2 = 1.18, p = 0.28).

Comparing the two different presidential eras (Table 15), the use of partisan language within the articles and transcripts is significantly higher under the Trump administration than under the Biden administration. There is a higher percentage of conservative-leaning media, Trump (67.5%) and Biden (60.2%), using partisan language under both administrations than the liberal-leaning media (χ^2 = 9.41, p < 0.05). Liberal-leaning media under both administrations, Trump (83.6%) and Biden (60.0%), are significantly more likely to inform their audience of preventive measures against the virus when compared to their conservative-leaning counterparts (χ^2 = 33.32, p < 0.01). Analyzing the third attribute shows that a significantly larger percentage of liberal-leaning media, Trump (67.9%) and Biden (63.6%) under both administrations informed their audience of COVID-related statistics over the conservative-leaning media (χ^2 = 14.16, p < 0.01).

The results of the attribute sentiment for prevention/protection and COVID-related statistics are listed in Table 16. There is a higher percentage of conservative-leaning media, Trump (60.6%) and Biden (96.7%) providing more negative coverage of preventive measures to their audience under both administrations when compared to the liberal-leaning media (χ^2 = 140.64, p < 0.01). Under the Trump administration, the media coverage of COVID-related statistics is more negative under both media styles, conservative-leaning (83.1%) and

Table 13. Attribute sentiment by presidential era.

		Trump Administration	Biden Administration
CrS Sentiment	Positive	20 (24.7%)	181 (74.2%)
	Negative	61 (75.3%)	63 (25.8%)
	χ^2 (1, n = 325) = 63.12, p < 0.01		
Prevention Sentiment	Positive	155 (71.8%)	61 (28.2%)
	Negative	93 (58.1%)	67 (41.9%)
	χ^2 (3, n = 376) = 7.61, p < 0.01		

Note: CrS = COVID-related Statistics.

Table 14. Issue salience by presidential era.

		Trump Administration	Biden Administration
Partisan Language	Present	199 (60.1%)	126 (56.5%)
	Absent	132 (39.9%)	97 (43.5%)
	χ^2 (1, n = 554) = 0.72, p = 0.40		
Prevention/ Protection	Present	246 (74.3%)	126 (56.5%)
	Absent	85 (25.7%)	97 (43.5%)
	χ^2 (1, n = 554) = 19.18, p < 0.01		
COVID-related Statistics	Present	201 (60.7%)	124 (55.6%)
	Absent	130 (39.3%)	99 (44.4%)
	χ^2 (1, n = 554) = 1.44, p = 0.23		
Positive	Present	130 (39.3%)	83 (37.2%)
	Absent	201 (60.7%)	140 (62.8%)
	χ^2 (1, n = 554) = 0.24, p = 0.63		
Negative	Present	146 (44.1%)	88 (39.5%)
	Absent	185 (55.9%)	135 (60.5%)
	χ^2 (1, n = 554) = 1.18, p = 0.28		

Table 15. Issue salience by presidential era.

		Trump Administration		Biden Administration	
		Conservative-Leaning Media	Liberal-Leaning Media	Conservative-Leaning Media	Liberal-Leaning Media
Partisan Language	Present	112 (67.5%)	87 (52.7%)	68 (60.2%)	58 (52.7%)
	Absent	54 (32.5%)	78 (47.3%)	45 (47.3%)	52 (47.3%)
	χ^2 (3, n = 554) = 9.41, p < 0.05				
Prevention/ Protection	Present	108 (65.1%)	138 (83.6%)	60 (53.1%)	66 (60.0%)
	Absent	58 (34.9%)	27 (16.4%)	53 (46.9%)	44 (40.0%)
	χ^2 (3, n = 554) = 33.32, p < 0.01				

Continued

COVID-related Statistics	Present	89 (53.6%)	112 (67.9%)	54 (47.8%)	70 (63.6%)
	Absent	77 (46.4%)	53 (32.1%)	59 (52.2%)	40 (36.4%)
	χ^2 (3, n = 554) = 14.16, $p < 0.01$				

Table 16. Attribute sentiment by presidential era.

		Trump Administration		Biden Administration	
		Conservative-Leaning Media	Liberal-Leaning Media	Conservative-Leaning Media	Liberal-Leaning Media
CrS Sentiment	Positive	15 (16.9%)	5 (4.5%)	14 (25.9%)	47 (67.1%)
	Negative	74 (83.1%)	107 (95.5%)	40 (74.1%)	23 (32.9%)
	χ^2 (3, n = 325) = 94.86, $p < 0.01$				
Prevention Sentiment	Positive	43 (39.4%)	112 (80.6%)	2 (3.3%)	59 (86.8%)
	Negative	66 (60.6%)	27 (19.4%)	58 (96.7%)	9 (13.2%)
	χ^2 (3, n = 376) = 140.64, $p < 0.01$				

Note: CrS stands for COVID-related Statistics.

liberal-leaning (95.5%). Compared to the Biden administration, conservative-leaning media (74.1%) continues to report COVID-related statistics with negative sentiment while the liberal-leaning media (86.8%) reports more positively (χ^2 = 94.86, $p < 0.01$).

