The Political Consequences of Depression:
How Conspiracy Beliefs, Self-Efficacy, and Depression Affect Support for Political Violence

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Abstract

Depression can affect individuals' attitudes by enhancing cognitive biases and altering perceptions of risk. Some evidence suggests an association between depression and violence. This linkage, however, is undertheorized and tentatively empirically supported, with little attention to conditions impacting the relationship. The authors investigate whether and how depressive symptoms influenced Americans' attitudes regarding domestic extremist violence surrounding the 2020 election and the January 6th US Capitol riot. They develop a theory regarding the circumstances under which depression will be positively associated with supporting political violence. They posit that it depends on efficacy, conspiracy beliefs, and their combination. The researchers test their theory using a two-wave national survey, from November 2020, and January 2021. They find that among those who are efficacious and/or hold conspiracy beliefs, depression is positively associated with support for the Capitol stormers and election violence. The researchers' findings make clear that interventions aimed at addressing depression can have political consequences.

Depression can affect individuals' attitudes by amplifying cognitive biases and altering perceptions of risk (Ackermann and DeRubeis 1991; Park et al. 2016). This can have important political implications. Indeed, researchers have found links between depression and reduced political participation (Landwehr and Ojeda 2021; Ojeda 2015), increased gun ownership (Simonson et al. 2021) and reduced support for rightwing parties (Bernardi 2021). Others look at how politics affects mental health, showing, for example, that the current highly polarized state of American politics may lead to stress, sleep loss, and emotional distress (Smith et al. 2019). On the other hand, despite media attention to the possible role of severe mental illness in a small minority of mass shootings, academic research suggests only a weak, and not necessarily causal, association between depression and committing acts of violence (Skeem and Mulvey 2020). Even less certain is whether depression may increase support for political violence, and if so, under what circumstances. Notwithstanding these examples, most political science research largely ignores mental health as an explanatory factor. The present study seeks to fill this gap, by investigating whether and how mental health during the COVID-19 pandemic influenced Americans' attitudes regarding domestic extremist political violence in the context of the 2020 election and the January 6th storming of the US Capitol. Ultimately, this provides insight into whether and when the mental health of individuals affect the nation's political health.

We specifically assess the relationship between depressive symptoms (henceforth "depression") and support for political violence in the United States, which is of increasing concern to political scientists (e.g., Arceneaux and Truex 2021; Uscinski et al. 2021; Kalmoe and Mason 2022), the government (Doxsee and Harrington 2021), and the public (Frankovic 2021). Amid concerns of democratic backsliding (e.g., Graham and Svolik 2020), understanding the correlates of support for political violence is of crucial importance. We specifically exploit the co-existence of two defining events of 2020-21 American politics. First, the COVID-19 pandemic saw an unprecedented threefold spike in depression among US adults (Perlis et al. 2021), as well as a proliferation of misinformation, and conspiracy theories (Douglas 2021; Druckman et al. 2021).[1] Second, the January 6th US Capitol insurrection created an opportunity to explore whether this mixture of depression and conspiratorial beliefs (note that we use "conspiracy" and "conspiratorial" interchangeably in this context) contributed to public support for actual, rather than hypothetical, political violence. This provides an ideal empirical test case, although—as we will articulate—our framework and findings generalize beyond these particular events.

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[1] Additional research (van Prooijen and Douglas 2017) indicates that historically, the proliferation of misinformation has increased during pandemics.

Our theoretical framework draws on research that shows the complexity of depression in its effects on cognition and behaviors. While rarely treated as such in the social science literature, major depressive disorder is remarkably heterogeneous in its presentation and effects (Fried and Nesse 2015). In some instances, it is associated with fear and inhibition, or passivity (O'Connor et al. 2002), while in others it manifests with anger and aggression (Biaggio and Godwin 1987; Fava 1998; Perlis et al. 2005).

How a person responds to depression—whether with fear/passivity or anger/aggression—affects the linkage between depression and support for political violence. But what determines the emotions and reactions that a person with depression will experience in political contexts? We argue that one important factor determining whether an individual suffering from depression responds with passivity or anger is conspiratorial beliefs. Conspiracy beliefs about the government offer those suffering from depression a target of attribution. They also provide a moral justification for extremist actions, meaning those with depression who hold conspiratorial beliefs have an increasing likelihood of supporting political violence. Another significant factor is self-efficacy, defined as one's capacity to exert control over the environment (Tahmassian and Jalali-Moghadam 2011). Efficacy can fill the void left by depression and embolden an aggressive response including support for violence. The presence of conspiracy beliefs exacerbates this effect, leading to even more support. Conversely, individuals with low efficacy likely feel fearful of their ability to cope with stressful situations, leading to passivity and avoidance (Bandura 1977; Landwehr and Ojeda 2021). In short, we argue that these two factors—conspiracy beliefs and efficacy—determine whether and to what extent depression will influence the likelihood of supporting violent extremism. We further expect the strongest influence when both factors combine with depression.

From our theoretical framework, we derive a series of hypotheses that we test with a unique panel survey on attitudes about election violence and the January 6th US Capitol insurrection. We interviewed 19,766 Americans from all 50 states plus the District of Columbia in November 2020, prior to the events of January 6th. We then re-interviewed 2,044 of these same respondents, beginning a week after January 6th (from January 13 - 20, 2021). This provides insight into the association between depression and support for the insurrection, and also (to the extent possible with observational data), the direction of causality since our measures of depression, efficacy, and conspiratorial beliefs precede the insurrection. Our findings strongly support our expectations, highlighting the democratic implications of interventions aimed at addressing depression.

Before proceeding further, we strongly emphasize that individuals suffering from depression should not be seen in a negative light; not only are additional conditions

necessary for depression to have a positive relationship with support for violence (as we will articulate), but individuals suffer from depression for reasons over which they have little or no control. The point is to take steps to vitiate the illness rather than criticize those experiencing it.

The Psychology of Political Violence

Democratic backsliding can occur via violent overthrows (e.g., coups) or the gradual erosion of democratic norms (Levitsky and Ziblatt 2018). Scholars of American politics have recently focused on people privileging their partisan goals over democratic processes either by justifying *partisan* violence (e.g., Kalmoe and Mason 2022) or endorsing the violation of electoral, civil liberty, or constitutional norms (e.g., Graham and Svolik 2020). We explore support for/acceptance of actors who engage in violence against the government.[2] This need not involve partisan motivations among competing sides with distinct ideologies. Rather, it can entail the acceptance of violence as a way to manage conflict and govern (a la Peirce 1877). It normalizes violence for those who actually engage in it and may embolden them; it involves the devolution of a norm against violence as a general matter. We focus on a psychological state—support for violence, an essential form of political expression (as important as political trust, endorsement of checks and balances, etc.).

Specifically, we study support for violence in a particular context (presidential elections) and in response to a specific event (the January 6th Capitol insurrection) rather than generalized support or behavioral intent to engage in violence. These types of supportive attitudes towards concrete hypothetical or actual violence are problematic given that popular support for the unlawful removal of democratic leaders and institutions can signify democratic backsliding (Bermeo 2016). As Diamond et al. (2020) note, "public approval of political violence [can] potentially creat[e] a vicious cycle even if violence is sparked in only a few spots." To be clear, we do not seek to explain the origins of a violent event such as the January 6th insurrection (this likely requires access to those who participated). Rather, we look at those who normalize violent actions via support.[3] These individuals also could become a target population for those trying to activate further violence.

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[2] Some people engage in political violence while others support but do not engage in it. As Webber et al. (2020: 108) state,"Simply prescribing violence as an acceptable means, however, is often insufficient to motivate one to undertake violence as their personal obligation. Indeed, the adherents of violence-justifying ideologies who sit idly on the sidelines far outweigh those who act on behalf of the cause."
[3] We also do not investigate over-time changes in support for violence as our data are from a short time period, and we do not theorize about the evolution of causal factors.

We seek to identify the factors that lead people to positively assess others who engage in violence. We build our theory by starting with the proximate factor of conspiratorial beliefs, moving to a discussion of self-efficacy that we posit conditions the impact of conspiracy beliefs. Then, we turn to depression—our main focus—and explain how its effects depend on conspiratorial beliefs and efficacy.

Conspiratorial Beliefs

A conspiracy theory is an effort to explain an event by invoking the machinations of powerful people, who attempt to conceal their role while pursuing malevolent goals (Bale 2007; Sunstein and Vermeule 2009). Conspiracy ideation comes in many guises—for example, believing that NASA faked the moon landing, or that the government suppressed evidence that the MMR vaccine causes autism. While many such theories involve governmental institutions, others concern industry (e.g., pharmaceutical), marginalized groups (e.g., Muslims, Jews), or organizations (e.g., employers) (van Prooijen and Douglas 2017). Such beliefs lead people to feel a heightened sense of threat, which, in turn, reduces their capacity to distinguish between truth and falsehood (Newman et al. 2021). We focus here on conspiracy theories that involve allegations that governmental actors act for nefarious purposes These beliefs undermine trust in the system and thus any change needs to occur through *extra-systemic processes* that include violence (van Prooijen and Douglas 2017; Webber et al. 2020). Moreover, thinking powerful people are plotting provides a *moral justification* for acts of violence (Bartlett and Miller 2010; Krekó 2015; van Prooijen and Douglas 2017). Along these lines, Jolley and Paterson (2020) found that belief in an association between 5G antennas and incidence of COVID-19 positively associated with expressions of support for hypothetical and real-world violence (also see Lamberty and Leiser 2019; Uscinski et al. 2021). This leads to the following hypothesis:

> H1: All things being equal, holding governmental conspiratorial beliefs will be positively associated with support for political violence.

