# Parenthood, Politics, and COVID-19: Examining the Influence of Parent's Partisanship on COVID-19 Vaccination Among Adolescents in the United States

Ву

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To my mom and dad, who have supported me and believed in a	my dreams every sten of the
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"One isn't necessarily born with courage, but one is born with potential. Without courage, we cannot practice any other virtue with consistency. We can't be kind, true, merciful, generous, or honest"

-Maya Angelou

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#### INTRODUCTION

The issue of vaccine hesitancy has been an existing public health concern, even dating back to the 18th century when Edward Jenner first demonstrated successful immunity against smallpox among the group of people that he had inoculated with cowpox (Wolfe & Sharp 2002). Since then, the development of vaccines for a variety of viruses has been revolutionary in mitigating the spread of global outbreaks. With that said, the emergence of SARS-CoV-2 (the novel virus that causes COVID-19) posed new obstacles for the scientific community and public health experts. The onset of the COVID-19 pandemic created a season of uncertainty among society, one in which medical experts and scientists were tasked to find a quick solution. The rapid development of the COVID-19 vaccine was met with differing opinions: one of praise and enthusiasm, and one of skepticism and concern. Despite the demand for the vaccine, medical professionals have also seen a growing increase in vaccine hesitancy. According to the World Health Organization (WHO 2022), the term vaccine hesitancy "refers to delay in acceptance or refusal of vaccines despite availability of vaccine services" and "is influenced by factors such as complacency, convenience, and confidence" (Troiano & Nardi 2021, p. 245). In 2019, the organization listed the issue of vaccine hesitancy as one of the top ten global health threats (WHO 2019). Vaccine hesitancy and subsequent vaccine refusal has been observed throughout the pandemic and is not a standalone phenomenon; the reluctance or hesitancy to receive the COVID-19 vaccine is largely influenced by societal factors and determinants of health, while also being influenced by the current political climate we are living in.

Globally, this public health crisis led to an urgency for vaccine development and for rapid solutions to mitigate spread and disease. Given the wealth and stability of the United States in comparison to other nations, the U.S. has been able to have a large vaccine rollout. That said, this did not automatically translate to immediate vaccination of all Americans. The United States has had a particularly unique experience in vaccine rollout due to the politicization of the pandemic by elected officials and political messaging. As COVID-19 cases rose in the United States, so did the political

grappling with issues related to partisanship and polarization among the two major political parties (Druckman et al. 2021). In 2019, the Pew Research center conducted a survey of almost 10,000 adults that indicated that partisanship and polarization among parties was extending even beyond the political bubble of Washington, D.C. Americans on either political party are increasingly expressing more negative views about the opposing party and believe that they are unable to agree on "basic facts" (Pew Research Center 2019).

With the pandemic, division that was being caused by partisanship grew as political figures either endorsed or opposed the vaccine rollout. By equating scientific messages to specific politicians or political beliefs, the COVID-19 pandemic became a source of polarization for American society. Moreover, political polarization caused Americans to have a perspective about COVID-19 health guidelines that is influenced by their own political leanings or ideologies. Political endorsements of the COVID-19 vaccine have not been as effective as expected and have been attributed to sowing mistrust in the safety of the vaccine itself (Bokemper et al. 2021). Ultimately, the politicization of the pandemic can be having a significant impact on creating vaccine hesitancy among Americans, subsequently impacting their risk to COVID-19.

As of February 2022, the CDC has reported that over 200 million people in the United States are fully vaccinated, with approximately 90 million people having also received a booster. Despite these large vaccination numbers, the CDC also reports that there are still several states with high percentages of vaccine hesitancy (CDC 2022). If we wish to understand the trends of vaccine hesitancy in the United States, it is imperative to examine how vaccine hesitancy impacts specific demographics, in particular children. Children who contract COVID-19 are less at risk of experiencing severe symptoms, yet they can still be carriers of the virus and transmit to others within their communities, often being asymptomatic carriers (Morgan et al. 2021). Before the COVID-19 vaccine was approved for teenagers aged 12-17 years old by the FDA, cases in the United States for young teens and adolescents were higher than adults due to their inability to receive the vaccine (Morgan et al. 2021). Most states require parental approval in

order for children and adolescents to receive the COVID-19 vaccine, making the role of parents critical in the vaccination of children and adolescents in the United States. This consent law has been put in place because it has been widely accepted that children do not yet have the cognitive processes to make accurate or educated decisions regarding their health (Morgan et al. 2021). While this may hold validity among younger children, there is growing debate about the merit these laws have for older children, specifically young teens, and adolescents. As they become older, adolescents between the ages of twelve to seventeen years old become more cognizant of their health choices and bodily autonomy. Differences between how parents perceive the vaccine and how their child does can impact how many young teens and adolescents in the United States are vaccinated.

With all of this in mind, this thesis will aim to analyze the issue of the COVID-19 vaccine through the perspective of American parents of young teens and adolescents between the age of twelve to seventeen years old. The objective of this research is to understand the extent to which partisanship among American parents is associated with health-related decisions, such as receiving a vaccine. In using an anonymous online survey on Facebook, Instagram, and Amazon Mechanical Turk advertised to parents of this specific age group, this thesis intends to analyze the following questions:

- 1) Does parent's partisanship impact their likelihood of being vaccinated for COVID-19 and the likelihood of their adolescent's being vaccinated?
- 2) Is partisanship influencing how parents perceive the COVID-19 pandemic and how does it reflect the political messaging seen throughout the pandemic?

Through the administration of an anonymous online survey and quantitative data analysis, this study will focus on highlighting the reasons as to why parents of teens and adolescents may be vaccine hesitant and what they feel has led them to be reluctant to vaccinate their child. While this thesis focuses specifically on partisanship, it is important to disclose that the objective of this work is not to undermine or discount the other social factors that can be influencing parent's decisions regarding the vaccine.

Instead, this work intends to demonstrate how the politicization of the pandemic influence's health related decisions. This has substantial impact on COVID-19 vaccinations currently, yet it will also affect the receptiveness that parents have towards other medical interventions in the future. Furthermore, this research study will address this issue to bring awareness to the importance of addressing vaccine hesitancy for the current context of COVID-19 and the future.

### **BACKGROUND**

# Part I: Defining Partisanship and Examining the Influence of Politics on Health Behaviors Pre-COVID-19

Partisanship's Influence on Social Identity and Behavior

The first definition of partisanship dates back to the book *The American Voter* published in 1960 by Angus Campbell and colleagues, which described partisanship as the beliefs or feelings that will lead to a sense of "psychological attachment" to a certain political party (Campbell et al. 1960; Huddy et al. 2015). In the context of the United States, partisanship can be defined as an individual that identifies with either the Democratic or Republic. Although research on partisanship tends to focus on Democrats or Republicans, Independents need to be considered as they often swing between which party they identify with. The concept of partisanship is still a debated topic within the political science field, which has led to the development of two contrasting theories: instrumental and expressive (Arceneaux & Vander Wielen 2013; Lupu 2013; Huddy & Bankert 2017). Instrumental partisanship argues that individuals will be attached to a specific political party based on their ideological beliefs and proximity to the preferred policies of that party. In contrast, expressive partisanship is recognized as the "enduring identity strengthened by social affiliations to gender, religious, and ethnic, or racial groups" (Green, Palmquist, & Schickler 2002; Huddy et al. 2015). While these existing theories continue to be debated, there is one general theme that remains-party identification and partisanship is being increasingly related to social identity and group membership.

Political scientist Leonie Huddy has extensively researched partisanship by expanding upon the social identity theory first proposed by Henri Tajfel and John Turner in 1979. In the context of politics, Huddy argues that when people identify themselves with a political party and feel a part of the created "in-group", they will be further motivated to act in ways that benefit the group or advance the status of that party (Huddy 2001). As described by Tajfel and Turner, members of the group will feel inclined to create a positive social identity that stands out from others (Taifel & Turner 1979). Feelings of attachment help create specific identities, such as religious or racial identities. Research conducted in 2018 by Shanto Iyengar and Masha Krupenkin supports these theories and argues that partisanship has become increasingly salient to the degree that it now impacts everyday behaviors and drives people to become more polarized. Using feeling thermometers, also referred to as thermometer scales, Iyengar and Krupenkin (2018) report that both Democrats and Republicans are maintaining relatively stable, positive feelings for their party, but are significantly showing more negative feelings toward each other. Partisans have become increasingly more hostile towards the opposing party in the last two presidential elections than in the 2008 election alone (Iyengar & Krupenkin 2018). In addition, the researchers reference a national survey conducted by the Pew Research center which found that 64% of Democrats and 55% of Republicans have reported to only have a few or zero close friends that identify with the opposing party (Pew Research Center 2017; Iyengar & Krupenkin 2018). These findings reiterate the concept of the ingroup vs. out-group and further develop the narrative of us versus them.

### Impact of Politics on Health-Related Behaviors

While the issue of partisanship during the pandemic is currently an ever-present conversation among social scientists, researchers had already begun to examine the intersection between politics and health related decisions before the start of the pandemic. For instance, the Affordable Care Act is a popular example of politicized healthcare interventions. Since the passing of Medicare and Medicaid, the Affordable Care Act is the largest healthcare initiative passed by the United States federal government (Oberlander et al. 2020). The ACA, also nicknamed "Obamacare" after former President Barack Obama

who formally signed the law, became a partisan issue that faced both support and criticism from Americans. Republicans have been less likely to enroll in state-funded insurance plans since the passing of the ACA compared to Democrats (Lerman et al. 2017). Enrollment in public health services can be dependent on the way that policies are framed to the public as well as individual partisanship. The "biggovernment" promotion of the ACA is less appealing to Republicans because a major tenet of Republican ideology is the preference for small government action. In turn, this causes individuals to feel that it is not in their best interest to enroll in a plan that is funded by the federal government. Individuals who oppose the ACA have said that they will seek other potential options or risk being uninsured (Lerman et al. 2017). Beyond individual partisanship, the ACA demonstrates politicization on the state level. One component of the ACA is the expansion of state Medicaid programs, which is dependent on individual state actions. As of August 2015, there were twenty states that had not adopted Medicaid expansion (Hertel-Fernandez et al. 2016). These twenty states are predominantly led by Republican figures. As of 2022, the Kaiser Family Foundation has reported that there are twelve states who have not adopted expansion (Kaiser Family Foundation 2022). These differences among state's expansion of Medicaid have been attributed to partisan levels of state government (Hertel-Fernandez et al. 2016). The partisanship that drove the divisive debates of the ACA demonstrates how political underpinnings of prior healthcare interventions can frame the perceptions that society has around their own health choices.

To understand the current nature of vaccine hesitancy during the pandemic, it is equally imperative to recognize that the partisanship observed over the COVID-19 vaccine is not a novel event; partisanship has already been inherently linked to vaccines because both Republican and Democratic administrations have promoted them for public health safety (Krupenkin 2021). Political messages behind vaccines can have significant implications on how the public accepts the vaccine rollout. In a national sample of the U.S. population during the H1N1 outbreak of 2009, 36.1 % reported willingness to be vaccinated. Of people who expressed significant concern, 52. 9% of people were willing to receive the vaccine (Mesch & Schwirian 2015). Those with the greatest trust in the federal government were the most willing to be vaccinated. In terms of partisanship, Democrats were more willing to receive the flu vaccine

compared to Republicans. These findings continue to reflect the ideological stance of Republicans who tend to prefer limited government involvement compared to Democrats (Mesch & Schwirian 2015).