In summary, conservative-leaning media are more likely to use partisan language in their reports under both administrations. Liberal-leaning media are more likely to inform their audience of prevention techniques recommended by the CDC, WHO, FDA, etc., and report COVID-related statistics under both administrations. Prevention sentiment is covered more favorably during both administrations by the liberal-leaning media. During the Trump administration, both media styles covered COVID-related statistics more negatively, but the liberal-leaning media began reporting more positively under Biden. For the analysis of the time period and the five attributes, the present study found that prevention measures were more salient and covered more positively in 2020 than in 2021.

4.4. Sentiment of Media Government's Response to COVID-19

Research question four (*RQ*4) asks about the media's coverage of Trump's response and Biden's response to COVID-19. In answering research question four, the hypotheses are also addressed.

As shown in Table 17 and Table 18, during the Trump presidency (*H*2*a*), a larger percentage (61.4%) of conservative-leaning media exhibited a more positive tone when discussing the administration's handling of the pandemic more than (*H*1*b*) liberal-leaning media percentage (17.0%); however, under the Biden presidency (*H*1*a*), more liberal-leaning media coverage used a more positive

Table 17. Positive sentiment by presidential era.

		Trump Administration		Biden Administration	
		Conservative Leaning Media	Liberal-Leaning Media	Conservative-Leaning Media	Liberal-Leaning Media
Positive	Present	102 (61.4%)	28 (17.0%)	15 (13.3%)	68 (61.8%)
	Absent	64 (38.6%)	137 (83.0%)	98 (86.7%)	42 (38.2%)
	χ^2 (3, n = 554) = 124.91, $p < 0.01$				

Table 18. Negative sentiment by presidential era.

		Trump Administration		Biden Administration	
		Conservative-Leaning Media	Liberal-Leaning Media	Conservative-Leaning Media	Liberal-Leaning Media
Negative	Present	35 (21.1%)	111 (67.3%)	76 (67.5%)	12 (10.9%)
	Absent	131 (78.9%)	54 (32.7%)	37 (32.7%)	98 (89.1%)
	χ^2 (3, n = 554) = 146.08, $p < 0.01$				

tone when addressing the administration's handling of the pandemic more than the (*H2b*) conservative-leaning media coverage (χ^2 = 124.91, $p < 0.01$).

Furthermore, during the Trump presidency (*H1b*), a greater percentage (67.3%) of liberal-leaning media exhibited a more negative tone when commenting on the administration's handling of the pandemic more than (*H2a*) conservative-leaning media percentage (21.1%); however, under the Biden presidency (*H2b*), more conservative-leaning media coverage expressed a more negative tone when commenting on the administration's handling of the pandemic more than the (*H1a*) liberal-leaning media coverage (χ^2 = 146.08, $p < 0.01$). Thus, all hypotheses were supported.

5. Discussion and Conclusions

Through a content analysis using second-level agenda-setting theory, this research aimed to understand media coverage of the pandemic in the United States under two different administrations. The analysis focused on several variables, including partisan language, prevention/protection and its sentiment, COVID statistics combined with sentiment, and positive and negative sentiment. Four different sources were examined: MSNBC, USA Today, Fox News, and The Daily Caller, which were further grouped into political tendencies: conservative-leaning and liberal-leaning.

One of the key findings from examining the individual sources was that both Fox News and MSNBC talked about the pandemic and used the five listed attributes. However, the saliency of the attributes was different for each media outlet. For instance, MSNBC and Fox News informed their audience about prevention/protection measures as well as COVID-related statistics, but there was no clear distinction between the two different media outlets that covered

COVID-19 attributes.

Upon examining the attribute salience of prevention/protection in media coverage of the pandemic, a split was observed among different media organizations. MSNBC and USA Today were more positive in their reporting compared to Fox News and The Daily Caller. This divide could be attributed to the political environment in which the media seems to be more aligned with the two major political parties in the United States. According to Aratani (2020), Democratic leaders were more vocal about the importance of mask-wearing to help stem the spread of the virus, with many Democratic governors mandating that masks be worn in public. In contrast, Kahane (2021) notes that Donald Trump politicized mask-wearing early in the pandemic and criticized presidential nominee Joe Biden during a debate. These political factors likely influenced the coverage and framing of prevention/protection measures in the media.