Given our empirical focus on 2020, conspiratorial beliefs are likely to be particularly relevant. During national elections, candidates routinely reference urgent crises where the wrong decision will lead to disaster (Lacatus and Meibauer 2021). The 2020 election represented a case in point, as both candidates repeatedly argued that the `"soul of America" was at stake in the election (Dias 2020). For supporters of then-President Trump, the potentially extreme perceived threat/risk associated with a Trump defeat—which the candidate repeatedly decried as illegitimate—may have rendered these voters particularly susceptible to conspiracy beliefs (Newman et al. 2021). This, in turn, could lead to support of violent action to overturn the election.

Though this case appears to tilt in a single partisan direction, it is important to recall that in at least one critical respect, the likely effects of the campaign may be symmetric. That is, supporters of President Biden may have responded with similarly extreme perceptions of threat/risk to his repeated warnings—and those of his allies—that the very survival of democracy in America was on the line in the 2020 election. Furthermore, conspiracy theories by their very nature may lead people to support positions that appear to outside observers to contradict their ideology or revealed policy preferences. Biden voters who subscribed to conspiratorial myths may not have believed the Capitol violence was directed against their candidate or may have harbored a grudge against anyone they identify with "the government." Our prediction then is orthogonal to partisan orientation, and we will empirically assess whether it holds among Democrats and Republicans, as well as Trump supporters and non-supporters.

Efficacy

Self-efficacy refers to a belief in one's own capacity to exert control over the environment (Tahmassian and Jalali-Moghadam 2011). It conditions how one responds to external stimuli—when an individual perceives a system to be non-responsive, those with low self-efficacy withdraw while those with high self-efficacy seek recourse (Bandura 1977). Young (2020) explains that those with high self-efficacy react with anger to regime threats, prompting them to act against the government. Such emotional reactions may explain the correlation between self-efficacy and high-risk behaviors (Piven and Cloward 1978; Wood 2003).[4] It also coheres with work showing that (internal) political efficacy generates anger that motivates participation (Valentino et al. 2008) and populist attitudes (Rico et al. 2020).

We build on these streams of work by considering the relationship between self-efficacy and conspiracy theories. First, those who subscribe to governmental conspiracy beliefs view the system as non-responsive—they believe the government acts counter the interests of the population.[5] Second, conspiratorial thinkers with high self-efficacy will advocate for actions against the regime/government (since efficacy prompts action). Third, as explained, anger felt by efficacious people who perceive threat motivates a call for action (Rico et al. 2020; Magni 2017; Turner et al. 2020). Fourth, a sizable body of work shows anger connects with support for violence (e.g., Gardner and Moore 2008; Novaco 2017; Romero-Martínez et al. 2020). For instance, when faced with a "stolen" election, we expect a person with high self-efficacy to feel anger, making them more likely to support people taking extreme actions. In contrast, we expect a person with low

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[4] In contrast, individuals with low self-efficacy, in the face of threat, tend to express more fear and anxiety (Bandura 1977; Rees et al. 2020).

[5] This is most relevant to democratic systems. We discuss the relationship between conspiracy theories and non-democratic regimes in the conclusion.

self-efficacy to experience fear, uncertainty, and indecision. Thus, while conspiratorial beliefs may provide the underlying basis for supporting violent action, self-efficacy acts as a leavening agent, generating an even stronger desire for drastic action. This leads to the following hypothesis.

> H2: All things being equal, among individuals with conspiratorial beliefs, high self-efficacy will be positively associated with support for political violence.

When Does Depression Exacerbate Support for Violence?

Depression has long been recognized as a heterogeneous concept, reflecting a range of disorders with highly variable features and pathophysiology (Buch and Liston 2021). In some instances, depression generates fear, passivity, and a loss of interest (O'Connor et al. 2002).[6] Even so, while not a diagnostic criterion of depression, anger can be a symptom under certain conditions (Fava 1998; Biaggio and Godwin 1987; Perlis et al. 2009; Judd et al. 2013). Thus, while the correlation between depression and support for political violence may be weak or even negative on average, we expect to see a strong association in the presence of underlying factors that tip the symptomatology of depression away from fear/passivity and toward anger/aggression. It is only in these latter circumstances that we would expect depression to positively correlate with support for violence. To be clear, it is not necessarily that depressed individuals have more anger, on average, than non-depressed individuals, but rather depressed individuals will gravitate towards anger in the presence of other conditions. In turn, as explained, there exists a clear relationship between anger and support for violence. These distinct possibilities (of passivity or anger) explain why research on mental health and violence urges caution in making general claims (Misiak et al. 2019).

Thus, for depression to enhance support for political violence requires ingredients that lead it to manifest as anger and aggression. One such factor is conspiracy beliefs, which research has shown to be positively associated with depression (Druckman et al. 2021; Fountoulakis et al. 2021). Governmental conspiracy beliefs offer a target of attribution for those suffering from depression, transforming feelings of passivity into anger aimed at the perceived source of discomfort. Levinsson et al. (2021) explain "Conspiracy beliefs may provide a mechanism to empower [depressed] individuals by allowing them to adopt narratives that explain and reduce the current uncertainties and distress [providing] individuals with an opportunity to … feel in control…" This reaction, in turn, generates support for violence. Indeed, Levinsson et al. report the intersection of depression and conspiracy beliefs leads to support for violent radicalization.

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[6] These situations explain the general negative correlation between depression and political participation (Landwehr and Ojeda 2021).

Further, just as self-efficacy increases support for violence among those with conspiratorial beliefs (Hypothesis 2), it can influence the attitudinal direction of depression. A depressed individual with low efficacy is more likely to respond with fear/passivity and hence to avoid political action entirely (Landwehr and Ojeda 2021), or at a minimum, avoid any forms of it entailing aggression. That includes supporting aggressive participation by others (Kruglanski et al. 2014). In contrast, the general anger that often comes with efficacy will do so more acutely among depressed people. They become emboldened, react with anger, and support aggressive participatory activities, including violence. Efficacy can help individuals fill the void of personal significance that depression often undermines (Kruglanski et al. 2014). Finally, in combination, efficacy and conspiratorial beliefs will reinforce one another and cause even stronger support for violence among depressed individuals. In short, conspiracy beliefs provide a target and self-efficacy promotes anger.[7] These conditions, in turn, lead depressed individuals to support violence. Our final hypothesis follows.

> H3: All things being equal, depression will be positively associated with support for political violence if and only if accompanied by:
>> H3a: high levels of self-efficacy,
>> H3b: high levels of conspiratorial beliefs, or
>> H3c: both (particularly so).

In Table 1, we summarize our hypotheses. The first three columns indicate the presence of a high level of the given variable while the last two columns state the predictions and brief rationales. Before turning to our data, we offer two clarifications. First, we recognize that various processes can contribute to depression. We focus directly on depression for a few reasons. For one, the literature on support for violence points to a host of stable features such as belief systems and trait aggression (e.g., Webber et al. 2020). We investigate levers that lend themselves to clear interventions. While we are not so naive as to believe addressing depression is straightforward, it is a condition that can be treated with more investment. Indeed, the CDC describes depression as "a common and treatable mental disorder" (Brody, Pratt, and Hughes 2018). As for situational factors, we isolate and control for many of these in the analyses that follow.

Another motivation to investigate depression concerns the aforementioned literature linking anger to violence that seeks to identify interventions (e.g., Gardner and Moore

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[7] Another possibility is that self-efficacy and/or conspiratorial beliefs act as mechanisms through which depression impacts support for violence. We think this is unlikely in the case of efficacy given the established negative relationship between depression and political activity (Landwehr and Ojeda 2021). With regard to conspiracy beliefs, it is reasonable to suggest a positive relationship between the two. However, the theoretical work on which we build posits that it works via moderation by increasing anger (by providing a target for the expression of depression) (e.g., Levinsson et al. 2021).

2008; Novaco 2017; Romero-Martínez et al. 2020). As mentioned, there also is a burgeoning literature on mental health and violence that remains ambiguous in terms of relationships (Misiak et al. 2019). We contribute directly to the latter by documenting the political ramifications of depression. We argue that in addition to being a major public health problem, depression also, under certain conditions, can be a political problem (also see Landwehr and Ojeda 2021). We further add insight to work on anger and violence, since anger stems from many sources and we seek to identify whether depression can be such a source that leads, in turn, to support for violence.

This leads to our second clarification: we posit anger as a pathway through which depression has an effect; however, other sources of anger can generate support for violence. We do not study anger per se since our main interest lies in identifying the conditions under which depression generates support for violence. We will discuss some suggestive evidence regarding the role of anger. Overall, if the data support our predictions, it will reveal novel political consequences of depression and accentuate the urgency of interventions for treating depression.

Table 1: Summary of Hypotheses*

Consp.	Efficacy	Depres.	Prediction	Explanation
X			All things being equal, holding governmental conspiratorial beliefs will be positively associated with support for political violence. (H1)	The beliefs lead people to view extra-systematic processes as necessary and provide a moral justification for endorsing violence.
X	X		All things being equal, among individuals with conspiratorial beliefs, high self-efficacy will be positively associated with support for political violence. (H2)	Self-efficacious conspiratorial believers will advocate for action against a non-responsive regime. The anger arising from self-efficacy leads to increased support for violent action.
	X	X	All things being equal, depression will be positively associated with support for political violence when combined with high levels of self-efficacy. (H3a)	Self-efficacy generates anger that emboldens depressed people to support violence.