Furthermore, their work is also supported by the research of Masha Krupenkin (2021) who finds that partisans are more likely to report an intention to vaccinate if their party is holding the presidency (Krupenkin 2021). When George W. Bush held the presidency in 2003, Democrats were more skeptical of the safety of the smallpox vaccine. In 2015 during the Obama administration, Republicans were more likely to question the safety of the MMR vaccine compared to Democrats (Iyengar & Krupenkin 2018; Krupenkin 2018). In line with the theories of social identity, these feelings of attachment to a political party are reflective of people's hesitancy towards vaccines that are rolled out during the presidency of an opposing party. An individual's partisanship shapes their thoughts regarding vaccines, thus indicating the influence that political ideologies have on the healthcare institution.

The existing literature continues to show an increasing relationship between vaccine choice and public trust in institutions, either government or medical institutions. Recent measles outbreaks in the United States have prompted further conversation about state rights and personal choice (Gostin 2015). Majority of the measles cases reported by the CDC were from unvaccinated individuals or individuals whose vaccination status was unknown (Gostin 2015). The "Disneyland" measles outbreak that occurred in January 2015 generated a wave of social media buzz around the issue of measles vaccinations for children. In an analysis of 204 Facebook pages between October 2009 and October 2019, David Broniatowski and colleagues, found that 44% of those pages were opposing vaccines for the purpose of protecting civil liberties (Broniatowski et al. 2020). The 2015 measles outbreak is particularly unique because it presented the idea of vaccine refusal to mainstream media. The conversation of civil liberties became a political messaging scheme, subsequently politicizing this public health issue. By creating this narrative of the measles outbreak, the field of healthcare is not apolitical as it may have once hoped to be. On the contrary, vaccines became a political talking point that continue to push feelings of partisanship onto healthcare issues.

### Part II: Applying Partisanship and Politics to SARS-CoV-2

Partisanship's Influence on Social Behaviors

Regarding the COVID-19 pandemic, research has primarily agreed that partisanship among

Americans is inhibiting the ability to mitigate the spread of the virus among the U.S. population (Clinton et al. 2021; Grossman et al. 2020). Prior to the pandemic, research on partisanship and social behavior was centered more on social interactions with others and interpersonal relationships in society. The is now a recent shift in this research, with more literature being dedicated to understanding the influence of partisanship on specific COVID-19 protocols or guidelines. Partisanship over the course of the pandemic has been attributed to the messaging promoted by political figures, as seen in the guidelines for physical distancing at the beginning of the pandemic (Grossman et al. 2020). Grossman et al.'s research in March 2020 used daily mobility patterns for U.S. counties, county-specific political preferences, and government leader's recommendations to stay at home, to understand how political partisanship was influencing if and how people chose to physically distance themselves. Researchers found that among Democratic-leaning counties, the messages given by state governors were more effective in reducing the mobility of local citizens compared to counties that leaned towards the Republican party.

An individual's own partisanship or political affiliation influences the receptiveness to messages given by political leaders. Republican governors who went against the national party narrative of COVID-19 experienced a unique response from constituents; Democrats in states with Republican governors responded strongly to social distancing guidelines, even when the governors were from the opposing party. Researchers argue that this occurred because the Republican governors who were urging for social distancing to be enforced were going against the Trump narrative of the pandemic. These governors then faced backlash from Republicans in these states because they were seen as people who were going against the Trump ideals and the Republican party. (Grossman et al. 2021). An individual's decision to adhere to COVID-19 guidelines is also a matter of how they perceive the impact of COVID-19. Up until April 2020, both Democrats and Republicans had increasing concern over the spread of SARS-CoV-2. Mid-April 2020 this synchronicity between parties started to cleave and Democrats maintained concerned,

whereas only about 40% of Republicans reported being concerned (Clinton et al. 2021). Public concern over the pandemic is being mediated by the messaging being presented by political figures at both state and federal levels of government. Hence, it is crucial for social scientists to recognize the impact that political messaging has on the health of the general population.

Political Messaging and Endorsements Influence COVID-19 Related Health Behavior

The politicization of the pandemic has also significantly impacted two other main health interventions proposed by medical professionals: mask-wearing and receiving the COVID-19 vaccine. Mask-wearing has been a critical component in reducing the spread of SARS-CoV-2, particularly in the earlier stages of the pandemic when a vaccine was not yet available. While the act of wearing a mask was foreign to most of society at the onset of the pandemic, mask-wearing has been suggested during other historic public health crises, such as the Great Influenza Pandemic, commonly referred to as the 1918 Spanish Flu (Kahane 2021). Researchers have proposed that possible anti-masking movements in 1918 could have been a result of skepticism around the efficacy of wearing a mask, as well as opposition to government overrule over personal liberties. Similar conversations on mask-wearing have occurred in our current experience with the COVID-19 pandemic.

The act of wearing a face mask has been politicized as major political figures used them in political messages. Former President Trump and his administration were hesitant to impose a national mask-wearing mandate. On April 3<sup>rd</sup>, 2020, Trump stated "You don't have to do it. They suggested for a period of time, but this is voluntary. I don't think I'm going to be doing it" (Kahane 2021; New York Times 2020). This statement was controversial because it came at the same time that cases were rapidly on the rise in the U.S., while also going directly against the recommendations that had been made by the Center for Disease Control and Prevention (CDC) Given that there was not a national mask mandate imposed, individual states implemented their own laws (Kahane 2021). As in the case of the ACA and Medicaid expansion, political leanings influenced which states implemented a face mask mandate. The states who did not implement a mask mandate were states that had a Republican governor in office (Kahane 2021). The decisions to wear a mask became a personal choice, as well as a political one. In a

mechanical Turk (MTurk) between the period of June 3<sup>rd</sup>, 2020, through June 11<sup>th</sup>, 2020 (Stosic et al. 2021). Participants were asked to complete a ten-item Belief in Science Scale (BISS), as well as questions regarding mask beliefs and other social demographic variables, including political ideology. Those who identify as more politically liberal reported wearing a face mask more often in public. Another survey conducted in 2020 found that 92% of Democrats reported wearing a face mask regularly compared to 76% of Republicans (Kramer 2020). These findings are supported in research led by Ping Xu and Jiuqing Cheng, which showed that political ideology was strongly linked to the attitudes individuals have regarding mask wearing. Although mask-wearing and social distancing has also been attributed to the need for self-control, mask-wearing, been more strongly linked to partisanship than other factors (Xu & Cheng 2021). The trends seen in mask wearing and social distancing behavior became more evident as the COVID-19 vaccine became available.

In addition to influencing social distancing behavior and mask wearing, partisanship and political messaging also had an impact on the COVID-19 vaccine rollout. Of 759 participants who participated in an online survey shared through WhatsApp, Instagram, and Facebook in October 2020, 49.7% of the participants said they would receive the vaccine if it was available (Akarsu et al. 2020). Moreover so, 38.4% said they would vaccinate their child. For those that opposed receiving the vaccine, the survey asked participants to explain their reasoning based on the provided options. Most of the participants who opposed the vaccines said they had concerns about reliability and effectiveness (Akarsu et al. 2020). That said, it is worthy to note that 13.7% of participants who said they opposed the vaccine responded to the question by choosing the following option: "COVID-19 infection is a biological weapon...and I think that the vaccine will serve those who produce the virus" (Akarsu et al. 2020). These findings serve to highlight the willingness of Americans to receive the vaccine before it had officially been available to the public. The work done by Kreps et al. around the same time also looked at a hypothetical COVID-19 vaccine although they took into other factors, including partisanship. In their survey of 2,000 participants, the researchers also asked participants to report their willingness to receive a hypothetical COVID-19

vaccine. Respondents who reported to be Democrats were more likely to report willingness to receive the hypothetical COVID-19 vaccine compared to those who reported to be Republicans (Kreps et al. 2021). While these research studies are based on participant's opinions of a hypothetical vaccine, these results do demonstrate the factors that were already influencing how people viewed their own vaccine choices before the official rollout of the COVID-19 vaccine began. Currently, the Kaiser Family Foundation (KFF) has established a COVID-19 vaccine monitor that is separated into political ideology and other factors, such as gender, age, education, race, and income (Kaiser Family Foundation 2022). Specifically looking at political party, KFF has reported that 92% of Democrats have been vaccinated as of February 2022. In comparison, 55% of participants who are Republican have been vaccinated. Unvaccinated individuals are usually of younger age and six in ten identify as Republican or lean towards the Republican party. This is in comparison to three in ten adults who are vaccinated and identify as Republican or lean towards that party. Of adults who have received at least one dose of the COVID-19 vaccine, four in ten identify as a Democrat or lean Democratic. The findings by the Kaiser Family Foundation support previous literature and continue to reinforce the idea that individuals who are of a certain political party are more willing to receive the COVID-19 vaccine compared to others.

The political messaging seen during the pandemic has also been a vital component to consider when aiming to understand how politics is intersecting with the decision to be vaccinated against SARS-CoV-2. During the 2020 Vice Presidential Debate, then-Senator Kamala Harris (D-CA) said that she would not receive the COVID-19 vaccine if it was endorsed by former President Trump, however she would receive it if Dr. Anthony Fauci of the National Institute of Allergy and Infectious Disease (NIAID) advised it. While the intention of the message was to argue that a public endorsement from a scientist would increase confidence in taking the vaccine, Vice President Kamala Harris inserted a political figure from the opposing party, subsequently making the messaging surrounding vaccination politicized.

Messages that stoke partisanship have also been seen from the Republican Party. During the presidential debate, former President Trump spoke of then-Democratic presidential candidate, Joseph Biden, and stated: "I don't wear masks like him. Every time you see him, he's got a mask. He could be speaking 200

feet away from them, and he show ups with the biggest mask I've ever seen." (Donald Trump as cited in Kolata & Rabin 2020). Statements made by political leaders have implications for how society will view the pandemic and recommended health interventions. Research by Bokemper et al. shows that announcing COVID-19 approval one week before the 2020 presidential election compared to announcing approval a week afterwards reduces the beliefs people have about the safety and efficacy of the vaccine (Bokemper et al. 2021). The timing of these announcements gives society the perception that the vaccine is politicized and is not being fully scientifically vetted.

Overall, beneath all these findings is the idea that partisanship and vaccine hesitancy is largely related to the public's trust in institutions (Mesch & Schwirian 2015). Concluding that partisanship is the primary driving factor of vaccine hesitancy would be inaccurate because it does not encompass all other external factors. Through the course of the pandemic, public trust in institutions has diminished or been questioned. Regarding the vaccine, the quick development of the vaccine and FDA emergency authorization implied to the public a "sense of being rushed" (Sabahelzain et al. 2021). There have been public vaccine campaigns, endorsements by pop culture figures, and endorsements from top political leaders to assuage the public about the safety of the vaccine. People with more trust in the federal government are more likely to receive a vaccine that is publicly endorsed by a political figure that they agree with. Prior to the rollout of the vaccine, having greater trust in science also meant that people had a greater belief in mask recommendations, thereby increasing the likelihood they would be willing to wear a mask out in public (Stosic et al. 2021). The Pew Research Center reported that 29% of U.S. adults have a great deal of confidence in medical scientists to act in the best interest of the public, which is a striking decline from 40% in November 2020 (Kennedy et al. 2022). Throughout the pandemic, the differences between Democrats and Republicans have continued to widen. Democrats are consistently more likely to have confidence in scientists compared to Republicans. Only 13% of Republicans are said to have high confidence in medical scientists, a statistic that has continued to decrease over the last two years (Kennedy et al. 2022). Examining the factors that have caused mistrust in the scientific community is still an ongoing area of study, yet it is already evident that the political cues by both elite figures on both

political parties has been an integral component in driving the messaging of the pandemic (Grossman et al. 2020).