In the present study, the findings showed that the reporting of the pandemic was further divided when the media was divided into categorical political tendencies. Specifically, liberal-leaning media tended to inform their audience of preventive measures against the virus and COVID-related statistics consistently during the two presidential eras. On the other hand, the only salient item that conservative-leaning media had was partisan language. This study found that conservative-leaning media provided negative coverage of prevention and protection and COVID-related statistics under both presidencies. The negative coverage could be attributed to various reasons, including the fact that Fox News regularly minimized the threat of the virus for political reasons (BMJ, 2020). Additionally, research conducted by Zhou et al. (2020) suggests that highly partisan environments provide people with high access to false information about the pandemic, and health messaging is highly damaged by political bias and economically focused narratives.

As anticipated, the study's final significant finding indicates that the media, categorized according to their political leaning, mirrors the ideological response to the federal-level management of the COVID-19 pandemic. When one of the two major political parties is in power, the media aligned with that party's ideology tends to highlight the favorable aspects of the president's pandemic management policies. Furthermore, the partisan media remained consistent in their criticism of the opposing party elected to oversee the pandemic's federal response.

Although this study did not investigate the audience's response to media reports, it is essential to consider previous research on selective exposure, polarization, and politicization (Camaj, 2014; Mutz & Martin, 2001; Stroud, 2010). Previous studies have shown that people tend to consume media that confirms their pre-existing beliefs and opinions (Camaj, 2014; Dilliplane, 2011). Therefore, individuals who primarily consume media that aligns with their political ideology are less likely to encounter opposing content that could challenge their views, especially in times of public health crises. Dilliplane (2011) suggests that exposure to opposing partisan media can encourage critical reflection and examina-

tion of one's criteria.

The findings of this study suggest that the media plays a crucial role in public health crises by providing objective and scientifically proven information to their audience to mitigate the spread. However, during the COVID-19 pandemic in the United States, some media outlets appeared to be fragmented in providing their audience with pertinent information, leading to further polarization. The media should promote behavior changes to help slow the spread of the virus, regardless of political leanings. Previous studies have shown that beliefs about the consequences of protective behaviors are significant predictors when campaigning to those who believe COVID-related misinformation. In times of crisis, it is ideal for a unified message to be presented, but creative messaging could still provide actionable changes. Engaging with public health officials and crisis communication practitioners can help media outlets create a plan to provide credible and informative coverage while remaining aligned with their audience.

In short, when one of the two major political parties assumes power, it is noticeable that media outlets aligned with the corresponding party's ideology tend to emphasize the positive aspects of the president's policies regarding pandemic management. Conversely, partisan media consistently criticize the opposing party elected to oversee the federal response to the pandemic. In essence, it is imperative for the media to prioritize the dissemination of objective and scientifically validated information to the public during times of crisis. This can be achieved through the creation of a cohesive message that promotes behavioral changes, while actively engaging with public health officials and communication experts. By doing so, media outlets can play a pivotal role in the collective endeavor to navigate the crisis with minimal loss of life.

While the present study did not explore the relationship between issue salience and media influence, it is believed to advance our understanding of how media organizations cover a subject of health crise such as the COVID-19 pandemic.

As with any research, this study has limitations that should be acknowledged. First, the study only examined a limited number of attributes related to COVID-19 coverage in the media, including partisan language, prevention, COVID-related statistics, positive, and negative sentiments. Other important attributes, such as economic impact, mental health, and vaccine hesitancy, were not included in the analysis. Second, the study did not directly examine how audiences respond to media reports, and the chosen method of quantitative content analysis is limited in its ability to provide contextual information. Finally, the study only analyzed a sample of the population and may not represent the views and opinions of the entire population.

The limitations of the study do not diminish its key findings, which reveal the extent of partisanship in media coverage during a public health crisis. To mitigate the risks associated with major contagions, media outlets should prioritize the dissemination of scientific data to encourage positive behavior changes that will facilitate a smooth return to normalcy. Zhou et al. (2020) emphasize the

importance of reducing partisan biases in health reporting and promoting scientific findings from credible and neutral sources. To achieve this goal, media outlets should consult with crisis communication and health communication experts to craft messaging that resonates with their audience while promoting positive behavior changes. This study advances our understanding of media coverage during the COVID-19 pandemic and sheds light on the polarization of the media in the United States. Future research could investigate the lasting impact of the pandemic on public attitudes and behaviors, building upon the insights generated by this study.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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