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X		X	All things being equal, depression will be positively associated with support for political violence when combined with high levels of conspiratorial beliefs. (H3b)	Governmental conspiracy beliefs provide a target of attribution for those suffering from depression. This generates anger (toward the regime) and support for violence.
X	X	X	All things being equal, depression will be (most strongly) positively associated with support for political violence when combined with high levels of conspiratorial beliefs and high levels of self-efficacy. (H3c)	Governmental conspiracy beliefs provide a target of attribution for those suffering from depression, generating anger. Self-efficacy exacerbates anger leading to strong support for violence.

An "X" indicates the presence of the given feature.

Data and Methods

The COVID States Survey

To analyze the effects of depression, self-efficacy, and conspiracy beliefs on support for violence, we draw on data from a massive online panel survey that ran nearly monthly throughout 2020-1. We invited respondents who completed the November 2021 wave (N = 19,766) following the 2020 Presidential Election to join a follow-up wave immediately after the January 6th insurrection (N = 2044). We collected all predictors of interest in the November wave, thus avoiding the risk that the insurrection itself influenced depression, efficacy, or conspiracy beliefs. Some demographic information was already stored from earlier waves.[8]

We recruited respondents through the PureSpectrum survey recruitment platform, which aggregates and deduplicates paid panelists from multiple sources. Emerging evidence suggests this methodology can perform as well as traditional probability sampling (Radford et al. 2020; Enns and Rothschild 2021; Lehdonvirta et al. 2021). To minimize topical selection bias, we did not inform respondents of the purpose of the survey when they entered it, and questions covered a broad range of topics, mostly related to public health. We filtered out inattentive and semi-automated respondents through multiple closed- and open-ended attention checks. Though not a probability sample, the large scale of the November wave and its demographic breadth allows considerable flexibility for including quotas for gender, race, and age at the state level, and reweighting of

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[8] Sample sizes vary slightly by model, due to occasional item non-response.

observations to match official U.S. Census figures. It thus serves as a representative sample.

Outcome Measures

Our interest lies in support for political violence that, as explained, can normalize extremist acts. We specifically sought to employ support for actual acts of violence, moving away from the abstracted nature of other approaches, which inherently may be problematic since it remains unclear what abstract scenarios enter people's minds (see Westwood et al. 2021). We thus included, on the January wave, two measures focused on the January 6th attack. First, we asked about the insurrection itself: "Did you support or oppose the storming of the Capitol building on January 6th?" We call this outcome "support attack," recoding the original 5-point scale into three discrete categories: support, oppose, and neither support nor oppose. Our second January 6th outcome, "sympathize stormers," is a 100-point "feeling thermometer" in which higher responses indicate warmer/more positive feelings toward "The people who stormed the Capitol building on Jan 6." The distinction between these two questions is non-trivial: in a free-response textbox asking how respondents felt about the events that day, many respondents indicated that they felt sympathy for the stormers and their demands, even if they did not condone their actions. Furthermore, survey respondents who support violence may nevertheless avoid explicitly condoning it but still express sympathy with its perpetrators if they see the latter as more socially (or legally) acceptable (Hayes and McAllister 2005). In our survey, two additional factors may lead this item to be a better reflection of true preferences: (1) the item appears prior to any other mention of January 6th, and (2) the item was embedded in a list of unrelated individuals and groups (e.g., Asian people, Biden supporters, scientists, police).

The January 6th items exploit an unprecedented opportunity to isolate support for actual violent political events in a stable democracy. That said, we also recognize the unique nature of any single event, and thus, we included two other measures that ask about hypothetical approval of violence if the election was not conducted fairly. This has the downside of being hypothetical, but, as a complement to our other measures, it allows us to move away from the idiosyncratic events of January 6th. This is particularly the case in our November survey wave which occurred *before* the capital insurrection. Specifically, on our November and January survey waves. We asked respondents, "If it became clear to you that the [2020 (November wave) /2024 (January wave)] presidential election was not conducted fairly, would you approve or disapprove of other people who reacted by…", followed by a list of four options starting with "protesting on social media" and culminating in "using violence." We recode the original 5-point scale into three discrete categories—approve, disapprove, and neither approve nor

disapprove—and designate the "using violence" item as "hypothetical election violence." The wording of this item directly relates to finding that people express more support for extralegal violence when they have lost confidence in the legitimacy of state institutions (Cruz and Kloppe-Santamaría 2019).

Our four outcomes, thus, measure support for political violence (by others) along distinct dimensions. Support attack measures straightforward support for or opposition to the actual attack on the US Capitol, sympathize stormers measures feelings towards the individuals who carried it out, November hypothetical election violence measures support for responding to an unfair election with violence (prior to any such violence taking place in the real world, but immediately after the election's conclusion), and January hypothetical election violence measures support following an actual manifestation of such violence on January 6th. Under our three hypotheses, we expect higher scores (and positive interactions) on all four outcomes for the subpopulations of interest. More generally, these violence measures capture general tendencies towards violence not inextricably linked to partisan considerations—as is the case with with many canonical measures of violence that ask respondents if it is acceptable for a member of their party to take violent action, often against the other party (e.g., Kalmoe and Mason 2022). This is not to ignore unavoidable partisan implications of our measures, given that our questions reference an unfair election involving parties and an insurrection that was driven by one partisan side. We therefore control for partisanship in our models and run robustness checks subsetting on each party as well as support/non-support for Trump (see Supplemental Appendix F.7)

Not surprisingly, all four outcomes have relatively low means: the support attack, sympathize stormers, November hypothetical election violence, and January hypothetical election violence measures have respective means and standard deviations of: .13 (.27), 15 (24), .14 (.29), and .16 (.29) . These scores are consistent with other contemporaneous surveys (Bright Line Watch 2021) and reflect left skewed distributions such that roughly 80% did not approve of the capitol stormers or electoral violence and about 70% scored below a 10 out of 100 on the sympathize stormers variable. In Supplemental Appendix C, we provide histograms of each outcome variable.

Measuring Conspiracy Beliefs

To measure conspiracy beliefs, we presented respondents with 12 statements about politics and the pandemic—10 of them false—and counted the number about which they had incorrect beliefs (relative to the best available information at the time). Nine of the statements focused on COVID-19 (e.g. "There is a cure for coronavirus that is being

withheld from the US public") and three focused on American politics (e.g., "Thousands of election ballots were found in dumpsters"). See Supplemental Appendix A for the full list of items and Druckman et al. (2021) for a more thorough discussion.[9] Throughout, we refer to the variable as conspiratorial beliefs.

While we treat conspiratorial beliefs as continuous in our regressions, when generating predicted probabilities we simulate a conspiratorial respondent by setting the variable equal to the top decile and compare them to respondents in the lowest decile. That said, we re-ran all of our models using the 20th and 80th percentiles, as well as the 25th and 75th percentiles, and the results remain robust (see Supplemental Appendix F). As we will later discuss, conspiracy beliefs moderately correlate with Trump support and conservative ideology but that does not undermine our results.

Measuring Self-Efficacy

One approach to operationalizing self-efficacy involves general measures of control (e.g., Schwarzer and Jerusalem 1995); however, this could misrepresent the domain specificity of control in a political context. We care about whether an individual feels that they could act in a way that can influence a *political* outcome. We capture this with a question that asked the respondents whether they had participated in at least one of six political actions in the past six months including volunteering for a candidate, party or political organization; attending a rally or protest; calling or writing an elected official; attending a town hall held by an elected official; posting about politics on social media; or making a political donation. This measurement approach provides us with a "revealed" measure of self-efficacy. By far the largest threshold distinction is between "no" political activity and engaging in "any" of the six political activities (around 30% of respondents in both the November and January surveys). We coded our "efficacy" predictor 1 if the respondent participated in any activity and 0 if they did not.

Two points merit further discussion. First, while multiple factors shape participation decisions, we contend that if a person engages in any of these activities, it indicates that person surpassed a threshold of efficacy. Importantly, the six months from May to November 2020 (i.e., the period of our measurement)—encompassing the COVID-19 lockdowns, Black Lives Matter protests, and 2020 Presidential election—is a period during which anyone with some efficacy to politically act likely would have done so.

Second, an alternative approach entails using a scale of internal political efficacy, which aligns with self-efficacy in the domain of politics (i.e., a belief in one's competence to

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[9] When we replicate our models using an operationalization limited to conspiracy belief items that unambiguously entail governmental conspiracies, the patterns remain robust (see Supplemental Appendix F.3 and F.4)

understand and participate in politics; e.g., Morrell 2003). We did not use this approach for practical and theoretical reasons. On the practical side, the surveys that provide our data—around this unique confluence of events—include the aforementioned participation items but not a direct measure of internal political efficacy such as the American National Election Studies (ANES) four-item internal political efficacy scale (e.g., Morrell 2003). We thus conducted two follow-up studies to assess the correlation between the ANES items and ours. The first, on a student population, found a correlation of .81, and the second, on Amazon's Mechanical Turk, found a correlation of .77. Therefore, we are confident that our participation variable effectively captures internal political efficacy. Theoretically, a score of at least one reveals whether the respondent had enough confidence to actually take action, regardless of the specific nature of that action. Higher scores may be more subject to situational factors (e.g., not everyone had a town hall meeting in their constituency or had time to join a campaign), but nearly all Americans should be physically capable of engaging in at least one of the six listed actions (e.g., calling or writing an elected official, posting about politics on social media). If the person actually has taken action in the past, it suggests they may do so again. Self-reported actions will likely be more predictive of future action than self-assessments or opinions, and ultimately of whether or not the person feels they can exert control in the domain of politics (our basic construct).