### Part III: Parent's Political Ideologies and Impacts on Children's Health

Parenthood and Political Strategies Intertwine

Existing literature on parent's politics and the subsequent impact on children has focused on examining how political ideologies are passed down or "transmitted" to children as they age. Political leanings towards one specific party tends to stay consistent over time and transcends into adulthood. In the book, Mothers and Others: the role of parenthood in politics, editors Melanee Thomas and Amanda Bittner argue that "the literature suggests that parenthood often pushes women's attitudes in a liberal direction but has a conservative influence on men's attitudes" (Thomas & Bittner 2017, p. 201). The dynamics and nature of parenthood shapes how parents perceive social issues and there are also gender differences to consider. There is no definitive answer as to why parenthood leads women to think liberally about social issues or why men tend to think about the same issues on a more conservative basis. Researchers have argued that it is potentially a result of increased politicization within the family that occurs as a result of polarized messages that Republicans and Democrats use (Elder and Greene 2006 as cited in Thomas and Bittner 2017). In social issues related to equality, parents have a different perspective than adults without children because of the different priorities they have. Parents will often think of politics and policy issues in a more liberal manner because of the way they envision the future for their children (Prokos, Baird, and Keene 2010). Regarding gender differences, researchers argue that motherhood creates a maternal instinct in women that leads them to prefer a more nurturing or active government. Therefore, mothers are more likely to support issues of social welfare or programs that provide aid and healthcare services to the public (Thomas & Bittner 2017). These trends highlight how the experience of parenthood shapes political thoughts, and it is essential to recognize that politics specifically references parenting in their messaging. For instance, the term "soccer mom" was a popular term during the 1996 election cycle. The first instance of the term was seen in an article by the Washington Post that discussed how Bill Clinton was gaining traction with conservative voters. One of

the voters former President Bill Clinton was targeting was the "soccer mom," who was defined as a mother who lived in the suburbs, was a busy person dealing with kids, and drove the "minivan". The key part that interested political strategists of the "soccer mom" was that the "soccer mom" was a swing voter. Both Republican and Democratic candidates appealed to them through their children and the traditional family image (Thomas & Bittner 2017). Issues about education, safety, and the future of children were of high importance as they were the principal issues for mothers. Political messages that appeal to children's issues have been useful to politicians in gaining the support of American parents. Going forward, these trends will be useful to social scientists in examining how politics shapes parent's perspectives in the current context of the pandemic.

Examining the Influence of Parent's Politics on their Perception of COVID-19 and Vaccination

Currently, most of the literature on COVID-19 and partisanship has been centered on adults in general, with minimal attention being paid to specific demographics within society. Research on political behavior and partisanship among young teens and adolescents between the ages of 12-17 years old is a difficult issue to measure given the fact that they are minors and still unable to vote. Nonetheless, partisanship and politics can still impact them by proxy of their parents or guardians. Although it is still an emerging topic, there are a few recent research studies that examine whether and how parent's political affiliation affects childhood vaccination status during the COVID-19 pandemic. Vaccine hesitancy was already an existing concern for parents before the beginning of the pandemic. Allison Kempe et al. (2020) published research on routine childhood and influenza vaccination history that illustrates the existing vaccine hesitancy among US parents prior to the rollout of the COVID-19 vaccine. Approximately 6.1% of parents of children between the ages of six months old to eighteen years of age reported to be hesitant about any routine childhood vaccination (Kempe et al. 2020). Vaccine hesitancy for the influenza vaccine was 26% (Kempe et al. 2020). When asked about the reasons for being hesitant, parents reported to be concerned about the potential side effects of the vaccine, specifically for the influenza vaccine.

Effectiveness of the influenza vaccine was also another important factor in their reasoning (Kempe et al. 2020).

Regarding the COVID-19 vaccine, parental reasons for not vaccinating their child against COVID-19 appear to be similar. The main concerns that parents have reported is related to the vaccine's safety and side effects (Szilagyi et al. 2021). This line of reasoning can be reflective of the quick development period of this vaccine. That said, it does merit noting that there is not a generalizable consensus among parents. Peter Szilagyi and colleagues sampled a group of about 9,000 parents to understand their intent to allow their child to receive the COVID-19 vaccine. Of the sample, about 2000 parents responded and 28% reported they were very likely to have their child vaccinated. 33% of the sample reported that they were very unlikely to have their child vaccinated (Szilagyi et al. 2021). Democrats were more likely to report that they were likely to have their child vaccinated. Although the findings vary by the nature of the study, there is a similar trend observed in research published by Matthew Rhodes et al. in 2020. At the time of their research, COVID-19 vaccines had not been made readily available, yet the aim of the research was to gather a sense of how parent's felt about the possibility of vaccinating their child. Unlike a national sample, the researchers focused on conducting a sample using parents who were already vaccine-hesitant about children's vaccines. Rhodes et al. reported that parents have a "general unwillingness" to vaccinate their child (Rhodes et al. 2020, p.832). When asked about their knowledge of COVID-19, more than half the participants said they feel adequately informed about COVID-19. Although these two studies are useful in contextualizing how parents feel about COVID-19 vaccines for children, these studies do not account for specific demographics of children, nor do they fully determine the extent to which politics is influencing these parent's decisions.

### **Summary**

The literature presented in this review encompasses the work done on issues of partisanship, healthcare interventions, and the role of parental politics on childhood partisanship and health. These studies present evidence on American's perception of social issues and the extent to which politics has impacted decision making or behavior. Moreover, researchers have raised the issue of partisanship as a

social identity. For Americans, politics is becoming a polarizing issue that changes who they interact with, what they value, or how they behave. The man-made political institution of the United States is transcending into personal identities in a profound way, although it may not always have been recognized. The context of the pandemic has provided an opportunity for social scientists to expand upon their research and to delve into the issue of vaccines further. In reviewing the past literature of the measles outbreak and the anti-vaccination movements that have taken place throughout history, it is no longer as surprising to imagine why vaccine hesitancy during the pandemic has become essential. As mentioned earlier, the issue of vaccine hesitancy had already been a concern within the healthcare community. The pandemic exacerbated the issue of vaccine hesitancy to a newer level and brought it to the forefront through media coverage.

Research on COVID-19 is growing rapidly and there are consistently new studies being published on the various issues that the pandemic has impacted. The research that has been published on COVID-19 vaccination and parental politics is still very new and most of the research on children's vaccination status is related to parent's opinions about the effectiveness of the vaccine. Of the surveys that have been conducted, the methodology usually consists of an online survey. Participants are asked to answer questions based on the multiple choice or Likert scale format. These studies provide important statistics as to how many parents are willing to vaccinate their child and their potentials reasons for being in favor or opposed to vaccination. That said, current surveys do not offer participants an opportunity to answer an open-ended question or to freely state their reasons behind not vaccinating their child. This component can be integral in further understanding the reasons as to how parents perceive the pandemic and how they have come to the decisions they have made in regard to the vaccine and their child's health.

With all this in mind, my thesis will expand upon the existing research to address the extent to which parental partisanship predicts their beliefs surrounding the COVID-19 pandemic and the personal decision whether to vaccinate themselves and their young teenagers and adolescents. The basis of my research relies on the information gained through the administration of an anonymous online survey advertised on Facebook, Instagram, and Amazon Mechanical Turk. Through the responses from the

sampled participants, this thesis facilitates the opportunity to better understand the perspective of U.S. parents, their partisanship, and willingness to vaccinate their children. In gaining this understanding, social scientists will be better able to investigate the impact that politics has on health decisions, which will subsequently impact the way that the scientific community continues to interact with everyday people in the United States. This research will also demonstrate the necessity of recognizing the influence of politics on health interventions and how this will significantly impact health choices for parents and their children.

#### **METHODS**

The objective of this project is to examine the relationship between partisanship and politics on parent's choice to get vaccinated and to have their adolescent receive the COVID-19 vaccine. At large, the data on COVID-19 vaccinations in the United States is still rapidly changing as the dynamics of the pandemic have continuously changed. For my study, I decided to generate and conduct an anonymous online survey. Although there are several online surveys and studies about COVID-19, surveys are often produced by larger organizations or research institutions that are designed to estimate statistical data on the vaccinations among the general population. For my specific study, the data collected focuses only on parents of teens and adolescents. Many of the surveys for parents about COVID-19 have been asked parents to speak on their experiences with the education system because of the transition to online schooling and the homeschooling initiatives that parents had to undergo during the peak of the pandemic. The survey used in this research was uniquely created with the intention to ask parents about their vaccination status, in addition to asking parents about their thoughts on the political climate of the pandemic, and their own political beliefs. This form of data collection provides the opportunity to understand the relationship between politics and COVID-19 in a manner that is not accomplished solely through quantitative data analysis of existing secondary data.

The anonymous online survey (included in the Appendix) had 52 questions and was created using the survey instrument REDCap. The targeted population and unit of analysis were parents of adolescents aged 12-17 years in the United States. Survey questions were geared towards the vaccination status of

parents and their teenage children, as well as questions about political affiliation and political ideology of the participant. While the questions on the survey focused on the context of COVID-19, I included questions that aimed to measure partisanship. Through these questions, I can examine the potential intersection between COVID-19 beliefs, political partisanship, and political ideology. Most of the survey is multiple choice format, with one open-ended question at the end. Unlike many other surveys, this study provides this feature in order to allow space for the participant to write down any comments or extra thoughts that they may wish to offer on their experience during the pandemic. The open-ended question facilitated the opportunity to better understand how parents are understand the COVID-19 vaccine and how they have come to the decision whether to vaccinate their teen or adolescent.

The survey used in this study was advertised on social media through Facebook and Instagram. The advertisement ran from April 8-May 8, 2022. Social media advertising has become a more recent research method for social science researchers because of the availability to reach a large number of potential participants (Murphy et al. 2013). Given that social media is an engrained part of culture and one of the primary sources where people get their information from, advertising surveys allows researchers to reach the public in a more direct way. With all these factors in mind, I decided to use social media advertising to reach American parents across the United States. Unfortunately, it is critical to recognize that social media advertising is not fully conducive to social science research. Advertising on social media is largely targeted for small businesses or companies who aim to sell products. The intention of Facebook advertising can create challenges for social science researchers wishing to advertise an academic survey.

The survey advertisement created for this study was promoted using the Facebook page of the Department of Medicine, Health, and Society (at Vanderbilt University) official education page. The use of the survey was exempt from review by Vanderbilt University's Institutional Review Board for Human Participant Research. The advertisement ran from April 8, 2022, until May 8, 2022, with a budget of \$100. The target audience was listed as U.S. users who were between the age of 18 years old and 65 years of age. Data from Facebook and Instagram were supplemented by additional recruitment from Amazon

Mechanical Turk (MTurk). Participants who completed the survey through the MTurk program were compensated \$1.90. The budget for MTurk was \$400, which allowed for a sample collection of 125 participants. This compensation was calculated based on the expected time it would take to complete the survey and MTurk's required fees to recruit participants that are parents.

