

## RESEARCH IN BRIEF OPEN ACCESS

# “Distinct and Separate Issues”: Examining US Adults’ Attitudes Toward Abortion During COVID-19

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## ABSTRACT

**Background:** The COVID-19 pandemic reshaped people's healthcare experiences and access to healthcare, including abortion. In response to the COVID-19 outbreak, some policymakers claimed that abortion is a nonessential service and should be restricted. In contrast, other policymakers contended that abortion is time-sensitive essential healthcare, and access to it should be protected. These efforts put access to abortion into the public arena during the onset of the pandemic. We examined whether people perceived the pandemic changed their attitudes toward abortion and their rationale for whether their support for abortion increased, decreased, or remained the same.

**Method:** We administered a web-based survey to US-based English and Spanish-speaking adults ( $n = 1583$ ) to assess their abortion beliefs. Participants answered open and close-ended questions about abortion, including whether they believe the COVID-19 outbreak changed their views about abortion and why. Because our sample was not representative of the US population, we weighted the data and present weighted results.

**Results:** As expected, most participants (91.7%) indicated that the COVID-19 outbreak did not change their abortion views. Many of these participants did not see a relationship between the COVID-19 pandemic and abortion. Participants who became more supportive (5.2%) cited well-being and financial concerns as reasons. Participants who became less supportive (3.1%) cited excessive death associated with the COVID-19 outbreak as their reason.

**Conclusion:** Most participants perceived that the COVID-19 pandemic did not change their views about abortion, suggesting the pandemic may not be a context linked to abortion attitudes.

## 1 | Introduction

Prior to the 2022 United States (US) Supreme Court decision overturning *Roe v. Wade* which had established a legal right to abortion in the US, abortion attitudes have remained relatively stable since the 1970s [1–5]. For example, according to a 1975 Gallup poll, 54% of US adults believed abortion should be “legal only under certain circumstances,” compared with 50% in 2020 [6]. However, changes in abortion attitudes can be attributed to

major policy changes [2]. In 1973, after *Roe vs. Wade*, attitudes grew more supportive of abortion [7]. Conversely, they again shifted in the mid-1980s, with more people opposing abortion after the Reagan administration adopted an anti-abortion platform [7]. Although abortion attitudes remain relatively stable despite historical shifts, support for abortion varies based on circumstances [8]. For example, circumstances such as whether the pregnancy resulted from rape garner greater support for abortion than when the person is not able to afford a child [8].

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**TABLE 1** | COVID-19-related abortion attitude questions.

	English	Spanish
Close-ended question and response options	Do you think the coronavirus outbreak has changed your views about abortion?	<i>¿Cree usted que la pandemia de coronavirus ha cambiado su punto de vista sobre el aborto?</i>
	No, my views have not changed	<i>No, mi punto de vista no ha cambiado</i>
	Yes, my support for abortion has increased	<i>Sí, mi apoyo hacia el aborto ha aumentado</i>
	Yes, my support for abortion has decreased	<i>Sí, mi apoyo hacia el aborto ha disminuido</i>
Conditional open-ended questions	Why do you think the coronavirus outbreak has not changed your views about abortion?	<i>¿Por qué piensa que la pandemia de coronavirus no ha cambiado su punto de vista sobre el aborto?</i>
	Why do you think the coronavirus outbreak has increased your support of abortion?	<i>¿Por qué piensa que la pandemia de coronavirus ha aumentado su apoyo hacia el aborto?</i>
	Why do you think the coronavirus outbreak has decreased your support of abortion?	<i>¿Por qué piensa que la pandemia de coronavirus ha disminuido su apoyo hacia el aborto?</i>

As a significant historical event, the COVID-19 pandemic reshaped economic and social realities in the US and globally [9]. Social distancing and stay-at-home requirements altered people's sexual and reproductive health practices [10]. Further, the COVID-19 pandemic significantly impacted access to healthcare, specifically the ability for people to seek in-person appointments during state and local lockdowns. Consequently, one of the most immediate effects of the pandemic on abortion access was the disruption of abortion care services [11]. Indeed, beyond limiting in-person health services, in some states, the pandemic was used by policymakers to push for stricter laws and regulations. As an example, in April 2020, in response to the COVID-19 outbreak, policymakers in 11 states (i.e., Alabama, Alaska, Arkansas, Iowa, Louisiana, Mississippi, Ohio, Oklahoma, Tennessee, Texas, and West Virginia) attempted to restrict abortion services, deeming abortion a *nonessential* medical service—or a service that is not considered essential for maintaining one's life [12, 13]. These efforts resulted in service disruptions in several states [14–17]. Conversely, during this period, policymakers in 12 states (i.e., California, Hawaii, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, New York, Oregon, and Virginia) deemed abortion *essential*—an urgent, time-sensitive service, ensuring that abortion services could continue as COVID-19 persisted, despite ongoing limitations on in-person healthcare [18–20].