Measuring Depression

We measured participants' experiences with depression via the Patient Health Questionnaire (PHQ-9), a widely used tool to screen patients for depression in primary care settings (Kroenke and Spitzer 2002; Arroll et al. 2010). The module begins by asking respondents, "Over the last two weeks, how often have you been bothered by any of the following problems?" and then presents nine items such as whether the respondent has "little interest or pleasure in doing things" (all on four-point scales from "not at all" to "nearly every day"). (See Supplemental Appendix A for details.) The items are then summed to create an overall numeric indicator.

This scale could be used as a continuous additive measure, although clinicians often utilize thresholds to differentiate qualitatively distinct levels of depression (Kroenke and Spitzer 2002). For this reason and for analytic clarity, we defined three groups a priori: *not depressed* (PHQ-9 ≤ 4), *moderate depression* (PHQ-9 between 5 and 14), and *severe depression* (PHQ-9 ≥ 15). As sensitivity analyses, we subsequently replicated all of our results using the continuous version and a dichotomous version with a cut point of 10, a common threshold for referral to psychiatric treatment (Arroll et al. 2010). The results replicate with these operationalizations, which we present in Supplemental

Appendix F.5.[10] For presentational efficiency, we focus (although not entirely) on severe depression, while noting that moderate depression has similar, albeit less dramatic effects.

Interestingly, we find that Republicans are somewhat less depressed than Democrats; in the November survey, 39% of Democrats report moderate depression and 16% report severe depression compared to 34% and 12%, respectively, among Republicans. In the January survey, 33% of Democrats report moderate depression, and 17% report severe depression, compared to 33% and 10%, respectively, among Republicans. This matches trends present in earlier waves of the COVID States survey data since the start of the COVID-19 pandemic.

Inferences

Our causal hypotheses are not amenable to experimental tests given feasibility and ethical considerations (e.g., we cannot manipulate/randomly assign depression). With that in mind, we took several steps to ensure the strongest possible inferential case. As discussed in detail in Supplemental Appendix D, we measured our explanatory variables in the November wave prior to three of our outcome variables, followed our predictions by testing very specific interactive relationships, confirmed that our precise interactive specifications had sufficient observations, ensured the interactive variables are not related non-linearly, assessed several modeling strategies, conducted a host of robustness tests among subgroups (e.g., Trump supporters and non-supporters), and identified correlates of each of our explanatory variables and confirmed none are proxies for our focal variables. We also of course included a large number of control variables measured in prior waves including demographics (race, gender, age), socioeconomic status (education and household income), partisanship, ideology, Trump support (whether or not a respondent voted for/supported Trump in the 2020 election), social media usage, and election confidence (level of confidence that the 2020 election was conducted fairly). See Supplemental Appendix G for details.

Condition Prevalence

We predicted increased support for violence when particular individual level variables register higher scores on our key variables. Thus, one can ask whether this envelopes a meaningful share of the population. Our bottom line is that it does involve a sizable number of people, amounting to 36% (in our January data) to 53% (in our November data) or roughly 92 to 136 million people in the United States.

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[10] In fact, the results are even stronger with the continuous measure.

We arrived at these number by calculating the percentage of the sample with high conspiracy beliefs, as defined by the top decile as noted (e.g. 12% in November) (H1); high conspiracy beliefs and high self efficacy (2% in November) (H2); moderate or severe depression and high self-efficacy (20%) (H3a); moderate or severe depression and high conspiracy beliefs (14%) (H3b); and moderate or severe depression, high self-efficacy, and high conspiracy beliefs (5%) (H3c).[11] In short, the prevalence is far from trivial; even focusing on our depression predictions, it amounts to 39% (roughly 100 million people) of our November sample (12% for severe depression).[12] We will return to these numbers below in discussing the potential impact of decreasing the prevalence of depression.

Results

Throughout our empirical analyses, we employ *Clarify* simulations (King et al. 2000) to transform coefficients into probabilities or expected values, with confidence intervals. As mentioned, all simulated values we employ in deriving the reported results are in-sample. We start with Table 2 that provides clear support for Hypothesis 1, indicating that conspiratorial beliefs increase the likelihood of support for political violence across all four of our indicators (p<0.001 in each case). The magnitudes of the effects are also substantial: an increase from the 10th to 90th percentile in conspiratorial beliefs brings with it an 8-percentage point increase in the probability of approving of the attack on the capitol (support attack), an increase of 14 "degrees" on the 0-100 degree feeling thermometer about the capitol stormers (sympathize stormers), as well as 4- and 7-point increases in the probability of approving of hypothetical election violence, for November and January, respectively.

Interestingly, ideology, which is coded such that higher values indicate a more conservative respondent, does not have a positive effect on support for violence, nor does being a Republican or a Trump Supporter. Although right-leaning respondents were more likely to support overturning the election of President Biden—they score higher on all four outcomes—this effect disappears once accounting for conspiratorial beliefs. Thus, conditional on one's level of conspiratorial beliefs—party, ideology, and Trump support are not significantly associated with greater support for violence. In fact, the only other control variables that remain significant across at least three outcomes are age and male, with younger and male respondents being more likely to support violence.

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[11] In computing these, the categories are exclusive (e.g., severe depression and high self efficacy only includes those without high conspiracy beliefs). The respective percentages from our January survey are 9%, 2%, 14%, 7%, and 4%.

[12] The depression cases in our January data are 25% (roughly 64 million people). While this may be a high number due to COVID-19, even in "normal" times, the numbers are non-trivial.

Additionally, being severely depressed significantly relates to support for violence, all else constant. As we shall see, however, this main effect disappears in our interaction models, only manifesting among depressed individuals who (as predicted) have conspiratorial beliefs and/or high efficacy. Finally, efficacy is positive and significant at the p<0.01 level or better for three of the four outcomes. Though we do not hypothesize this direct effect, some research, as noted, has linked high levels of efficacy to anger/aggression in individuals, which itself can motivate political activity/efficacy (Valentino et al. 2008; Rico et al. 2020; Young 2020).

Table 2. Support for Violence

	Support Attack		Sympathize Stormers	Hypothetical Election Violence (Nov.)		Hypothetical Election Violence (Jan.)	
Outcome	Neither Support nor Oppose	Support	0-100 Scale	Neither Approve nor Disapprove	Approve	Neither Approve nor Disapprove	Approve
Moderate Depression	0.317	0.794*	2.979	-0.00421	0.674***	0.00158	0.658
	(0.248)	(0.309)	(1.678)	(0.0710)	(0.108)	(0.220)	(0.364)
Severe Depression	-0.644	0.975*	4.105	0.293**	1.172***	0.464	1.317**
	(0.485)	(0.422)	(2.868)	(0.0897)	(0.118)	(0.325)	(0.425)
Efficacy	-0.114	1.176***	5.032**	-0.0261	0.597***	0.0712	-0.131
	(0.280)	(0.296)	(1.835)	(0.0677)	(0.0951)	(0.239)	(0.315)
Conspiracy Beliefs	0.783	3.635***	31.63***	0.748***	4.371***	1.061	4.207***
	(0.797)	(0.808)	(6.547)	(0.212)	(0.209)	(0.899)	(0.811)
Democrat	-1.386*	1.918	-2.697	-0.302*	0.147	0.708	1.014
	(0.662)	(1.553)	(5.681)	(0.127)	(0.218)	(0.564)	(0.810)
Republican	-1.540*	2.748	5.129	-0.288	0.165	0.537	1.113
	(0.680)	(1.612)	(6.206)	(0.150)	(0.242)	(0.630)	(0.827)
Independent	-0.686	2.239	2.009	-0.262*	-0.219	0.918	0.718
	(0.622)	(1.534)	(5.673)	(0.124)	(0.219)	(0.545)	(0.756)
Ideology	0.366**	-0.0594	0.615	-0.0847***	-0.126***	-0.102	0.0166

| Outcome | Support Attack | | Sympathize Stormers | Hypothetical Election Violence (Nov.) | | Hypothetical Election Violence (Jan.) | |
	Neither Support nor Oppose	Support	0-100 Scale	Neither Approve nor Disapprove	Approve	Neither Approve nor Disapprove	Approve
	(0.112)	(0.106)	(0.632)	(0.0249)	(0.0308)	(0.0880)	(0.100)
Political Interest	-0.175	0.178	-0.186	0.00804	-4.564***	-0.420***	0.0295
	(0.104)	(0.136)	(0.700)	(0.239)	(0.379)	(0.0902)	(0.128)
Trump Supporter	0.639	1.135*	4.251	-0.246*	-0.220	-0.309	-0.215
	(0.342)	(0.484)	(5.964)	(0.105)	(0.152)	(0.358)	(0.525)
Black	0.579	-0.195	-1.004	0.627***	0.872***	-0.261	-0.886
	(0.660)	(1.048)	(5.625)	(0.167)	(0.261)	(0.530)	(0.595)
White	0.274	-0.611	4.064	0.140	0.0778	-0.742	-1.373*
	(0.602)	(0.973)	(6.269)	(0.154)	(0.245)	(0.478)	(0.554)
Asian American	-0.126	-0.431	4.160	0.376	0.565	-0.441	-1.029
	(0.727)	(1.070)	(6.179)	(0.200)	(0.296)	(0.628)	(0.777)
Hispanic	1.182	-0.521	-0.310	0.506**	0.469	-0.877	-1.515*
	(0.660)	(1.025)	(0.355)	(0.172)	(0.267)	(0.549)	(0.601)
Income	-0.0762	0.0950	-0.266	-0.0483**	0.0331	0.0283	-0.0400
	(0.0650)	(0.0620)	(0.709)	(0.0151)	(0.0214)	(0.0495)	(0.0703)
Education	-0.190	0.102	-0.238***	-0.0169***	-0.0238***	-0.0336	0.136
	(0.127)	(0.141)	(0.0514)	(0.00213)	(0.00336)	(0.104)	(0.149)
Age	-0.0398***	-0.0394***	3.859**	-0.0606*	0.0957*	-0.0291***	-0.0604***
	(0.00820)	(0.00980)	(1.494)	(0.0255)	(0.0375)	(0.00724)	(0.00948)
Male	0.0688	0.768**	4.049	0.469***	0.905***	0.630**	0.979***
	(0.232)	(0.286)	(2.608)	(0.0622)	(0.0852)	(0.210)	(0.281)
Social Media Scale	0.568*	0.123	3.222*			0.663**	1.000**