After data collection was concluded, the data from Facebook and MTurk were compiled and reviewed. Survey data that was partially completed by a participant were removed from the data analysis. Data that contained expletives or racial slurs were also removed. Between Facebook and Instagram advertising and MTurk, 254 records were collected. Sampled participants were selected based on their completion of the survey. For the participants who completed the survey through Amazon Mechanical Turk, participants were selected if they correctly inserted a code into the survey through their Amazon worker account. Matching codes between the two sites verified their submission and allowed participants to be compensated. The statistical analysis of survey responses was conducted using the statistical software Stata. I estimated descriptive statistics of the sample and bivariate analyses between parental partisanship and vaccination status of both the parent and adolescent. Multivariable logistic regressions were also used to further examine the relationship between partisanship and vaccination status of parents and their adolescents, while adjusting for parental gender, race/ethnicity, educational attainment, and relationship status.

### RESULTS

Prior to addressing the specific research question, it is imperative to make note of the demographics of the sampled participants. The demographics presented in Table 1 include gender, marital status, level of education attained, and the number of adolescents in the household. Table 1 also provides information on how many sampled participants have access to a pediatrician for their child's healthcare needs. Of particular importance to understanding the sampled participants, political affiliation is also included in this table. In sum, all these variables begin to establish the "identity" of the sampled participants. There were 254 sampled participants in total, 137 (53.9%) were women, and 85 (33.5%) were men. There were also 31 missing records, indicating that the participant chose not to specify their

gender identity. Most of the participants were White (83.9%) and 85.4% of the participants reported that they were either married or living with a partner. 157 participants (62.6%) had one adolescent in the household, and 64 participants (25.5%) reported that they have two adolescents in the household. Over three-quarters of the participants attained at least a bachelor's degree or more (82.7%) and most parents also said that their teen or adolescent attended public school. 81% of participants indicated that their child has access to a pediatrician as their form of primary medical care. As for political affiliation, the majority of the sample reported themselves as Democrats (53.5%), with 28.4% reporting as Republicans and 12.4% as Independents. Almost ten percent of the sample had missing records and did not answer the question.

When comparing the sample to the nationally representative data, there are many similarities. According to the United States Census Bureau, women made up approximately 50.8% of the U.S. population in July 2021, and men made up 49.2% (U.S. Census Bureau 2021). The percentage of the sample identifying as women were similar to the national average; however, the percentage of men in this sample is much smaller than national data. In the same report, the Census Bureau also reported that 76.3% of the population is White, a little less than the almost 84% of participants in my sample who reported being White. The percentage of participants who indicated that they were of another race was also close to the percentages reported by the U.S. Census Bureau. One notable difference between the sampled participants and nationally available data is the level of education that participants have attained. The Census reports that 88.5% of the U.S. population is a high school graduate or higher, with 32.9% having a Bachelor's degree or more (U.S. Census Bureau 2021). In contrast, 82.7% of my sample reported having completed a Bachelor's degree or more, with only ten participants reporting that they have received a high school diploma or GED. Therefore, my sample is skewed to participants who have completed higher education. As for the type of education that their children receive, most parents reported that their child is enrolled in public school. This finding is consistent with reports made by the National Center for Education Statistics, in which they have projected that the enrollment of children in public elementary and secondary school is around 50 million people. The reports made by the National Center for Education

Statistics show that the majority of American children attend public school. Only 20% of parents in the sample said that their child attends a private school with a religious affiliation.

While Table 1 does not provide information on respondent's access to medical care, Table 1 does include information on the type of medical care that their adolescent receives. The majority of sampled parents indicated that their adolescent visited a pediatrician at least once in the past year. The fact that their adolescents already have access to a pediatrician can indicate that they already have some form of involvement with the medical system. Although we are unable to know if their pediatrician has provided them with information about the COVID-19 vaccine, it is likely that they will use their pediatrician as a source of information. Hence, any information that pediatricians provide in the context of COVID-19 can be an important factor when parents decide whether to vaccinate their child. One of the most important pieces of information from Table 1 is the makeup of the sample by political affiliation. Most of the sampled parents consisted of Democrats. Among all registered voters in 2018, 33% identified as Democrat, 29% as Republican, and 34% as Independents (Pew Research Center 2020). Speaking at the national level, party identification tends to be similarly split among Democrats, Republicans, and Independents. My online sample of parents is significantly skewed to Democrats, unlike the nationally representative data. Republicans make up about 29% and only 12% of the sample can be considered "true" independents, meaning that when prompted to choose the option "Democratic-leaning" and "Republican-leaning", the participant chose neither. The separation of these respondents by party begins to create a picture of their political ideologies and how these then reflect their vaccination status of themselves and their adolescents.

**Table 1. Demographics of Sampled Participants** 

	Sample Size (n)	Percent (%)
Gender		
Male	85	33.5
Female	137	53.9
Other	1	0.4
Missing	31	12.2
Race/Ethnicity		
White	213	83.9
Black	6	2.4
Hispanic	10	3.9
American Indian/Alaska Native	8	3.2
Asian	9	3.5
Pacific Islander	1	0.4
Other	7	2.8
Relationship Status		6
Married or living with a partner	217	85.4
Divorced, separated or widowed	20	7.9
Never married	12	4.7
Missing	5	2.0
Adolescents in Household		
One adolescent in the household	157	62.6
Two adolescents in the household	64	25.5
Three of more adolescents in the household	17	6.8
Missing	13	5.18
Educational attainment		
Less than high school	1	0.39
High School Diploma/GED	10	3.9
Some College/Associate's Degree	32	12.60
Bachelor's Degree or More	210	82.7
Missing	1	0.4
Type of School Adolescent Attends		
Public School	156	62.15
Private, Religious Affiliation	48	19.12
Private, No Religious Affiliation	21	8.37
Homeschool	26	10.36
Missing	3	1.18
Adolescents Access to Medical Care		
Has Pediatrician	205	81.03
Does Not Have a Pediatrician	43	17.00
Missing	5	1.98
Political Leaning		
Democrat	130	53.50
	30	12.35
Independent		
Independent Republican	69	28.40

Source: Online Survey Conducted April 8-May 8, 2022

Table 2 presents the vaccinations status of sampled participants and their teenage adolescents for COVID-19, Influenza, and Human Papilloma Virus (HPV). This table also includes information on reasons why sampled parents may have chosen not to vaccinate their teenager or adolescent for COVID-19. Across all participants, 62.6% of parents indicated that they were vaccinated for COVID-19. Sampled parents also reported the vaccination status of their children, and 58.3% reported that their adolescent was vaccinated for COVID-19 as well. The percentage of parents and adolescents who were not vaccinated for COVID-19 was similar (35.4% of parents and 37.0% of adolescents). In comparison to the COVID-19 vaccine, the percentage of adolescents who have received the flu vaccine this year is higher (62.60%). The percentage of adolescents who are not vaccinated for the flu vaccine (36.6%) or HPV (44.5%) was similar to the percentage of adolescents who were not vaccinated for COVID-19. If we solely look at the reasons that the sampled parents have chosen not to vaccinate their adolescent, half of the participants (50%) said that they do not trust the medical experts that have been promoting the COVID-19 vaccine. The second largest reason that participants chose not to vaccinate their child was that they feel the COVID-19 vaccine is "unnecessary and ineffective." Other participants indicated that they would prefer to see the long-term effects (13%), feel that their child has enough protection through wearing a mask (2.2%), or they have medical reasons that prevents their child from receiving the vaccine (5.4%).

As argued by the World Health Organization, the issue of vaccine hesitancy has become a growing concern for the overall health of the population. Vaccine hesitancy surrounding the COVID-19 vaccine leads to a bigger conversation surrounding the factors that led us here; however, it is pertinent to take note of the vaccination status surrounding other vaccines. By assessing whether parents vaccinated their child for HPV and Influenza, I can also begin to determine if parents are actually hesitant about the COVID-19 vaccine itself of if they have already refused to vaccinate their children for other vaccines. There is about a 4% difference between the number of adolescents who have received the COVID-19 vaccine compared to the HPV vaccine (54.7% vs 58.3%). Comparing this to the vaccination status for the flu vaccine, more parents reported that their adolescent received the flu vaccine this year or would be receiving one. The percentage of adolescents who have not been vaccinated for Influenza or do not intend

to get one is within a one-percentage point difference from the percentage not vaccinated for COVID-19. This small marginal difference is consistent with the idea that those who do not get vaccinated for COVID-19 this year will also not likely get vaccinated for the flu. An important trend to note in Table 2 is the similarity between the percentage of parents vaccinated for COVID-19 and their children who are vaccinated for it as well. There is little difference between the vaccination status of parents and their adolescent, regardless of if they were vaccinated for COVID-19 or not. Of those who reported that their adolescent was not vaccinated, the most popular reason for doing so was that they did not "trust the medical experts promoting the vaccine." This information is critical to take into consideration when looking at the vaccination status among Democrats, Republicans, and Independents in this sample.

Table 2. Vaccination Status of Sampled Parents and Adolescents: COVID-19, Influenza, and HPV

Table 2. Vaccination Status of Sampled Parer	Sample Size (n)	Percent (%)
COVID-19 Vaccination Status of Sampled Parent	Sample Size (II)	1 Ci Cont (70)
Vaccinated for COVID-19	159	62.60
Not Vaccinated for COVID-19	90	35.43
Have Not Yet Decided	5	1.97
COVID-19 Vaccination Status of Adolescent		
Vaccinated for COVID-19	148	58.27
Not Vaccinated for COVID-19	94	37.01
Plans to Get Vaccinated for COVID-19	8	3.15
Have Not Yet Decided	4	1.57
Reasons for Not Vaccinating Adolescent for COVID-19		
"I do not trust the medical experts that are promoting this vaccine"	46	50.00
"This vaccine is not effective and unnecessary"	24	26.09
"I would prefer to wait to see the long-term effects of the vaccine"	12	13.04
"My child has medical reasons for not being vaccinated against COVID-19"	5	5.43
"My child already wears a mask and that is enough protection"	2	2.17
"I am not sure the vaccine is safe"	2	2.17
"My child is too young to receive this vaccine"	1	1.09
Influenza Vaccination Status of Adolescent		
Vaccinated for Influenza/Plans to Vaccinate	159	62.60
Not Vaccinated for Influenza/No Plans to Vaccinate	93	36.61
Missing	2	0.8
HPV Vaccination Status of Adolescent		
Vaccinated for HPV	139	54.72
Not Vaccinated for HPV	113	44.49
Missing	2	0.79

Source: Online Survey Conducted April 8, 2022- May 8, 2022

As previously mentioned, the objective of this research is to understand how partisanship may predict vaccination status among parents and their teens and adolescents. Table 3 demonstrates how vaccination status of the parent and their adolescent varied by the three political affiliations. Of the parents who reported being vaccinated for COVID-19, 91.5% were Democrats. 40.6% of Republican parents are also vaccinated for COVID-19. For those who consider themselves to be Independents, 63% are not vaccinated, with 27% of them having received the vaccine. There were some Democrats (1.5%) and Independents (10%) who answered that they were not sure yet whether or not they would receive the COVID-19 vaccine. In comparison, there were no sampled Republicans that indicated they were unsure about receiving the vaccine. Similar to the vaccination status of the parent, 90% of Democratic parents reported their adolescent to be vaccinated against COVID-19. 30.4% of Republican parents stated that their child was not vaccinated. A small percentage of both Democrats (3.1%) and Republicans (4%) said that they were planning on having their teenager vaccinated for COVID-19. In September 2021, the Pew Research Center reported that 86% of Democrats had received at least one dose of the COVID-19 vaccine. 60% of Republicans had also reported to have received at least one dose (Pew Research Center 2021). Comparing these values to the vaccination status of the respondents of this survey, it is further clear that the percentage of Democrats who are willing to get the vaccine is larger than the percentage of Republicans. Given that the sample is skewed significantly to Democrats, it is reasonable to expect that the vaccination status of Democrats in this sample are higher than the national sample. This reasoning can also serve as an explanation to why there are less Republicans in the sample who are vaccinated compared to the information reported by the Pew Research Center. In both this sample and that of the Pew Research Center, there are significant differences between Democrats and Republicans. These variations between the two parties represent a partisan divide that can also be reflected in how participants view the pandemic, as shown by Table 4.