Although abortion access and policies changed in some states during the COVID-19 pandemic, it is unclear if any of these changes are linked to people's abortion beliefs. Indeed, abortion has long been a deeply divisive issue, and changes in public attitudes toward abortion can shape the direction of policy debates and policymakers' legislation [21]. As such, a significant shift toward greater support for abortion access may lead to increased pressure on policymakers to repeal restrictive decisions put in place during the COVID-19 pandemic [22]. Conversely, a shift toward less supportive attitudes could lead to increased support for additional policies limiting access to abortion.

Stability in abortion attitudes in the US may be due to the close relationship between abortion attitudes and broader social and political ideologies [1]. Thus, examining temporal changes, or the lack thereof, in abortion attitudes as a result of a particular

event (i.e., COVID-19 pandemic) may help researchers, policy-makers, and advocates on both sides of the abortion debate better understand what may influence shifts in abortion attitudes. Additionally, examining people's rationale for their perceived change, or lack thereof, may also provide further insight into factors that drive people's abortion attitudes more generally. Investigating individuals' perceptions of their attitudes offers a direct window into their beliefs and perceptions [23, 24], which is particularly useful for exploring subjective constructs like abortion attitudes. Thus, using a mixed-methods design, we explored whether people perceived their abortion attitudes changed in response to the COVID-19 pandemic and the reasons they provided for any perceived change in their attitudes.

## 2 | Methods

### 2.1 | Procedures and Participants

We administered a web-based survey to a sample ( $N=1583$ ) of English ( $n=1094$ ) and Spanish-speaking ( $n=489$ ) US adults via a Growth from Knowledge (GfK) panel. We collected data using quota-based sampling with quotas for language preference, race/ethnicity, gender, age, and education level to achieve demographic diversity. Eligibility requirements included being at least 18 years old, residing in the US, and being able to read in English or Spanish.

We developed a survey in English and Spanish using a team-based approach for more culturally and linguistically equivalent translations [25, 26]. The 20-min survey comprised open- and close-ended items about abortion and was administered from August to November 2020. During this period, no COVID-19 pandemic-related abortion bans were in place. All participants received GfK credits as an incentive for participation. The Institutional Review Board at Indiana University approved study protocols before data collection.

### 2.2 | Measures

We assessed whether participants thought the COVID-19 outbreak changed their views about abortion (see Table 1

for the specific questions). Participants were asked to indicate whether the COVID-19 outbreak did not change their views, changed their views to be more supportive of abortion, or changed their views to be less supportive of abortion. We included socio-demographic characteristics often related to abortion attitudes across the general population, such as level of education, political affiliation, and abortion identities [27–29]. Such questions included, “What is the highest level of education you have completed?”, “What is your political affiliation?”, and “Which of the following [abortion identities] best represents you in terms of your belief about abortion?” Additionally, we considered other socio-demographic factors, such as gender identity and race/ethnicity, which have been linked to abortion attitudes [30–33].

Based on prior research on the limitations of the pro-life/pro-choice binary, this study used a seven-option scale [22]. Of note, the survey did not ask participants to indicate if their support for abortion varied in degree (e.g., becoming more or less supportive while maintaining the same position). Therefore, the data reflect perceived changes in support level but do not distinguish between changes in the direction of support and changes in the intensity of support within the same stance.