| Outcome	Support Attack		Sympathize Stormers	Hypothetical Election Violence (Nov.)		Hypothetical Election Violence (Jan.)	
	Neither Support nor Oppose	Support	0-100 Scale	Neither Approve nor Disapprove	Approve	Neither Approve nor Disapprove	Approve
	(0.222)	(0.279)	(1.513)			(0.203)	(0.320)
Election Confidence	-0.325**	-0.174	-0.563	-0.217***	0.0863	-0.133	-0.0397
	(0.108)	(0.129)	(0.883)	(0.0284)	(0.0483)	(0.119)	(0.172)
Constant	0.268	-6.082***	12.72			0.691	-2.298
	(0.941)	(1.556)	(8.306)			(0.856)	(1.182)
Observations	1,771	1,771	1,771	18,872	18,872	1,769	1,769

Note: Robust standard errors in brackets.

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

Note: Support attack and the two hypothetical election violence outcomes use unordered multinomial logit models, showing the probability of the category listed relative to the omitted category ("Oppose"). Sympathize stormers uses an OLS regression.

Figure 1 (derived from Supplemental Appendix Table E.2, with a full set of controls) presents the results of our tests of Hypothesis 2. In panel A, we see that in the baseline condition (neither efficacius nor holding conspiratorial beliefs), with all controls held constant at their mean values, the probability of supporting the attack on the Capitol (support attack) is only about 1%. If respondents are efficacious, support rises to 4.3%, whereas if they have a high level of conspiratorial beliefs, their likelihood rises to 5.7%. For individuals who are both efficacious and high in conspiratorial beliefs—our focal condition—the likelihood rises to 15%. This result strongly supports the confluence of efficacy and conspiratorial beliefs intensifying, by a large amount, approval of the storming of the capitol (Hypothesis 2).

Figure 1
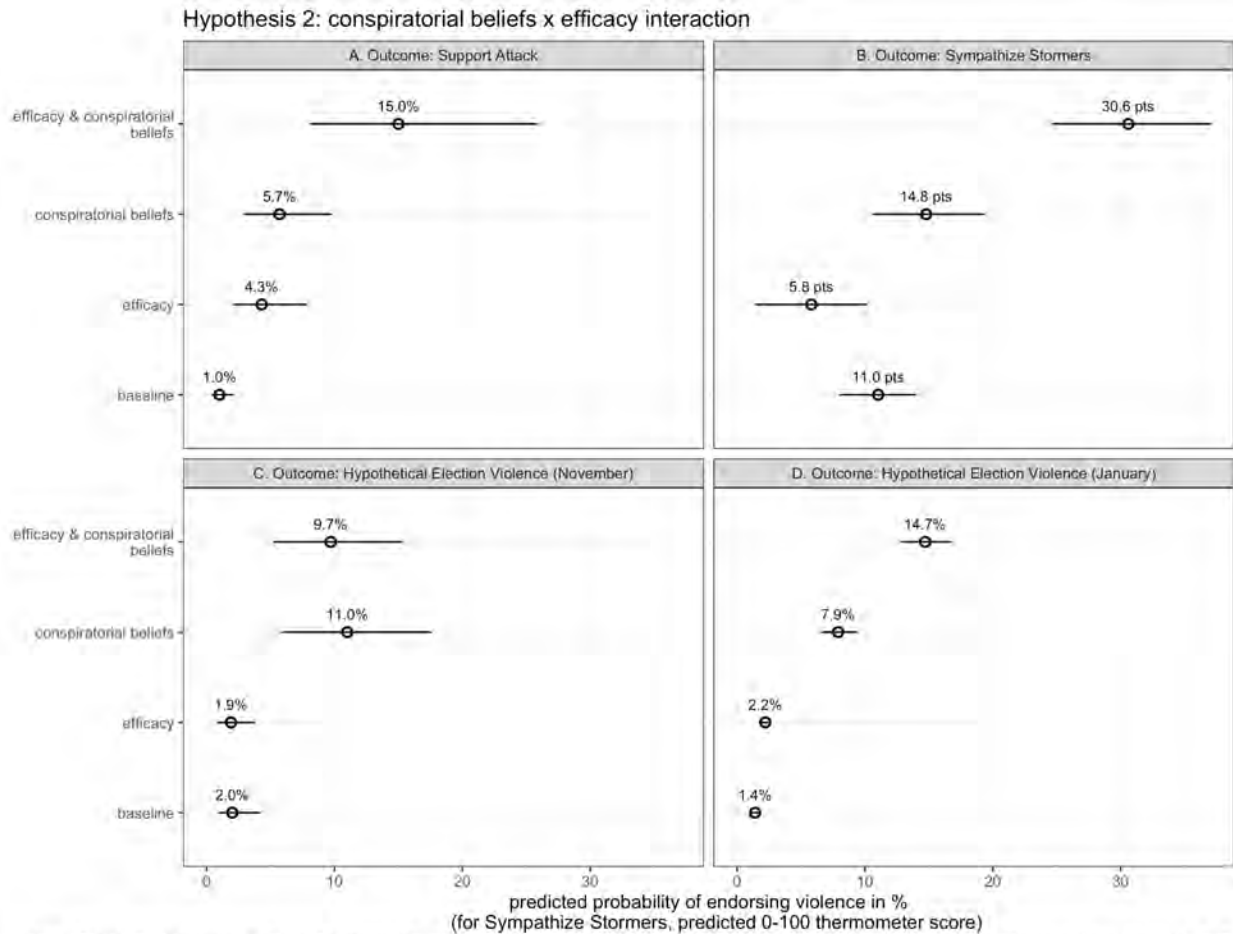
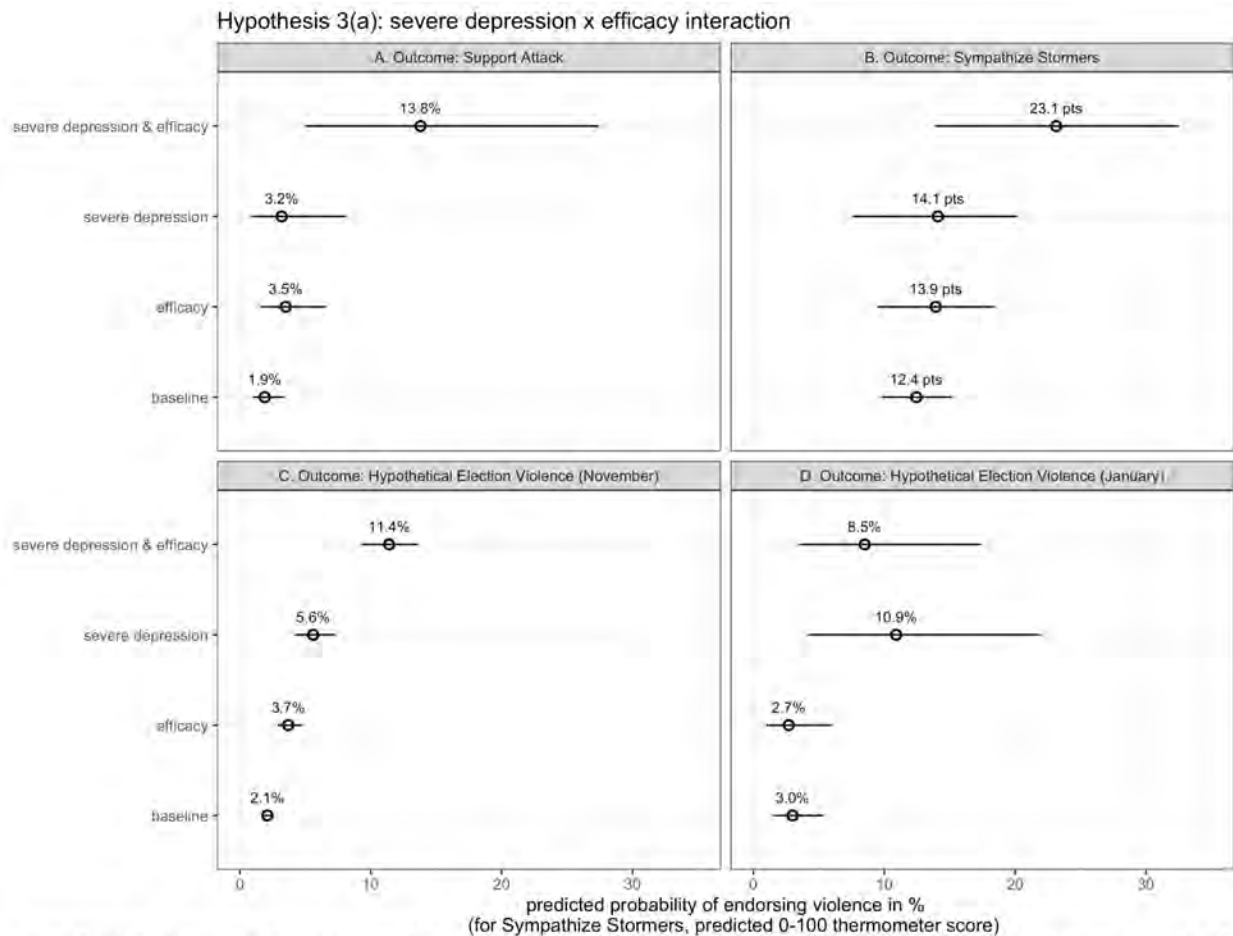Hypothesis 2: conspiratorial beliefs x efficacy interaction