Table 3. COVID-19 Vaccination Status Separated By Partisanship

	Percentage		
	Democrat	Independent	Republican
Parent's COVID-19 Vaccination Status			
Not Vaccinated	6.92	63.33	59.42
Vaccinated	91.54	26.67	40.58
Not Sure Yet/Haven't Decided Yet	1.54	10.00	0.00
Adolescent's COVID-19 Vaccination Status			
Not Vaccinated	4.62	70.00	65.22
Vaccinated	90.00	26.67	30.43
Planning on Getting Adolescent Vaccinated	3.08	0.00	4.35
Not Sure Yet/Haven't Decided Yet	2.31	3.33	0.0

Source: Online Survey Conducted April 8-May 8, 2022

Table 4 demonstrates how the sampled participants answered questions regarding their views on COVID-19 at both the state level and at the level of the federal government level, vote choice, and the media sources that participants observe. These types of questions were used to gain an understanding of how sampled participants perceive these issues that have contributed to the politicizing of the COVID-19. When asked about how they view their own state's handling of the pandemic, most Independents (73%) and Republicans (84%) said that their state's handling of the pandemic has been too strict. Approximately 34% of Democrats said that their state's handling of the pandemic has not been strict. This pandemic has been a controversial subject in American society, with varied opinions as to the risk it poses to certain groups within society. Sampled Democrats and Republicans had conflicting opinions as to the risk that they feel COVID-19 poses to teens and adolescents. 59% of Democrats said that COVID-19 poses a high risk to this age group, whereas 70% of Republicans stated that COVID-19 is not a risk. Participants varied on how they viewed the influence of politics on their perspective of COVID-19, although Democrats were the largest group of participants to agree that their politics influenced how they viewed COVID-19. A

clearer measure of partisanship can be seen through the vote choice of the sampled participants during the 2020 presidential election. 82% of sampled Democrats said they voted for the Democratic presidential nominee Joseph Biden and 70% of sampled Republicans voted for the Republican presidential nominee Donald Trump. Given how the politicization of the pandemic has largely been influenced by media, it was important to also ask participants the type of media that they frequently watch or listen to. Sampled Democrats frequently watch CNN or MSNBC, which are considered to be left-leaning media sources. In contrast, Republicans reported watching other news sources such as Fox News and NewsMax, which are considered right-leaning media outlets. In conjunction with the results shown in Table 3, these statistics highlight how the positionality of participants on these issues varies by their individual partisanship and are reflected in the percentages of respondents that are vaccinated.

Table 4. Attitudes of Partisanship Among COVID-19 Related Views, Political Issues, and Media Intake

		Percentage	
	Democrat	Independent	Republican
States Handling of the Pandemic			
State's handling of the pandemic has <b>not</b> been too strict.	33.85	16.67	7.25
State's handling of the pandemic <b>has been</b> too strict.	40.00	73.33	84.06
State's handling of the pandemic has been <b>somewhat</b> too strict.	26.15	10	7.25
Missing	0	0	0.41
Risk COVID-19 Poses to Teens			
"Yes, COVID-19 poses a high risk to my teen or adolescent"	59.23	20	28.99
"No, COVID-19 does not pose a risk to my teen or adolescent"	40.00	80	69.57
Missing	0.77	0	1.45
Influence of Politics on Views Regarding the COVID-19 Pandemic			
Participants <b>agree</b> that their political views have influenced their views regarding the pandemic.	64.89	3.19	26.60
Participants <b>do not</b> agree with the statement that their political views have influenced the pandemic.	41.30	21.74	29.35
Participants <b>neither</b> disagree nor agree to the statement.	54.39	12.28	29.82
Participant's Rating of President Trump's Handling of the Pandemic			
Agree that Trump's handling of the pandemic was better than Biden's.	33.08	23.33	56.52
Do not agree with the statement that Trump's handling of the pandemic was better than Bidens.	41.54	43.33	17.4
Neither disagree nor agree with the statement.	23.85	33.33	26.09
Missing	1.54	0.00	0.0
Participant's Rating of President Biden's Handling of the Pandemic			
Agree that Biden's handling of the pandemic is better than Trump's.	20.00	76.67	68.12
Do not agree with the statement that Biden's handling of the pandemic was better than Trump's.	48.46	6.67	15.94
Neither disagree nor agree with the statement.	30.00	16.67	15.94
Missing	1.54	0	0
Participant's Voting Choice in 2020 Presidential Election			
Donald J. Trump (R)	5.38	6.67	69.57
Joseph R. Biden (D)	82.31	10.00	13.04
Other	1.54	20.00	2.90
Missing	10.77	63.33	14.49
Type of Media Participant's Watch or Listen To	10.//	03.33	17.7/
ABC, CBS, NBC	87.50	8.33	4.17
CNN, MSNBC, NPR	79.41	8.82	5.88
Fox News, NewsMax	62.07	1.15	34.48
Other Sources	29.67	23.08	36.26

Source: Online Survey Conducted April 8-May 8, 2022

Up until this point, the data analysis has consisted of assessing the vaccination status of parent and adolescents compared to other vaccines, in addition to separating it by political party. Logistic regressions were used to better estimate the odds ratio that parents have of being vaccinated when predicting for political party and other demographic variables. Table 5 summarizes the odds ratio of parent's receiving the COVID-19 vaccine when predicting for political affiliation, vote choice, and media intake. When using political affiliation as a predictor of COVID-19 vaccination, both Independents and Republicans are less likely to receive the COVID-19 vaccine compared to Democrats. Even when adjusting for race, gender, marital status, and educational attainment, their likelihood of receiving the vaccine is still less than Democratic parents. Parents who voted for Democratic candidate Joe Biden in the 2020 Presidential election were much more likely (OR= 47.25, p < 0.001) to also receive the COVID-19 vaccine compared to parents who voted for Republican candidate Donald Trump. Parents who voted "other" in this election cycle were less likely to receive the vaccine compared to parents who voted for Trump (Unadjusted OR = 0.36, Adjusted OR= 0.45). Adjusting for demographic variables decreased the likelihood that parents who voted for Biden received the vaccine, yet it still remained significantly higher than both those who voted for President Trump or another individual (Adjusted OR= 14.14).

The last predictor of interest in this table is media consumption. Using media consumption as a predictor can be useful as media has become a key component of how we receive information. Parents who said that they watched ABC, CBS, or NBC are more likely to be vaccinated for COVID-19 compared to those who watched CNN, MSNBC, or NPR (OR=3.83), which are media sources that are considered "left-leaning/left-wing sources." Parents who reported watching Fox News or NewsMax, "right-leaning/right-wing sources," are less likely to receive the vaccine (Unadjusted OR= 0.71, Adjusted OR= 0.68) than parents who watch CNN, MSNBC, or NPR. Parents who indicated that they watch other sources are less likely to be vaccinated than parents who watch either CNN, MSNBC, NPR or Fox News and NewsMax (OR = 0.10). Unlike vote choice, these odds ratio's do have notable changes when adjusting for race, gender, marital status, and educational attainment. The adjusted ratio for parents who watched ABC, CBS, and NBC does decrease, although they were still more likely to receive the vaccine compared to parents who watched CNN, MSNBC, and NPR. For this

particular group, the difference in odds ratio doesn't dramatically change the outcome, but it does indicate that the odds do become slightly less. When adjusting for these demographic variables, parents who watch Fox News or NewsMax still were less likely to receive the vaccine compared to parents who watched CNN, MSNBC, and NPR. In the case of parents who watch other news sources, their odds of being vaccinated for COVID-19 does increase and surpasses the likelihood of parents who watch Fox News or Newsmax (Unadjusted OR= 0.10 vs. Adjusted OR= 0.71).

Table 5. Logistic Regression Results For Vaccination Status of Sampled Parents

	Predictor	Unadjusted Odds Ratio	р	Adjusted Odds Ratio	p
Political Affiliation	Independent	0.04	0.00	$0.03^{\dagger}$	0.00
*Reference Group: Democrat	Republican	0.05	0.00	0.05 <sup>†</sup>	0.00
Vote Choice in 2020 U.S. Presidential Election	Joseph R. Biden	47.25	0.00	38.89 <sup>†</sup>	0.00
*Reference Group: Donald J. Trump	Other	0.36	0.21	$0.45^{\dagger}$	0.37
Media Source Participants	ABC, CBS, NBC	3.83	0.23	3.22.†	0.35
Watch *Reference	Fox News, NewsMax	0.71	0.53	$0.68^{\dagger}$	0.56
Group: CNN, MSNBC, NPR	Other Sources	0.10	0.09	0.71 <sup>†</sup>	0.00

Source: Online Survey Conducted April 8-May 8, 2022

Although the purpose of Table 5 is to present the odds ratio for parents, it was also important to use a regression analysis to estimate the odds ratio that their adolescents would be vaccinated for COVID-19. Using the same model, Table 6 presents the estimated odds ratio for adolescents. Overall, the results

<sup>†</sup>Adjusted for parent's race/ethnicity, gender, marital status, and educational attainment

of Table 5 are similarly reflected when examining the vaccination status for adolescents. Adolescents of parents who identify as Independent and Republican are less likely to be vaccinated for COVID-19 than the adolescents of parents who consider themselves to be Democrats. When these values are adjusted, the likelihood tends to decrease further. Regarding the vote choice of their parents, adolescents of parents that voted for Joe Biden are significantly more likely to be vaccinated for COVID-19 than adolescents of parents that voted for Donald Trump (OR= 65.46 vs. OR=1). In the case of their children, this odds ratio is substantially higher than the odds ratio for parents who voted for Joe Biden compared to Donald Trump, as shown in Table 5 (Unadjusted OR= 65.46 vs. Unadjusted OR= 47.25; Adjusted OR = 61.18 vs. Adjusted OR= 38.89). Similar to the odds ratio of parents themselves, adolescents of parents that voted for another candidate are less likely to be vaccinated. This odds ratio changes when adjusted, yet it is still below the odds ratio of the reference group, meaning that the outcome does not change. Adolescents of parents that watched "central/neutral" media sources (ABC, CBS, NBC) are more likely to be vaccinated compared to adolescents of parents that watched left-leaning sources. Compared to the odds ratios for parents watching Fox News or NewsMax, adolescents have a higher odds ratio of being vaccinated if their parents watched these sources compared to adolescents whose parents watch CNN, MSNBC, and NPR (Adjusted OR= 2.52 vs. OR =1). Even when adjusted, the odds ratio is greater than 1, indicating that their likelihood of being vaccinated is greater than the reference group (OR = 1.66). Finally, adolescents whose parents watched other media sources are less likely to be vaccinated for COVID-19 when compared to adolescents who have parents that watched CNN, MSNBC, or NPR.