## 2.3 | Analysis

### 2.3.1 | Study Sample Data

We used frequencies to visualize the distribution of participants' support for abortion as a result of the COVID-19 outbreak. Given that some of our quotas were disproportionate when compared with the U.S. population, we used the *ipfweight* command [34] in Stata to generate weights so that our sample was comparable to population estimates across several benchmarks. Data were weighted on gender, race, Hispanic ethnicity, age, education, and political affiliation. Except for political affiliation, all benchmarks were based on the 2018 American Community Survey [35]. For political affiliation, we obtained benchmarks from the General Social Survey [36]. In our tables and throughout the text, we present the raw *n* and weighted percentages. Additionally, we conducted a thematic analysis to examine participants' rationale for whether they believed their abortion attitudes changed due to the COVID-19 outbreak [37]. We excluded responses deemed unintelligible by the first two authors (*n* = 152). Thus, our analytic sample comprised 1431 participants (1045 English, 386 Spanish). Of note, 15.5% (*n* = 76) of participants who took the survey in Spanish answered the open-ended question in English.

To develop a codebook for the qualitative analysis, two authors (a bilingual native Spanish speaker and an English-only speaker) read a subset of open-ended responses. Researchers separated responses based on whether participants' support for abortion increased, decreased, or remained the same due to the COVID-19 outbreak. Then, researchers identified patterns in participants' statements regarding why the COVID-19 outbreak did or did not change their attitudes to develop an initial codebook. Participants' open-ended responses varied based on whether they indicated their support for abortion increased, decreased, or remained the same. Thus, we

created three codebooks to reflect the three different response patterns.

The first four authors coded a subset of responses: two English speakers (an English native speaker and a bilingual English and Spanish speaker) coded English responses, and two Spanish speakers (a bilingual native Spanish speaker and a bilingual English and Spanish speaker) coded Spanish responses. Most of the responses were one or two sentences long. Although data were coded in the language in which they were collected, when needed for the purposes of discussion among the four coders, Spanish responses were translated by the main author, a native Spanish speaker, with experience in translating and adapting texts and responses between English and Spanish. The team met to discuss disagreements and revise the codebook, making iterations until agreement was reached. Then, the team coded all open-ended responses. Researchers calculated interrater reliability for each code category. Cohen's Kappa averages were 0.84 for *remained the same*, 0.89 for *more support*, and 0.90 for *less support*.

After coding all open-ended responses, the authors analyzed the codes' nuances and relationships, created larger themes, and organized results around key themes. Illustrative quotations are presented with information about participants' abortion identity label, as this characteristic helps contextualize their abortion attitudes. We edited quotes for spelling and included English translations for Spanish quotes.

## 3 | Results

### 3.1 | Study Population

Half of our participants identified as women (*n* = 947; 51.0%). More than half (*n* = 488; 66.4%) identified as white, and 18.4% (*n* = 587) as Hispanic/Latino. A third (*n* = 260; 34.6%) had a high school diploma or an equivalent. Thirty percent (*n* = 680) identified with the Democratic party and almost a third (*n* = 453; 25.1%) identified as strongly pro-choice. See Table 2.

### 3.2 | Descriptive Statistics

Most participants (*n* = 1452; 91.7%) indicated that the COVID-19 outbreak did not change their abortion attitudes. However, a small proportion (*n* = 79; 5.2%) indicated their support for abortion increased, and 3.1% (*n* = 52) indicated their support decreased. When examining the stratified responses across demographic characteristics among participants who indicated a perceived change in their abortion attitudes, several trends were observed. It is important to note that while these differences reflect variations in responses among subgroups, they are not statistically significant and should not be interpreted as indicating meaningful trends without further analysis. However, presenting these stratified descriptive responses provides valuable preliminary insights into how different demographic groups might perceive changes in abortion attitudes. By highlighting these trends, our approach aims to encourage further exploration and discussion, particularly in identifying potential areas where attitudes might be shifting.

**TABLE 2** | Sociodemographic characteristics of analytic sample.

	<i>N</i>	Weighted %
Gender		
Men	628	48.50
Women	947	51.09
Other	8	0.41
Race/Ethnicity		
American Indian or Alaskan Native	17	0.21
Asian or Asian American	212	2.68
Black or African American	197	11.17
Hispanic or Latina/o	587	18.43
Middle Eastern or Middle Eastern American	3	0.04
Native Hawaiian or Other Pacific Islander	4	0.05
White/Caucasian or European American	488	66.47
Bi-racial/Multi-racial	55	0.69
Other	20	0.25
Education		
Less than HS degree	39	4.67
High school or equivalent	260	34.63
Some college	347	21.31
Associate's degree	200	9.29
Bachelor's degree	460	18.90
Master's degree or higher	277	11.20
Political party		
Democrat	680	29.70
Republican	341	23.10
Independent	324	30.61
Other	30	2.28
No affiliation	208	14.31
Abortion identity label		
Strongly pro-choice	453	25.10
Moderately pro-choice	199	11.85
Slightly pro-choice	77	4.95
Equally pro-choice and pro-life	198	10.67
Slightly pro-life	61	4.37
Moderately pro-life	101	6.58
Strongly pro-life	277	20.81