Note: Each hollow dot represents the predicted probability that a person with a particular set of conditions (e.g., severe depression & efficacy) will support violence in panels A, C, and D; in panel B, it represents their predicted feelings toward the capitol stormers on a 0-100 scale (0 = cold, 100 = warm). Conditions are exclusive (e.g., the row labeled 'efficacy' implies a person with efficacy but neither severe depression nor conspiratorial beliefs. Lines represent 95% confidence intervals based on 1000 Monte Carlo simulations.

We find similar patterns for the other three outcomes. In panel B, a typical baseline individual rates their sympathy toward the stormers as 11 out of 100, while a typical individual in the focal condition assigns a rating of 31.6. The probability of supporting hypothetical election violence increases from 2.0% in baseline to 9.7% in the focal condition in the November survey (panel C), and from 1.4% to 14.7% in the January survey (panel D). The difference between a typical baseline individual and a typical focal individual is significant in all models. Additionally, in all but the third case (panel C), the differences between the intermediate conditions and the focal condition are statistically significant and in the predicted direction. Taken together, these results offer strong support for H2, with impacts of notable magnitude.

We turn next to Hypothesis 3, regarding the conditions under which depression will increase support for violence. Figure 2 (derived from Supplemental Appendix Table E.3) presents the results of our tests of Hypothesis 3a, offering strong support. In panel A, we see that a typical individual in the baseline condition (neither depressed nor

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efficacious) has a 1.9% chance of supporting the attack on the capitol (support attack). If they are efficacious, their likelihood rises to 3.5% whereas if they are severely depressed, their likelihood of support rises to 3.2%. In the focal condition (both depressed and efficacious), the likelihood climbs dramatically, and statistically significantly, to 13.8%, a 7-fold increase relative to baseline. This represents strong support for the confluence of efficacy transforming depression into support for violence (H3a).

Figure 2

Hypothesis 3(a): severe depression x efficacy interaction

A. Outcome: Support Attack
B. Outcome: Sympathize Stormers
C. Outcome: Hypothetical Election Violence (November)
D. Outcome: Hypothetical Election Violence (January)

predicted probability of endorsing violence in %
(for Sympathize Stormers, predicted 0-100 thermometer score)

Note: Each hollow dot represents the predicted probability that a person with a particular set of conditions (e.g., severe depression & efficacy) will support violence in panels A, C, and D; in panel B, it represents their predicted feelings toward the capitol stormers on a 0-100 scale (0 = cold, 100 = warm). Conditions are exclusive (e.g., the row labeled 'efficacy' implies a person with efficacy but neither severe depression nor conspiratorial beliefs). Lines represent 95% confidence intervals based on 1000 Monte Carlo simulations.

The other three outcomes tell a similar story. The difference between a typical baseline individual and a typical focal individual is once again significant in all models. If interventions could ameliorate severe depression among those who otherwise exhibit

high efficacy, our findings suggest it would lead to roughly between a 6 and 11 percentage point reduction in support for violence (across our outcome measures).[13]

Turning to Hypothesis 3b, as predicted, a combination of severe depression and conspiratorial beliefs strongly associates with supporting political violence. As shown in Figure 3 (derived from Supplemental Appendix Table E.4), panel A, a typical respondent who is severely depressed and conspiratorial is 13 times more likely to support the attack on the capitol than a typical baseline respondent (.8% vs. 10.4%). Their sympathy for the stormers rises by nearly 20 points (panel B) (11.4 vs. 29.5), their approval of violence in the event of an unfair election increases 16-fold in November (panel C) and 15-fold in January (panel D) (1.1% vs. 17.8% and 1.7% vs. 25.3%, respectively). In fact, we predict with a high degree of confidence that a typical severely depressed respondent with conspiratorial beliefs would have nearly a one in five chance of endorsing hypothetical election violence in November (roughly one in four in January). In every instance, these differences reach statistical significance at the $p<0.05$ level or better, not only between the focal condition and baseline, but also between the focal condition and the two intermediate conditions. Here then, addressing depression among those who hold conspiratorial beliefs would reduce support for violence by around 10 to 23 percentage points (relative to the baseline)

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[13] We use the baseline in our comparisons; if we instead use the conditions where depression is low but the other variable(s) are high, the effect reduces in magnitude a bit but remains quite substantial across all of our results.

Figure 3
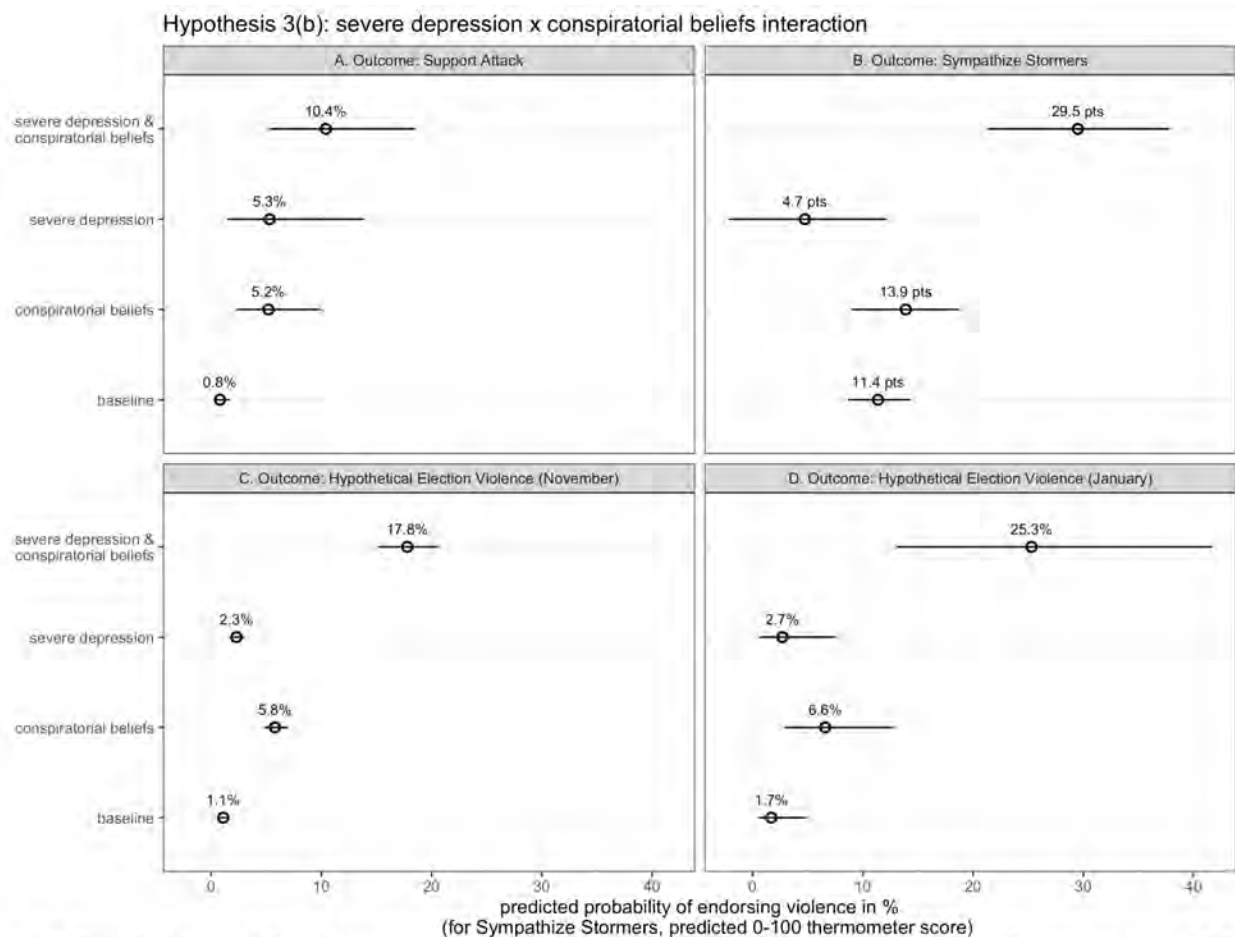
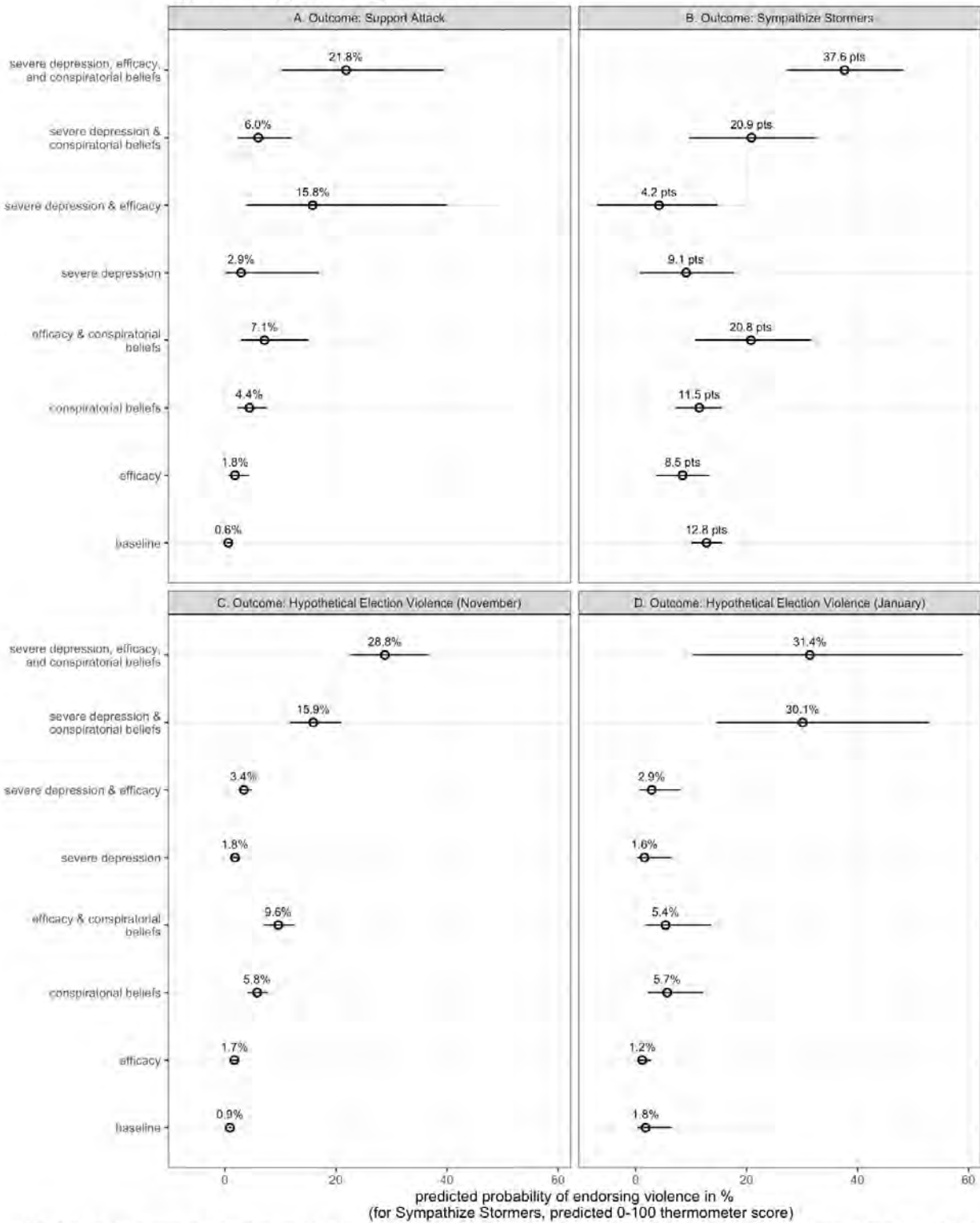Hypothesis 3(b): severe depression x conspiratorial beliefs interaction