**Table 6. Logistic Regression Results For Vaccination Status of Adolescents** 

	Predictor	Unadjusted Odds Ratio	р	Adjusted Odds Ratio	p
Political Affiliation	Independent	0.02	0.00	$0.01^{\dagger}$	0.00
*Reference Group: Democrat	Republican	0.03	0.00	0.03 <sup>†</sup>	0.00
Vote Choice in 2020 U.S. Presidential	Joseph R. Biden	65.46	0.00	61.18 <sup>†</sup>	0.00
Election *Reference Group: Donald J. Trump	Other	0.49	0.39	$0.48^{\dagger}$	0.44
Media Source	ABC, CBS, NBC	2.27	0.34	2.52 <sup>†</sup>	0.39
Participants Watch	Fox News, NewsMax	0.88	0.801	0.83 <sup>†</sup>	0.77
*Reference Group: CNN, MSNBC, NPR	Other Sources	0.12	0.00	0.07	0.00

Source: Online Survey Conducted April 8-May 8, 2022
† Adjusted for parent's race/ethnicity, gender, marital status, and educational attainment

Table 7. Multivariable Logistic Regression Using Vaccination Status of Sampled Parents

	Predictor	Odds Ratio (OR)	p
Political Affiliation	Independent	0.03	0.00
*Reference Group: Democrat	Republican	0.06	0.00
	Black/African American	*NA	*NA
	Hispanic	1.09	0.92
Race	American Indian or Alaska Native	0.17	0.12
*Reference Group: White	Asian	1.23	0.80
	Pacific Islander	*NA	*NA
	Other	0.66	0.67
Gender  *Reference Group: Female	Male	3.86	0.00
Marital Status *Reference	Married/Domestic Partnership	1.49	0.69
Group: Single/Never Married	Divorced/Widowed/Separated	3.01	0.34
Educational Attainment	College-No Degree/Associate's Degree	6.95	0.09
*Reference Group: High School Diploma/GED	Bachelor's Degree or More	10.45	0.03

Source: Online Survey Conducted April 8-May 8, 2022

Whereas Tables 5 and 6 provide estimates that adjust for race, ethnicity, marital status and educational attainment, these tables are based on a bivariate analysis of parent's and adolescents' vaccination status and political affiliation. A multivariable regression model further allows me to understand the relationship between vaccination status and political affiliation. In Table 7, the odds ratio for both Independents and Republicans follows the same trend as seen in Table 5 and 6: both groups of parents who identify as either party are less likely get vaccinated compared to the reference group. When using race as a predictor, both Hispanic and Asian parents have a slightly greater likelihood of being

<sup>\*</sup>Excluded because of small sample sizes

vaccinated for COVID-19 compared to White parents. Parents who are of another race or are American Indian or Alaska Native are less likely to be vaccinated than White parents. Although there are more females in this sample, male parents are significantly more likely to be vaccinated for COVID-19 (OR=3.86, p<0.00 vs. OR=1). Parents who are married do have a slightly greater odds of being vaccinated, yet parents who are divorced, widowed, or separated have an even greater odds compared to single parents and parents who are married (OR = 3.01). Regarding educational attainment as a predictor, parents who have a Bachelor's degree or more have much greater odds of being vaccinated for COVID-19 (OR = 10.45) compared to parents who have a high school diploma or GED. This large value may be in part by the fact that many parents of this sample are highly educated and fit into this category.

In culmination, these pieces of data collectively demonstrate the underlying influence of partisanship on vaccination status for both parents and adolescents when speaking of the COVID-19 vaccine. These differences are also apparent in the differing viewpoints about their political affiliation, the type of news that parents are consuming, and how they view issues related to the pandemic and the health of themselves and of their children. While past literature has already discussed the growing influence of politics on health institutions, this data supports the claim that partisanship does influence the likelihood by which parents and their adolescents receive the COVID-19 vaccine.

## **DISCUSSION**

Based on the demographics of the sampled participants, I conclude that the sample skews towards highly educated White participants. Research shows that higher education and higher social capital enables people to have better access to medical care than individuals of lower social capital (Hendryx et al. 2002). Higher socioeconomic status provides families with better access to healthcare, including pediatric care. Even prior to the pandemic, it is likely that these adolescents sought regular care from a pediatrician. In fact, more than half of respondents reported that their adolescent has received the HPV vaccine (54.7%) or the flu vaccine (62.6%). These percentages indicate that parents may not be fully hesitant about all vaccines. Unlike the rapid development of the COVID-19 vaccine, many of the vaccines that Americans are familiar with have taken years of development and clinical trials. This longer process

is equated to greater safety and efficacy. However, there is not a large difference between the percentage of adolescents who have been vaccinated for COVID-19 compared to HPV or the flu. If parents vaccinate their child for HPV or the flu, it is likely that they will also vaccinate their child for COVID-19.

When thinking of the story behind this data, it is valuable to remember that parents will base decisions on a variety of factors, including risk. As this project addresses parenthood and politics, it is imperative to recognize the gender gap that exists between parents. Mothers are often viewed as the nurturing caregiver and head of the household, whereas the father is seen as the "breadwinner" of the family (Goodyear-Grant & Bittner 2017; Thomas & Bittner 2017). Researchers in political science have argued that the act of becoming a mother causes some women to have more liberal or progressive views towards social issues. The act of becoming a parent is "transformative, exerting both salience and directional effects on public opinion" (Goodyear-Grant & Bittner as cited in Thomas & Bittner 2017, p. 206). The different experience between mothers and fathers throughout parenthood leads to changes in roles, opinion, and politics. As parents, men and women may view their politics differently. In considering how parents may have concluded that their adolescent should or should not be vaccinated for COVID-19, it is plausible that the gender gap that exists between mothers and fathers plays a role.

In the case of COVID-19, the perception of risk is highly variable. In comparison to those who are immunocompromised or of older age, children and adolescents are less at risk of severe disease if they contract COVID-19. Nevertheless, medical professionals do caution that children and adolescents are still carriers to those around them. While one adolescent in a household may face mild symptoms, there is no guarantee that the others in the household will not have severe symptoms or disease. The data obtained here supports the argument that perceived risk to COVID-19 is partisan. There are very stark differences between how Democrats, Independents, and Republicans view the risk of COVID-19 to their adolescent. Almost 70% of Republicans answered that COVID-19 does not pose a risk to their adolescent. On the other side, about 60% of Democrats said that they do feel COVID-19 poses a high risk. Even greater than Republicans, 80% of Independents also said that they do not feel COVID-19 poses a risk to their adolescent.

Additionally, risk is often used as an explanation for why parents have chosen to not vaccinate their child or not. For instance, in the open-ended portion of the survey, one respondent wrote: "The [COVID-19 vaccine] does not work to prevent the spread of [COVID-19] and carries many risks. [COVID-19] currently prevents little to no risk to people below 30 years old". There were also respondents that said the risk was high, with one stating: "Children are very much at risk for covid. A large percentage of hospitalizations and deaths occurred in otherwise "healthy" children with no other medical issues. It's critical to vaccinate our children and our children [less than] 5 years old with no access to vaccines are very much at risk. The country has moved on and left our young children behind with no protection from this deadly virus," These two responses demonstrate the disconnect between American parents' perception of risk to COVID-19. The wording choice of both respondents is also very different. The first respondent used the word "risk" when speaking of the COVID-19 vaccine, instead of the actual virus itself. They also framed the risk as minimal for a specific age gap. In this case, risk is seen as minimal for younger individuals (i.e., children) than compared to that of older adults. The other respondent had a completely different perspective, instead making the comment that there is a high risk to children. Additionally, this participant also used the words "deadly virus" to describe COVID-19. This disconnect is not equal among Democrats, Republicans, and Independents. On the contrary, the partisan divide correlates to their perception of risk and may be a driving factor in their interpretation of the risk that COVID-19 poses to their child.

Beyond the issue of risk, the information that respondents provided on the survey demonstrates that participants' views on other pandemic-related issues is correlated to parent's partisanship. Of the three parties, more Democrats said that they do not believe that their state's handling of the pandemic has been too strict. Almost 85% of Republican parents in the sample said that they do not believe that their state's handling of the pandemic has been too strict. When thinking of political ideology, the responses of Democrats and Republicans in this sample is consistent with the general beliefs of their respective parties. In this sample, more Democrats also said that they believe that their political views have influenced how they view the pandemic. Only 3% of Independents agreed with this statement and almost 27% of

Republicans agreed with this statement. These differences may imply that Democrats view their partisanship differently than Independents and Republicans. As mentioned in the literature, partisanship can be a form of social identity. Often, when people are asked what political party they align with, they are asked about what party they "identify" with or "belong" to. The type of phrasing that is used to identify an individual's partisanship is inherently referencing a form of social identity or group belonging. Given how they answered the question, I would make the argument that, to some degree, both Republicans and Democrats feel a sense of attachment to their politics and their partisanship, hence their willingness to state that this has influenced how they view the pandemic. Since Independents are not very attached to either party, it is reasonable that a small percentage of the sample agreed with this statement.

One of the key issues that has been brought up through the course of the pandemic is the growing mistrust in government institutions. In times of crisis, the first political figure that Americans often look to is the Commander-In-Chief. About 42% of Democrats in this sample do not believe that former President Trump's handling of the pandemic was better than President Biden's handling of it. Compared to Democrats, more Republicans favored President Trump's handling of the pandemic. Whereas the Independents of this sample have been split on other issues, most Independents (76.7%) favored Biden's handling of COVID-19 compared to Trump. This trend does not necessarily reflect partisanship; instead, it may be reflective of how Independents ideologically fall on how the handling of the pandemic should be done.

Although we would expect that the majority of Democrats would rank President Biden's handling of the pandemic better than President Trump's, only 20% of Democrats actually agreed with this statement. Based on how they have rated former President Trump's handling of the pandemic, it appears that most Democrats opposed the way that Trump managed the COVID-19 during his time in office. At the same time, only a smaller percentage of this group actually agreed with the sentiment that President Biden's handling has been better. Therefore, we can make the deduction that the Democrats in this sample are not fully satisfied with the handling of either politician-regardless of party affiliation. When looking at the responses of Republican parents, there is a distinctive trend: almost 70% of Republican parents in this

sample believed that President Biden has handled the pandemic in a better way than President Trump. Based on the norms of partisanship, we would expect that Republicans would be more likely to rate former President Trump's handling of the pandemic better compared to the President of the opposing party. Although the majority of sampled Republicans approved of Biden's handling of the pandemic and therefore go against the expectations of partisanship, I would argue that these ratings reflect how the country has reopened and started to return to some semblancy of normal. The fact that many Republican parents in this sample support Biden's handling of the pandemic may not be an actual support of Biden himself, but instead, a support of the reopening of the country. The fact that these findings also diverge from expectations of partisanship also highlight the importance of recognizing the complexity of partisanship. For this survey question, it is suggestive that Democratic and Republican parents do not always fall along party lines. This finding speaks to the idea that partisanship is nuanced and despite a feeling of attachment to a specific political party, we can't expect that all members of the Democratic party or Republican party will stay consistent, just as we should not conclude that all Independents will remain in the middle of either party.