(Continues)

**TABLE 2** | (Continued)

	<i>N</i>	Weighted %
Neither pro-choice nor pro-life	134	10.69
Prefer not to answer	83	4.97

Among gender groups, more women reported increased support for abortion than men ( $n = 44$  vs.  $n = 34$ ; 55.7% vs. 43.0%) post the COVID-19 pandemic. In terms of ethnicity, more Latino respondents ( $n = 37$ ; 46.8%) reported an increase in support for abortion post the COVID-19 pandemic compared with other ethnic groups, such as white participants ( $n = 20$ ; 25.3%). Political affiliation showed varying levels of reported changes in support. A higher number of Democrats ( $n = 39$ ; 49.3%) indicated increased support for abortion compared to Republicans ( $n = 15$ ; 18.9%) and Independents ( $n = 17$ ; 21.5%). Interestingly, among Republicans who indicated a perceived change, the number of respondents who reported increased support and decreased support for abortion was very similar ( $n = 15$ ; 18.9% and  $n = 13$ ; 25.0%, respectively).

In terms of abortion identity, a higher number of participants who were strongly participants ( $n = 31$ ; 39.2%) and moderately pro-choice ( $n = 16$ ; 20.2%) reported an increase in support for abortion post the COVID-19 pandemic. In contrast, more strongly pro-life and slightly pro-life participants indicated decreased support ( $n = 7$ ; 13.4% and  $n = 9$ ; 17.3%, respectively). While those slightly pro-choice, moderately pro-life, equally pro-choice and pro-life, neither pro-choice nor pro-life, and those who prefer not to answer showed relatively low levels of both increased and decreased support.

Additionally, in states where policymakers attempted to restrict abortion access during the COVID-19 outbreak (e.g., Alabama, Alaska, Arkansas, Iowa, Louisiana, Mississippi, Ohio, Oklahoma, Tennessee, Texas, and West Virginia), some respondents ( $n = 19$ ; 24.0%) reported increased support, while others ( $n = 11$ ; 21.15%) reported decreased support. See Table 3.

### 3.3 | Open-Ended Findings

We identified four themes among all participants: (1) lack of association between the COVID-19 outbreak and abortion; (2) stability of abortion attitudes among respondents whose attitudes did not change; (3) concerns brought on by the COVID-19 outbreak for those who perceived their support for abortion had increased; and (4) excess deaths associated with the COVID-19 outbreak for participants who perceived their support for abortion had decreased.

#### 3.3.1 | Lack of Association Between COVID-19 and Abortion

Most participants whose abortion attitudes did not change indicated that they did not see a connection between COVID-19 and abortion. For example, a strongly pro-choice person said, "I don't feel that one subject has anything to do with the