Note: Each hollow dot represents the predicted probability that a person with a particular set of conditions (e.g., severe depression & efficacy) will support violence in panels A, C, and D; in panel B, it represents their predicted feelings toward the capitol stormers on a 0-100 scale (0 = cold, 100 = warm). Conditions are exclusive (e.g., the row labeled 'efficacy' implies a person with efficacy but neither severe depression nor conspiratorial beliefs. Lines represent 95% confidence intervals based on 1000 Monte Carlo simulations.

For the final element of our critical hypothesis (H3c), we find substantial evidence that, as predicted, a three-way combination of being severely depressed, efficacious, and conspiratorial associates with greater support for political violence than we observe in any other combination. As shown in Figure 4 (derived from Supplemental Appendix Table E.5), we predict that a typical respondent in the focal condition will sympathize more strongly with the stormers (panel B) and endorse hypothetical election violence in November (panel C) than typical respondents in any other condition. We find large and statistically significant effects in the predicted directions in both cases. This pattern generally holds with the other two outcomes as well—that is, we find the highest support for violence in the focal group (i.e., in the presence of all three threshold conditions). That said, we cannot distinguish with 95% confidence between the focal condition and being both severely depressed and efficacious in panel A (with support attack as the outcome variable) and being both severely depressed and conspiratorial in panel D (with hypothetical election violence in January as the outcome variable).

Figure 4

Hypothesis 3(c): Three-way interaction

Note: Each hollow dot represents the predicted probability that a person with a particular set of conditions (e.g., severe depression & efficacy) will support violence in panels A, C, and D; in panel B, it represents their predicted feelings toward the capitol stormers on a 0-100 scale (0 = cold, 100 = warm). Conditions are exclusive (e.g., the row labeled 'efficacy' implies a person with efficacy but neither severe depression nor conspiratorial beliefs. Lines represent 95% confidence intervals based on 1000 Monte Carlo simulations.

Interestingly, in these latter two models, when we compare the focal conditions from our tests of H3a and H3b, with those for our tests of H3c, across all four outcome measures we find substantially—and in all but one instance, statistically significantly—higher support for violence when all three critical threshold conditions are met (Figure 4) than when we account for only two of the three critical threshold conditions (Figures 2 and 3). Regardless, we can conclude that either H1 or H3 is substantiated by the support attack outcome (panel A) and either H2 or H3 is substantiated by the hypothetical election violence (January) outcome (panel D). These findings cohere with our earlier findings (see Figure 2, panel A and Figure 3, panel D, respectively). Note also that despite our limited statistical leverage with three of the four three-way interaction models (those utilizing the January wave), we find continued support for H3a in panels A and C and for H3b in panels A, C, and D.[14]

Once again, the magnitudes of the associations stand out. A typical respondent who is severely depressed, efficacious, and conspiratorial would have a over a one in five chance of supporting the attack on the Capitol—compared to less than 1% for a typical respondent with none of these mindsets—and would rate their sympathy toward the stormers 25 points higher. They would also have nearly a one in three chance of endorsing violence in the event of an unfair election both in November and January. A baseline respondent, in contrast, would have less than a 2% probability of endorsing violence. Here, interventions to address depression could lower support for violence by about 21 to 30 percentage points (relative to the baseline).

We thus have consistent results concerning the conditions under which depression leads to support for violence (a la our hypotheses). It is worth noting that, sans conspiratorial beliefs or high efficacy, depression actually seems to vitiate support for violence. Those who are moderately or severely depressed but lack the other attributes register scores at or near 0 in support for violence on our outcome scales (once we control for other variables), which is well below our overall averages of around 8% or 9%. This coheres with Landwehr and Ojeda's (2021) point that depression on its own can have a demobilizing effect. When joined with conspiratorial beliefs and/or efficacy, though, it prompts support for violence.

From a practical standpoint, the results accentuate the political implications of depression (not to mention those regarding conspiracy beliefs). We estimated 8% to 12% of the population was experiencing severe depression and had high self-efficacy, held conspiratorial beliefs, or both. In essence, then, if depression could be addressed

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[14] With only 2044 respondents in the January survey, of whom 14% were efficacious and depressed, our power to detect such effects is extremely limited.

among those individuals, we would see reductions in support for violence of up to about 25 percentage points. That is a notable return. Moreover, recall that even though we focused most of our substantive interpretations on the severe depression cases, we find in nearly every case corresponding to our hypothesis tests statistically significant effects for those with moderate depression (and high self-efficacy and/or conspiracy beliefs). While the magnitudes are not quite as large, they are still quite substantial. For instance, based on the regression models presented in the Supplemental Appendix, we find (using *Clarify*) that the, all else constant, the percentage point increase in support for violence as we move from not depressed to moderately depressed, given high efficacy and conspiracy beliefs, is 18.7%, 15.3%, 8.1%, and 17.2%, respectively, for support attack, sympathize stormers, hypothetical election violence (November), and hypothetical election violence (January). Thus, ameliorating moderate depression would lead to a reduction in support for violence (across our outcome variables) by up to nearly 19 percentage points. And, it adds another 17% to 27% of the population. In short, our results suggest that a sizable portion of the population, 25% to 39%, would exhibit substantially less support for political violence, by up to 19 or 30 percentage points, from interventions that address their depression.[15] In addition to the crucial individual and public health benefits of reducing depression, doing so could also play a potentially important role in stabilizing democracy by undermining the normalization of support for violence.[16]

Robustness Checks

All models reported above remain robust to alternative specifications, excluding all controls, or limiting control variables to demographic and socio-economic factors or to political characteristics, attitudes and behaviors (see Supplemental Appendix F). Even so, we seek to rule out various other possibilities. We thus re-ran all of our models with the following alternative specifications (the explanations for which appear in the Supplemental Appendix, along with results): (1) split-sample models by Trump support (vs. non-support) (Supplemental Appendix F.7, Table F.7.1/F.7.2 and Figure F.7.1), (2) split-sample models by party (Supplemental Appendix F.8, Table F.8.1 (for Democrats)/F.8.2 (for Republicans) and Figure F.8.1), (3) split-sample models by gender (Supplemental Appendix F.9, Table F.9.1 (for Males)/F.8.2 (for Females) and Figure F.9.1), (4) continuous specification of the PHQ-9 scale (Supplemental Appendix F.5, Tables F.5.1 - F.5.4 and Figures F.5.1 - F.5.4), (5) dichotomous specification of the PHQ-9 scale (Supplemental Appendix F.6, Tables F.6.1 - F.6.3 and Figures F.6.1 -

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[15] We arrive at 25% and 39% by summing the percentages of severely and moderately depressed respondents in our samples and the 19 and 30 percentage points from the maximum effects for moderate and severe depression, respectively.