One such example of this complexity is voter choice. As mentioned earlier, the 2020 Presidential election was a tumultuous election cycle that further pushed Americans farther into their partisan groups. Voter choice was included in this survey to understand how the partisan divide of vote choice correlates back to the rest of the data presented here. The vote choice of parents in this sample was highly partisan, with very few Democrats or Republicans voting for the opposite party. This example of partisanship can be tied back into how they viewed the pandemic. From the data, it is suggestive that Democratic parents tend to favor COVID-19 vaccination for themselves and their adolescents. Democratic parents are more likely to also see COVID-19 as a risk to their adolescents, and many of them also voted for then-candidate Joe Biden. On the other hand, fewer Republican parents were vaccinated, were less likely to see the pandemic as a risk and were more likely to vote for then-candidate Donald Trump. These findings are significant when considering the political messaging that has come from both sides of the aisle on the issue of COVID-19. Both presidential campaigns used COVID-19 as a talking point when trying to

persuade voters. Trump often aimed to reassure voters that the pandemic would be over and that it was not a large issue to worry about. In October 2020, he tweeted "Don't be afraid of COVID. Don't let it dominate your life!" (Donald Trump as cited in New York Times 2020). By minimizing the risk of COVID-19 to voters, people who sympathize with Trump or the Republican party may support this narrative and begin to believe it. On the Democratic ticket, candidate Joe Biden often talked about the failures of the Trump administration to effectively control the spread of COVID-19. The party campaigned on the idea that they believed in science and can solve the pandemic. Strongly urging voters to wear masks and follow COVID-19 protocols was a convincing message to those who are Democrats or lean towards this party.

Having two major political figures give very different messages on the pandemic can influence their constituents or supporters to believe in very different stances surrounding the pandemic.

Furthermore, this influence then becomes a reasoning tactic or a piece of information that parents use when deciding whether they should receive the COVID-19 vaccine or not. In recognizing the influence of political figures on the beliefs that people have on the COVID-19 vaccine, it is imperative to also denote that media consumption is significantly involved in spreading these messages. Left-leaning messages will be a source of Democratic talking points, where Republican-leaning news sources will tailor their messaging to that of the Republican party. These messages have an influence over time and can have a significant impact on people's partisanship. The biases that exist within these media sources will continue to reiterate the talking points of either party, which makes it even more salient for the viewer. If parents are consistently watching or listening to reports that promote hesitancy towards the COVID-19 vaccine, this will have an influence on how they view the vaccine. Media sources need to be considered in this issue because the world of journalism and media becomes the mediator between the messages given by elected officials and everyday people, in this case, parents. The biases that exist within media coverage further drive feelings of partisanship that can then translate to how they will change their behaviors.

Overall, the data presented here supports my argument that partisanship has influenced the COVID-19 vaccination status of parents and their adolescents. Despite adjusting for other variables, the

Independents and Republicans sampled in my study are still less likely to be vaccinated than COVID-19. There is clear partisan divide among the way that parents view the risk of COVID-19, how it has been handled by political officials, and of particular importance, whether to vaccinate themselves and their adolescents. This analysis demonstrates that there is a need for researchers and those within the medical community to acknowledge the role of politics on health interventions. Although the partisan divide reported here pertains to COVID-19, this partisan divide is growing and can continue in the future.

Inevitably, there will be other public health crises in the future and the way that people perceive the scientific community becomes critical in this time. The growing mistrust of institutions, specifically the scientific community, should be of utmost concern. The COVID-19 pandemic has changed how people view scientists, doctors, and other medical professionals in an unprecedented way. Many of the parents in this sample often mentioned public health institutions in their open-ended responses. For instance, one respondent said:

"It's criminal that this vaccine be mandated on any child. I feel the same way about masks and school & sports closure. The government & public health gaslighted an entire country when it comes to [COVID-19] risk to children and the healthy population, but especially to children. The government & public health has known from the very beginning that [COVID-19] is near zero risk to children."

This response shows that parents are associating the public health response to the government. When they speak about the pandemic, they equate both to each other. Another example of this can be seen here, where a parent stated: "Natural immunity is best. [COVID-19] is a political weapon being used for fear mongering and control. While not mentioning the government in the same explicit way as the last respondent, this response frames COVID-19 as a tactic used by politicians and demonstrates that they have associated the pandemic to political institutions. These associations to politics or the government further demonstrate that parents are viewing the issue of the vaccine and the pandemic through a political and partisan lens.

As mentioned before, COVID-19 may not lead to severe disease for younger children and adolescents, yet this frame of thinking does not adequately address the issue of public health. Vaccination for COVID-19 is important for both the personal health of the individual and the surrounding community. In making the argument that partisanship impacts COVID-19 vaccination uptake for parents and adolescent, my aim is not to undermine the concern that parents have about vaccinations, be it COVID-19 or otherwise. Parental concerns need to be addressed and the research community needs to communicate with parents to assuage their concerns. We must also recognize the growing mistrust that towards the scientific community. If the scientific community wishes to show parents the importance of vaccinating their adolescent for COVID-19, they must first begin by finding ways to increase trust between the scientific community and the public. In a time of political tension and polarization, people are already hesitant to speak to others who have opposing views as them. Partisanship is a form of social identity that can cause people to divide among party lines. As shown in other surveys, many Americans now feel that they can't agree with the other side because of how polarized and controversial social issues (Pew Research Center 2018). When the partisanship of parent's begins to influence the way that they make health decisions for their child, the decision may not be fully based on scientific evidence. As seen by the findings presented here, the likelihood of adolescents being vaccinated is correlated significantly to the party that the parent identifies with. While this may not be the only deciding factor, the large likelihood that adolescents of Democrats have of being vaccinated compared to adolescents of Republicans, further drives the argument that adolescents are being impacted by their parent's politics.

Going forward, the medical and scientific communities face a new obstacle: do they address politics or is it not their place? For instance, is it the responsibility of pediatricians to ask parents about their politics if the parent says that they are concerned about vaccinating their child? Pediatricians, as with all other medical professionals, bear the objective of promoting healthy behaviors and health interventions to maximize the health and safety of the patient. While the argument can be made that pediatricians must ask parent's these questions for approval, I would argue that this type of questioning further creates the perception that the public health community is becoming too involved with politics. Instead, pediatricians

may benefit more from creating an environment of trust with the parent and the child, with the hope being that the trust translates to a trust in the science behind the vaccine.

### Limitations

Despite the evidence I present here, I find it critical to acknowledge the limitations of this study, in order to present suggestions for future research on parental politics and the health of their children. Regarding the mechanics of the data collection process, all responses were self-reported. This can facilitate reporting or social desirability bias, meaning that the participants of this sample could have answered the survey questions based on the responses they believe would be viewed favorably by others. Additionally, the participants were recruited through social media advertising and MTurk. Therefore, this sample is not random. A skewed sample can lead to biased results; therefore, it may not guarantee internal or external generalizability. The sample size collected did consist of demographics that were like that of the national data, yet it is still a small sample size. The distribution of the sample is heavily skewed towards Democrats and White parents who are highly educated. A highly skewed sample does not accurately reflect the entire makeup of United States parents, nor does it consider parents who may be of lower socioeconomic status. Since parents with lower socioeconomic status are missing, there is the possibility that this may bias the results to the null hypothesis. Future studies that are able to acquire a larger sample size would be better able to provide a more balanced sample that is also more diversified.

Another limitation of this study is the that the survey questions did not ask participants about their age or estimated income. Asking parents about their estimated income would have allowed for a specific measure of their socioeconomic status, further supplying more information that supports the idea that higher socioeconomic status enables parents to have easier accessibility to a pediatrician for their adolescent. If the survey had asked parents to specify their age, this would have allowed for an analysis of potential age differences among the participants. While adding more questions to the survey is useful for the researcher, there needs to be a balance between the number of questions asked compared to the time that it takes the participant to complete the survey. Public surveys need to remain concise in order to keep the participant engaged and willing to complete it in full, while still containing enough information that

allows the researcher to meet their objective. Going forward, these are changes that would strengthen the objective of this research and would provide further information that is useful to addressing the objective of this project.

A larger sample size would also be able to provide a more balanced sample that is also more diversified and representative of the United States as a whole. For instance, this study is also limited by the fact that it did not ask for participant's age or estimated income. Asking participants their age would be a useful question to include in this type of study as it allows for an analysis of potential age differences among the participants. Parent's income would also be a relevant variable to use when assessing the demographics of the sample. Public surveys should be comprehensive, yet they also need to be concise and relatively quick to maintain the respondent engaged with the questions. Going forward, these are changes that would strengthen the objective of the research and would provide further information useful to addressing the objective of this work.

### CONCLUSION

"I am in the minority when it comes to my view on [COVID-19] versus my local community's views. Our school district removed its mask mandate back in April 2021. My kids are the only ones in their classroom who still routinely mask. Even levelheaded friends of mine have not vaccinated their children against [COVID-19] despite getting vaxxed themselves, meanwhile mine got the first available appointments once shots were approved for their age range. I hate it and feel like my community does not care about me, my kids, the disabled, the elderly, or immunocompromised people. My kids will get their booster as soon as they're eligible, but they have cousins who are still too young for the vaccine and that's stressful - I feel like the families of under-5s have been totally forgotten about and there's no excuse. That population should have a vaccine by now. I don't want the pandemic to continue but given the leadership ("leadership") around [COVID-19] and everybody wanting to just pretend it's over instead of doing the work to get there... I don't see an end in sight."

The primary objective of this research has been to examine the influence that partisanship and politics has had on parental decisions regarding the COVID-19 vaccine. The use of an anonymous online survey advertised on Facebook, Instagram, and MTurk gave me the space to reach American parents in a direct way to ask them about their thoughts and their concerns. The findings of this study suggest that partisanship influences how parents perceive the risk of COVID-19 to their children and how they view the handling of the COVID-19 pandemic. Furthermore, the findings illustrate that partisanship impacts the likelihood that parents will be vaccinated for COVID-19 and the likelihood that they will also have their adolescent vaccinated. The political party that an individual aligns with can change social behavior and these findings reaffirm the idea that partisanship is salient and present in our behaviors and ideals. From looking at their open-ended responses, it also becomes evident that they have very differing opinions on this issue; overall, they all seem to share a sense of frustration and concern-regardless of which side of politics they align with. The parent's response that is highlighted above serves as an example of the concern or frustration that parents have. In culmination, these findings continue to support the claim that partisanship will affect social behavior, whether that be social distancing, wearing a mask, or in the case of my own work, receiving the COVID-19 vaccine.