**TABLE 3** | Response variations by respondent characteristics.

	No change ( <i>n</i> = 1452)		Increased support ( <i>n</i> = 52)		Decreased support ( <i>n</i> = 79)	
	<i>N</i>	Weighted %	<i>N</i>	Weighted %	<i>N</i>	Weighted %
Gender						
Men	570	39.26	34	43.04	24	46.15
Women	876	60.33	44	55.70	27	51.92
Other	6	0.41	1	1.27	1	1.92
Race/Ethnicity						
American Indian or Alaskan Native	16	1.10	0	0.00	1	1.92
Asian or Asian American	197	13.57	6	7.59	9	17.31
Black or African American	179	12.33	12	15.19	6	11.54
Hispanic or Latina/o	529	36.43	37	46.84	21	40.38
Middle Eastern or Middle Eastern American	2	0.14	1	1.27	0	0.00
Native Hawaiian or Other Pacific Islander	4	0.28	0	0.00	0	0.00
White/Caucasian or European American	453	31.20	20	25.32	15	28.85
Bi-racial/Multi-racial	53	3.65	2	2.53	0	0.00
Other	19	1.31	1	1.27	0	0.00
Education						
Less than HS degree	38	2.62	1	1.27	0	0.00
High school or equivalent	244	16.80	9	11.39	7	13.46
Some college	312	21.49	20	25.32	15	28.85
Associate's degree	181	12.47	12	15.19	7	13.46
Bachelor's degree	429	29.55	21	26.58	10	19.23
Master's degree or higher	248	17.08	16	20.25	13	25.00
Political party						
Democrat	620	42.70	39	49.37	21	40.38
Republican	313	21.56	15	18.99	13	25.00
Independent	298	20.52	17	21.52	9	17.31
Other	26	1.79	4	5.06	0	0.00
No affiliation	195	13.43	4	5.06	9	17.31
Abortion identity label						
Strongly pro-choice	416	28.65	31	39.24	6	11.54
Moderately pro-choice	177	12.19	16	20.25	6	11.54
Slightly pro-choice	70	4.82	5	6.33	2	3.85
Equally pro-choice and pro-life	174	11.98	14	17.72	10	19.23
Slightly pro-life	51	3.51	1	1.27	9	17.31
Moderately pro-life	94	6.47	2	2.53	5	9.62
Strongly pro-life	266	18.32	4	5.06	7	13.46
Neither pro-choice nor pro-life	127	8.75	4	5.06	3	5.77

(Continues)



TABLE 3 | (Continued)

	No change ( <i>n</i> = 1452)		Increased support ( <i>n</i> = 52)		Decreased support ( <i>n</i> = 79)	
	<i>N</i>	Weighted %	<i>N</i>	Weighted %	<i>N</i>	Weighted %
Prefer not to answer	77	5.30	2	2.53	4	7.69
States of residence						
States response to COVID-19 restricted AB	275	18.94	19	24.05	11	21.15
States response to COVID-19 expanded AB	607	41.80	26	32.91	25	48.08
States response to COVID-19 no change	570	39.26	34	43.04	16	30.77

other, at all. Not in any way” (English response). Likewise, a strongly pro-life participant stated, “Because the pandemic has nothing to do with abortion” (English response). Some explained that they do not see a connection between these issues because abortion and COVID-19 are not similar health issues. For example, an equally pro-choice and pro-life participant said, “COVID-19 deals with the health of all people. While abortion is a process to terminate a pregnancy. COVID-19 has not affected my views on pregnancy or abortions, this [is] more of a personal choice that an individual makes” (English response). Similarly, a strongly pro-life participant stated, “COVID-19 has no relationship with abortion. Abortion is not a sickness, but COVID is” (English response).

### 3.3.2 | Stability of Abortion Attitudes

Some participants indicated that their abortion views did not change because of COVID-19, as their beliefs have not changed over time. For example, a strongly pro-life participant wrote, “I have always been pro-life, and in recent years I have confirmed that abortion is murder and is something that God does not want” (Spanish response), whereas a strongly pro-choice participant said, “I have always believed that abortion is a woman's right. It is hers and hers alone to make that choice” (English response).

### 3.3.3 | Concerns Brought on by COVID-19

Participants who perceived their support for abortion increased indicated that the pandemic is a difficult global situation linked to other social problems. Some referenced gender violence. For example, a strongly pro-choice participant said, “In this pandemic I have seen in the news many instances of women being raped, beaten, robbed, and others massacred by strangers This pandemic has brought a lot of negative things regarding that, and it has been worldwide” (Spanish response). Others mentioned financial concerns. For example, an equally pro-choice and pro-life participant mentioned, “many people have lost their jobs and do not have money to support their children now and surely the new ones to come” (Spanish response). A strongly pro-choice participant said, “With the economy in recession and uncertainty, retaining abortion as an option would lessen undue stress on those who are pregnant” (English response).

Finally, some participants connected individuals' well-being to social changes tied to the COVID-19 outbreak. For instance,

a moderately pro-life participant said, “The coronavirus outbreak has fueled attempts to ban abortions in some states, but providers, where the procedure remains available report increased demand, often from women distraught over economic stress and health concerns linked to the pandemic” (English response).

### 3.3.4 | Excess Deaths Associated With COVID-19

Participants who perceived their support for abortion decreased indicated that the excessive deaths resulting from COVID-19 may have reduced their support for abortion. For example, a slightly pro-choice participant stated, “we all want everybody to survive, and everyone is dying” (English response). Similarly, a neither pro-choice nor pro-life participant said, “Why abort a child when people are dying more than ever right now” (English response). Likewise, a slightly pro-choice participant said, “There are too many deaths, and we have to repopulate the world” (Spanish response).