[16] This does not even account for extant efforts that surely quell the extent of depression in the population; put another way, those mental health efforts also have an underappreciated political benefit.

F.6.4), (6) varying thresholds for "high" conspiratorial beliefs (Supplemental Appendix F.4, Figure F.4.1), (7) ordered logit estimation for all 3-category outcome variable models (Supplemental Appendix F.10, Table F.10.1/F.10.2 and Figure F.10.1/F.10.2), and (8) limiting conspiratorial beliefs scale to 3 unambiguous governmental conspiracies (Supplemental Appendix F.3, Table F.3.1 and Figure F.3.1). *In every case* (e.g., both Trump supporters and non-supporters, Democrats and Republicans, etc.), the robustness tests replicate our reported findings. Our results do *not* only reflect dynamics in a particular partisan, ideological, or demographic subgroup (or that they are driven by those variables rather than then the ones we study). We also offer suggestive mediational evidence for anger by using an instrumental variable causal mediation analysis of direct and indirect effects, through depression, of anger on support for violence (Supplemental Appendix H, Table H.1).

External Validity

Our robustness checks provide affirmation for the relationships we documented. A distinct concern revolves around the external validity of those relationships. External validity concerns the extent to which one's results generalize over samples, measures, outcomes, and contexts (Shadish et al. 2002). We are confident that our sample generalizes insofar as it is a balanced sample weighted to be representative of the US (similar to most other samples used in the study of political behavior). We used a depression measure widely employed in clinical practice and a conspiracy measure constructed based on prior work (Druckman et al. 2021) and contemporary coverage of conspiracies (e.g., on the WHO website). As we discussed, our self-efficacy measure highly correlates with other internal political efficacy measures and possesses some advantages. When it comes to the outcome, in turn, we are in a uniquely privileged position in terms of generalizability. In contrast to much other work, Instead of relying on self-reports about abstract scenarios (e.g., would it be justified to use violence in advancing their political goals these days?), the January 6th event allows us to measure actual support for a real world event. We also complimented this with a measure about electoral violence taken both *before* and *after* January 6th. That the results replicate across all four outcome variables gives us even more confidence in the generalizability of our findings.

That leaves the question of whether the context of the study, occurring during a time of notable norm-violating rhetoric and COVID-19, limits its reach. Our thoughts on this are twofold. First, the central question is whether some unique aspect of the context moderates the relationships that we find (Druckman 2022). We have no reason per se to believe that to be the case. For instance, our findings regarding depression do not stem only from a large proportion of respondents being at high levels of depression .

Put another way, even though depression levels were high, our findings regarding depression incorporate moderate levels of depression as well (for which the effects are smaller but still substantial). We also do not have a theoretical reason to believe the 2020 campaign altered the relationships between our variables, particularly given Clayton et al (2021) find that Trump's rhetoric did not affect general support for violence. Second, we are on relatively stronger ground than many others who focus on single contexts insofar as we replicate our results with data at two points in time (again, with four distinct outcome measures).

An intriguing direction for future work—beyond replication in distinct American contexts or other democracies—is to test the relationships in non-democratic countries. We derived our theory on general principles that should apply across contexts, with two caveats. First, its application to non-democratic regimes complicates how one defines conspiracy theory. In such regimes, it may be more likely that "conspiracy theories" about mischievous government actions are accurate (e.g., van Prooijen and Douglas 2017). Alternatively, if one does not include accurate theories about governments concealing their role to pursue mischievous ends as conspiracy theories, then it could be that governmental conspiracy theories in these contexts lack sufficient prevalence to have explanatory power.[17] Second, conspiratorial ideation is not a necessary condition to explain all support for violence (e.g., we do not suggest that the Arab Spring is fully explained by conspiratorial beliefs). Rather, conspiracy believers will be more likely, all else constant, to be supportive of violent actions, particularly when joined with self-efficacy and/or depression.

Conclusion

Depression has reached unprecedented proportions during the COVID-19 pandemic (Perlis et al. 2021). To the extent that depression has important effects on political attitudes or behavior, this could have profound ramifications for American politics going forward. The relative dearth of research by political scientists into the possible attitudinal or behavioral effects of depression makes it difficult to assess the likely nature or extent of any such effects. Our study aimed to help extend this nascent literature by assessing the effects of depression on an aspect of politics with significant implications for democracy: support for political violence. The dramatically heightened climate of polarization in the US in recent years arguably renders the confluence of rampant pandemic-induced depression with dropping support for democratic institutions particularly worrisome, and makes this an area of research with potentially important real-world implications. The seeming explosion of misinformation surrounding both the

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[17] This is not to say that democratic governments are immune to mischievous actions. We thank an anonymous reviewer for this point regarding the implications of our argument for non-democratic regimes.

pandemic and the 2020 election, in turn, and resulting widespread conspiracy beliefs among voters, heightens the sense of crisis surrounding American politics in 2021. It is for these reasons that citizens, pundits, and scholars have expressed increasing concern about democratic backsliding. Indeed, the Economists Intelligence Unit rated the US as a "flawed democracy" in 2021 (Castronuovo 2021).

We argued that it is the combination of efficacy and conspiracy beliefs that determine whether and to what extent depression enhances support for political violence. We explored this question in response to the general circumstance of the 2020 election, the event-specific circumstance of the January 6th Capitol insurrection and concern about the levers of political (but not necessarily partisan) violence. We found clear and consistent evidence that both efficacy and conspiracy beliefs play an important role in driving support for political violence, both in the general population and in depressed individuals in particular. This result holds up regardless of whether we are talking about hypothetical election violence (in response to believing that the election was unfair), the actual violence that took place January 6th at the Capitol, or sympathy for the people who committed it. While our data come from a particular confluence of events—COVID-19, the 2020 election, and the January 6th insurrection—we suspect that the hypotheses generated from our theoretical framework hold more generally, and encourage further tests in other settings. In so doing, it would be useful to directly test the psychological processes we posit. For example, we suggest that efficacy triggers anger among depressed individuals. An alternative possibility is that it leads individuals to believe actions by those like themselves will be impactful. The exact psychological pathway warrants further investigation. Along these lines, it will be important to explore the relative impact of moderated depression effects against other factors as well as more precisely pinpointing the emotional pathways. Additionally, we focused on depression due to our interest in a prevalent mental health condition for which interventions can matter. This though leads to another question about the antecedents of depression, as it can stem from bipolar disorder, seasonal affective disorder, cyclothymic disorder, psychosocial factors etc. Understanding its origins is obviously crucial when discussing treatments.

Our study represents an initial foray into one pathway through which depression might negatively impact politics not only in the United States but also in less consolidated democracies. Our findings show how depression and conspiracy beliefs can represent a gateway of sorts into something even more worrisome—their combination, particularly among efficacious individuals, leads to the normalization of political violence. That said, depression and efficacy more often than not have an inverse relationship (Landwehr and Ojeda 2021), and thus the three variables do not necessarily go hand in hand. Regardless, our results add even more urgency to efforts to address mental health and

misinformation: their mix has crucial, and potentially quite worrisome, democratic implications. The results also provide some clarity into work on the relationship between mental health and violence insofar as we have identified conditions under which depression has an effect.

We emphasize, finally, that individuals suffering from depression are not themselves a risk to society. For one, depression on its own does not increase support for violence, and, moreover, people with mental health disorders should be seen as suffering from illnesses not of their own making. We seek to highlight that policymakers and public health officials should prioritize a major policy response to the epidemic of depression, not only to limit the social and economic costs, but also to mitigate the potential exacerbation of the crisis facing American democracy. The nation's democratic institutions were under great stress and confronting widespread skepticism even prior to the COVID-19 pandemic and the resulting wave of depression. Our data clearly show that by facilitating the legitimation of political violence, mass depression represents yet another potential crisis point for democracy, one we ignore at our peril.

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Appendix: Research Methods and Ethics

As we restricted participation to adult U.S. citizens who consented to participate and did not employ deception, this research was determined to be exempt by the IRB. Participants gave consent to participate on the first page of the survey, and we did not collect any information from those who did not consent. Participants were recruited via PureSpectrum, a firm that draws participants from numerous survey vendors. We did not compensate participants directly; participants were compensated by the survey vendors that recruited them. The risks of participation were minimal and we do not believe participation differentially benefitted any participants. The survey design employed quota sampling to approximate a representative sample within each state by race, gender, and age group. The only deviation was allowing for oversampling of respondents who identify as Black, Latinx, or Asian. All data necessary to reproduce the results will be made available upon publication. As the raw data we collected through Qualtrics contains information that could potentially be used to identify participants (e.g., IP addresses and ZIP codes), we will remove all potentially identifying information before making such data available