On a larger scale, I would also make the argument that the partisan divide occurring between parents on the issue of the COVID-19 vaccine has ramifications for how parents are viewing one another and how they view the actions taken by their communities. When parents view the issue of the COVID-19 vaccine so differently because of their partisan attachment, the issue becomes personal. I chose to include the response above because this parent is clearly expressing concern and is also personally impacted by the decisions that others have made in their community. The participant now feels that their community has forgotten about vulnerable populations, and I would make the inference that this parent is disappointed by the actions of others that are around them and their children. The pandemic is not just a political or controversial issue-it is a personal issue for all parents. Parents on both sides are concerned for the wellbeing of their children, regardless of if they may be vaccine hesitant or not. That said, when

political messages create conflicting messages around these issues, parents who are on opposite sides of the COVID-19 vaccine no longer feel as if they agree and will then divide along their party lines.

If we wish to address this issue going forward, we must recognize that there are similarities between both parties, instead of only focusing on the issues that divide them. The scientific community must recognize that it is not apolitical and must work to find solutions that allow people to regain trust in the community of scholars, experts, and researchers who work to create these revolutionary health interventions. Although the term partisanship focuses on Democrats or Republicans, there needs to be attention on examining where Independents are on these health-related issues. If Independents are not agreeing with either party and are still vaccine hesitant, this may be an indication that there are other factors beyond partisanship that causes people to mistrust in scientific institutions. Regarding COVID-19 vaccination, there were less Independent parents and adolescents vaccinated compared to Democrats or Republicans. This finding supports the idea that partisanship is nuanced and is only one of many factors potentially leading to the rise of vaccine hesitancy in the United States. The way in which the medical community frames decides to frame this issue and the mechanisms that it employs to promote health interventions to the public is critical during a time where misinformation and polarization is rampant.

COVID-19 may have disrupted society and challenged the validity of scientific institutions, yet we must not forget that vaccine hesitancy and mistrust in the scientific community was always present to some degree. The difference between now and before the pandemic is that this level of vaccine hesitancy and mistrust has grown to the degree where it can have serious implications for the future. When a parent is hesitant about vaccinating their child and feels that they can no longer trust the scientists and doctors promoting them, they may become prone to denying all vaccines. For every parent that loses trust in medical experts and the scientific community, there is a subsequent risk for their children. If parent's feel unsafe receiving a vaccine, it is likely that they will not feel comfortable vaccinating their children. The key to ensuring children and adolescents are vaccinated is to be aware of the concerns parents are having and what factors are influencing these concerns. While we cannot expect partisanship to remain separate from healthcare, we can take action to make sure that the scientific community improves how they

communicate with parents on issues of vaccination and health during a global health crisis. Political institutions will continue to use healthcare as a political strategy and talking point in the future, therefore it becomes imperative that the scientific community maintain open communication with parents, as well as the rest of the public. Although science has attempted to maintain apolitical, this stance has been ineffective. Ultimately, scientists, researchers, and medical experts will need to further delve into the conversation surrounding partisanship and the politicization of COVID-19; in doing so, they will be able to ensure that parents are receiving factual and scientific-based information that allows them to make the best decision for themselves and for the health of their children.

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## APPENDIX

# **Survey Questionnaire**

1)	Age Confirmation: Are you 18 years or older?
	[] Yes
	[] No
2)	Participant Eligibility: Are you a parent to a child between the ages of 12-17 years old?
	[] Yes
	[ ] No
3)	What is your gender identity?
	[] Male
	[] Female
	[] Gender non-confirming
	[] An identity not listed above (please specify below) <sup>1</sup>
4)	Which of the following would you say is your race/ethnicity? Please select all that apply.
	[] White
	[] Black or African American
	[] Hispanic or Latino/a
	[] American Indian or Alaska Native
	[] Asian
	[] Pacific Islander
	[] A race/ethnicity not listed above*
5)	What state do you live in?
	[] Drop down menu list of each state in the U.S. was provided.

<sup>&</sup>lt;sup>1</sup> If this option was chosen, another question with a text box populated for the respondent to provide an answer of their choice.

6)	What is your marital status?
	[] Single/Never Married
	[] Married/Domestic Partnership
	[] Divorced
	[] Widowed
	[] Separated
7)	What is the highest degree or level of education you have completed?
	[] Less than a high school diploma
	[ ] High school diploma or GED
	[] Some college, but no degree
	[] Associate's Degree (ex: AA, AS)
	[] Bachelor's Degree (ex: BA, BS)
	[] Master's Degree (ex: MA, MBA, and MS)
	[] Professional Degree (ex: MD, DDS, JD)
	[] Doctorate (ex: Ph.D., Ed.D.)
8)	Before continuing, please confirm that you are a parent to a child between the age of 12-
	17 years old of age. If you are not a parent to a child between that age group, we kindly
	ask that you exit the survey as this survey focuses specifically on parents of teens and
	adolescents. Thank you for your understanding.
	[] Yes, I am a parent to a child 12-17 years old.
	[] No, I am not a parent to a child 12-17 years old.
9)	Are you a parent to multiple children?
	[] Yes
	[] No

10) How many children in your household are between the ages of 12-17 years old?
11) What type of school does your child (between the age of 12-17 years old) attend?
[ ] Public School
[] Private, religious affiliation (ex: Catholic school)
[] Private, no religious affiliation
[] Homeschool
12) Does your child have a pediatrician?
[ ] Yes
[ ] No
13) Prior to COVID-19, how often did your child visit their pediatrician?
[] As needed
[] Usually once a year (for a yearly wellness check)
[] Yes
[ ] No
14) If your child does not have a pediatrician, is there another place or medical expert that
you take your child to if they need medical care?
[] Yes
[ ] No
15) If yes, where?
[] Yes
16) To your knowledge, how would you rate your child's vaccination status prior to COVID
19?

[] Fully up to date
[] Mostly up to date
[] Behind schedule
[] Not sure
17) Does your child receive a flu vaccine on a yearly basis?
[] Yes
[ ] No
18) If no, do you plan on vaccinating your child for the flu this year?
[] Yes
[ ] No
19) Has your child been vaccinated for HPV (received either Gardasil, Gardasil 9, or
Cervarix)?
[] Yes
[ ] No
20) To your knowledge, were you regularly vaccinated as a child?
[] Yes
[ ] No
[] Not sure
21) When you have taken your child to get vaccinated in the past, do you feel that the
physician has been properly informed you and provided adequate information?
[] Yes, I feel very informed
[] No, I feel very uninformed and not enough information is provided
22) Regarding COVID-19, do you believe that COVID-19 poses a health risk to your young
teen and adolescent (ages 12-17 years old)?

[] Yes, high risk
[] No, minimal to no risk at all
23) Do you feel that medical experts and other healthcare professionals have adequately
conveyed information to the public regarding children's health during the pandemic?
[] Yes, adequate information has been provided.
[] Yes, but not enough adequate information has been provided.
[] No, the information provided has been inadequate.
24) Do you feel that your state's guidelines or mandates regarding COVID-19 has been to
strict?
[ ] Yes
[] Somewhat
[ ] No
25) Have you been vaccinated for COVID-19?
[] Yes
[ ] No
26) If not, do you plan on getting the vaccine?
[] Yes
[ ] No
[] Not sure
27) Has your child been vaccinated for COVID-19?
[] Yes
[ ] No
28) If not, do you plan on having your child vaccinated for COVID-19?
[] Yes
[ ] No

[] Not sure
29) If you do not plan to vaccinate your child, please check the statement that you feel
accurately describes your reasons for not vaccinating your child?
[] I am not sure the vaccine is safe.
[] I would prefer to wait to see the long-term effects of the vaccine.
[] The vaccine is not effective and unnecessary.
[] My child is too young to receive this vaccine.
[] My friends or family members told me I should not vaccinate my child.
[] I do not trust the medical experts that are promoting this vaccine.
[] My child has medical reasons for not being vaccinated against the COVID-19
[] My child already wears a mask and that is enough protection.
30) Has your child (ages 12-17 years old) expressed concern over the vaccine?
[] Yes
[ ] No
31) Generally speaking, do you usually think of yourself as a Republican, a Democrat, an
Independent, or something else?
[] Republican
[ ] Democrat
[ ] Independent
[] Other party
[] Prefer not to say
32) Do you consider yourself to be a strong Republican or not a very strong Republican?
[ ] Strong Republican
[ ] Not very strong Republican
33) Do you consider yourself to be a strong Democrat or not a very strong Democrat?

[ ] Strong Democrat	
[] Not very strong Democrat	
34) If you had to choose, do you consider yourself closer to the Republican party or the	1e
Democratic party?	
[] More close to the Republican	
[] More similar to Democratic	
35) Are you registered to vote in the state that you currently live?	
[] Yes	
[] No	
[] Prefer not to say	
36) If yes, did you register under a specific political party?	
[] Yes	
[] No	
37) If yes, which one?	
[] Democrat	
[] Republican	
38) Did you vote in the last Presidential election?	
[] Yes	
[] No	
[] Prefer not to say	
39) If yes, who did you vote for?	
[ ] Donald J. Trump	
[] Joseph R. Biden	
[] Other	
[] Prefer not to say	

40) Do you consider yourself to have liberal or conservative ideologies?	
[] Liberal	
[] Conservative	
[] Both	
[] Neither	
[] Prefer not to say	
41) To what extent do you agree with the following statement? My political views have	
influenced how I view the pandemic.	
[ ] Strongly Disagree	
[] Disagree	
[] Neutral	
[] Agree	
[ ] Strongly Agree	
42) To what extent do you agree with the following statement: The health-related	
information I see on social media influences how I view my child's health in a large wo	ıy.
[ ] Strongly Disagree	
[] Disagree	
[] Neutral	
[] Agree	
[ ] Strongly Agree	
43) To what extent do you agree with the following statement? Former President Trump's	
handling of the COVID-19 pandemic was adequate.	
[ ] Strongly Disagree	
[] Disagree	

	[] Neutral
	[] Agree
	[] Strongly Agree
44)	To what extent do you agree with the following statement? Former President Biden's
	handling of the COVID-19 pandemic was adequate.
	[] Strongly Disagree
	[] Disagree
	[] Neutral
	[] Agree
	[] Strongly Agree
45)	To what extent do you agree with the following statement: Former President Trump's
	handling of the COVID-19 pandemic was better than President Biden's current handling
	of the pandemic.
	[] Strongly Disagree
	[] Disagree
	[] Neutral
	[] Agree
	[] Strongly Agree
46)	To what extent do you agree with the following statement: President Biden's handling of
	the COVID-19 pandemic has been better than former President Trump's handling of the
	pandemic.
	[ ] Strongly Disagree
	[] Disagree
	[] Neutral
	[] Agree

[] Strongly Agree
47) Are you in support or opposed to a vaccine mandate for children in order for them to
attend public school in person?
[] Yes, I am in support of a vaccine mandate in order for children to attend public school in
person.
[] No, I do not support a vaccine mandate in order for children to attend public school in person
[] Prefer not to say.
48) Which of the following news sources do you turn to most often for news about current
events, if any?
[ ] CNN
[] Fox News
[] MSNBC
[] NewsMax
[] ABC
[] CBS
[] NBC
[] NPR
[] Other
49) As a parent of a child between the ages of 12-17 years old, is there anything that you
would like to add about how you or other parents feel about the COVID-19 vaccine?

50) You have now completed this survey. To get paid through Amazon M-Turk, please enter a 4-digit code of your choosing below. Then, enter your selected code on the HIT page.

The code you enter here must match what you enter on the HIT to be paid. <sup>2</sup>

 $<sup>^2</sup>$  This question only pertained to participants who were filling out the survey based on the link they received through Amazon Mechanical Turk.