## 4 | Discussion

We examined US adults' perceptions of whether the COVID-19 outbreak, as a significant historical event, altered their abortion attitudes and why they thought their support for abortion may have increased, decreased, or remained the same. Further, given that abortion attitudes in the US seem stable over time [1, 5], identifying factors that may be linked to abortion attitudes, particularly unique circumstances like the COVID-19 pandemic, may help us understand potential contexts related to people's abortion attitudes.

Our preliminary descriptive statistics suggest that attitudes about abortion during the COVID-19 pandemic did not change. However, the observed trends among those who reported a perceived change followed similar political and social ideologies linked to abortion attitudes [1, 38, 39]. For example, although not many participants who identified as slightly, moderately, or strongly pro-life perceived a change in their abortion attitudes (only *n* = 28 out of 439 reported a change in their views), among those who did, a larger number (*n* = 21; 40.3%) reported decreased support for abortion during the COVID-19 pandemic. This lends additional support to research indicating that identifying as pro-life is linked to having more conservative and absolute moral views on abortion

than those identifying as pro-choice [38, 40]. Further, this might suggest that changes in abortion attitudes among those who identify as pro-life are likely to be toward more conservative opinions.

More Democrats ( $n = 39$ ; 49.3%) than Republicans ( $n = 15$ ; 18.9%) reported increased support for abortion. This result is consistent with prior research in which identifying as Republican is often linked to having less supportive attitudes toward abortion and holding more conservative views [1, 39]. Of note, however, among Republicans, almost the same number of participants reported an increase ( $n = 15$ ; 18.9%) in their support as a decrease ( $n = 13$ ; weighted 25.0%). This result shows that some Republicans may support access to abortion and may have more moderate political attitudes when it comes to abortion. For example, results from a recent Pew Research Center poll showed that Republicans who support legal abortion describe their political ideology as moderate or liberal [41].

Additionally, our results indicate that not many participants who reside in the states where stricter abortion policies were enacted at the beginning of the COVID-19 pandemic (i.e., Alabama, Alaska, Arkansas, Iowa, Louisiana, Mississippi, Ohio, Oklahoma, Tennessee, Texas, and West Virginia) perceived a change in their abortion attitudes. Only  $n = 30$  participants out of  $n = 305$  reported a perceived change, with a relatively balanced split between increased support (24.05%) and decreased support (21.15%). This finding builds on prior research that indicates that abortion attitudes are complex [28], and although many Americans support abortion restrictions, many would like to keep it legal. This complexity is further highlighted by events following the 2022 US Supreme Court's decision in *Dobbs v. Jackson Women's Health Organization*, which overturned *Roe v. Wade*. In several presumed conservative states (e.g., Kansas, Kentucky, and Montana), voters rejected proposals to limit abortion access [42]. Future research should explore possible changes in abortion attitudes in states where abortion has been restricted.

Our qualitative analyses highlighted some of the reasons why participants may not have perceived a change in their abortion attitudes. For example, most of our participants who reported their abortion attitudes did not change indicated that they did not see a connection between the COVID-19 pandemic and abortion. We theorize this might be due to people being unaware of how the abortion policy landscape shifted in response to the COVID-19 outbreak or its impact on access to contraceptives, thus increasing risks for unintended pregnancy and unsafe abortions [43]. Our finding corroborates prior research on abortion knowledge more broadly, which tends to indicate that many people may have poor knowledge overall about abortion laws and services and how those laws and services affect abortion seeking and associated outcomes, including attitudes [44–46].

Additionally, some participants may not have considered how the COVID-19 outbreak affected access to abortion. For example, in all states regardless of policymaker action, there was limited availability of abortion clinics because many had to close or reduce their services for non-policy reasons during the pandemic, leading to longer wait times and reduced access to care for those seeking abortions. Limited access to abortion services

during the COVID-19 pandemic was especially difficult for people living in rural areas or states with few clinics nearby, as travel was complicated by stay-at-home orders [19].

Some participants who did not perceive their attitudes changed cited their religious beliefs or beliefs about bodily autonomy. This aligns with previous research indicating that religious beliefs and beliefs about bodily autonomy are strong predictors of abortion attitudes [47]. This lack of change in attitudes may be because new information may not be linked to people's attitudes when the attitude is strongly related to one's perception of ethics, morality, and social values [48]. Participants citing reasons such as moral or ethical values may have been less likely to perceive the pandemic as an important issue for changing their attitudes toward abortion since abortion may be strongly integrated into their identity/ideology.

Our qualitative analyses also illuminated some of the reasons why participants may have perceived a change in their abortion attitudes. For instance, some participants indicated that COVID-19 increased their support for abortion, connecting their abortion attitudes to different contexts. For example, some described how social issues, such as unintended pregnancy due to sexual violence and economic instability, became more salient during the pandemic. This result aligns with literature that suggests abortion attitudes vary as a function of circumstances surrounding the pregnancy, those involved in the pregnancy, and the abortion [8]. Indeed, in the US, support for abortion depends on why a person has an abortion, with the pregnancy resulting from rape being consistently a well-supported reason for abortion [8]. Interestingly, many participants under this category indicated that having an abortion may lessen financial concerns for people affected by the COVID-19 economic crisis, granting more support to a traditionally less-supported abortion reason, such as the person having low income [8].

For participants who perceived their support for abortion decreased, deaths associated with COVID-19 were the most cited reason. This perceived change in attitudes may be because COVID-19 rapidly increased worldwide death rates, possibly prompting some participants to reassess their beliefs about life, and people do associate abortion with life and death [28]. This could also indicate that some participants are becoming more conservative in their values. Thus, examining changes in abortion attitudes during the pandemic can provide valuable insight into the values and priorities of society at large.

## 4.1 | Limitations

There are important limitations to consider. First, participants indicated if their abortion views changed or remained the same due to the COVID-19 outbreak; however, we did not ask if the change was in degree or change from supportive to opposed or vice versa. Second, although our findings highlight observed patterns, they do not reflect statistically significant differences, emphasizing the need for further studies. Moreover, our sample was not nationally representative; thus, our results are not generalizable to the U.S. population. However, weighting our sample helped mitigate this limitation. Third, it is important to note that the survey design did not differentiate between changes in the

direction of support (e.g., changing from supportive to opposed) and changes in the intensity of support (e.g., becoming more or less supportive while maintaining the same stance). Future studies could benefit from a more nuanced measure that differentiates between changes in direction and intensity of support.

Another limitation was the small number of participants who perceived that their attitudes had changed during the pandemic. If possible, we encourage additional longitudinal research to examine potential changes over time in people's attitudes in response to notable events that influence abortion policy. Similarly, research examining whether attitudes and changes in attitudes differed by state policy context (i.e., whether state policymakers attempted to ban abortion during the pandemic) is also needed.

Lastly, we measured perceived changes in beliefs by asking people directly whether, and why, their attitudes had changed. While existing research suggests that individuals may not always possess accurate introspective access to their beliefs or the underlying reasons for their attitudes and behaviors [49], this does not negate the value of exploring these perceptions. Our preliminary research provides insight into how and why people perceive that their attitudes have or have not changed. Prior research suggests that understanding how people interpret and explain changes in their attitudes can provide significant insights into the social processes involved in belief formation and change [23, 24]. Even though self-perceived attitude changes may not always be entirely accurate, they offer valuable data on how social dynamics and contextual factors shape belief systems [23, 24]. By analyzing these perceptions, readers can gain a deeper understanding of the complex mechanisms underlying abortion belief change.

## 5 | Conclusions and Implications

The reported lack of change in abortion attitudes in this study aligns with the stability of abortion attitudes observed over the last 50 years [1–5]. The COVID-19 pandemic changed and disrupted the provision of health-related services, including abortion; however, the pandemic may not have impacted many US adults' general abortion views. In addition, although abortion attitudes appear to be relatively consistent, many state policymakers sought to limit abortion access during this timeframe [12, 13, 18, 20]. Therefore, understanding people's abortion attitudes in extraordinary circumstances, like COVID-19, can more accurately inform policymakers' decisions. Additionally, it is important to closely examine trends in reproduction during a pandemic because it provides insight into societal values and shifts in priorities, shapes policy debates and decisions, and directly impacts people's well-being. As such, it is essential that researchers, policymakers, and the public pay close attention to changes in abortion attitudes during this important time.

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