# Partisan Schadenfreude and Candidate Cruelty

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#### **Abstract**

We establish the prevalence of *partisan schadenfreude*—that is, taking "joy in the suffering" of partisan others. Analyzing attitudes on health care, taxation, climate change, and the coronavirus pandemic, we find that a sizable portion of the American mass public engages in partisan schadenfreude and that these attitudes are most expressed by those who are ideologically extreme. Additionally, we find that a sizable portion of the American public is more likely than not to vote for candidates who promise to pass policies that "disproportionately harm" supporters of the opposing political party, and we demonstrate experimental evidence of demand/preference for candidates that promise cruelty among those who exhibit high amounts of schadenfreude. In sum, our results suggest that partisan schadenfreude is widespread and has disturbing implications for American political behavior.

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Shortly after winning election to the U.S. House of Representatives in November 2020, Madison Cawthorn, a conservative firebrand from western North Carolina, celebrated his victory by sending a succinct tweet: "Cry more, lib." Such a sentiment reflects a growing desire in American politics to derive satisfaction through "owning" the other side by engaging in acts that elicit anger among supporters of the opposing party. Indeed, Dan Bongino, a conservative radio host, recently proclaimed that his entire life is "all about owning the [liberals]" (Robertson, 2021). The tendency to enjoy the anger and disappointment of the out-party exists on the political left, as well, with liberals taking to Twitter to gloat about the depressed turnout at Donald Trump's 2020 re-election rally in Tulsa, Oklahoma (Devega, 2020). These attitudes are increasingly common, and they manifest in areas as diverse as partisans' behavior on the Internet, their clothing choices, and the goods that they purchase. In fact, the widespread nature of these attitudes among the mass public has led online retailers to now offer coffee mugs adorned with phrases like "proud to be everything conservatives hate" and T-shirts with slogans proclaiming that the wearer "oils [their] gun with liberal tears."

Despite the growing evidence of these attitudes among the mass public, scholars know little about their consequences for political behavior. In this study, we seek to fill this gap in our understanding by examining the prevalence and implications of *partisan schadenfreude*, a term that captures the extent to which Americans experience "joy in the suffering of others"—particularly *partisan* others. We do so by examining schadenfreude across multiple different issue areas: health care, taxation, climate change, and the coronavirus pandemic. We also document the existence of the acceptance of candidate cruelty, finding that more than one-third of Americans are willing to vote for a candidate of unknown ideological leanings who has "regularly stated" a preference for enacting policies that "disproportionately harm" supporters of the opposing party. We then connect these two phenomena by showing that it is those Americans who are most prone to engaging in partisan schadenfreude that are the most likely to vote for such a candidate. In doing so, we

demonstrate that partisan schadenfreude offers more predictive power of this electoral preference than being ideologically extreme or identifying as a "strong partisan."

Finally, we make use of a survey experiment in order to demonstrate the causal effect of candidate promises of cruelty on voters' intentions at the ballot box. We find that, on average, voters dislike cruel candidates. Importantly, however, we also find that among those who score highest on our measure of schadenfreude, the promise of candidate cruelty does not weaken one's willingness to vote for a cruel candidate. In fact, those respondents scoring highest on partisan schadenfreude appear to prefer cruel candidates. Collectively, our analyses allow us to document the widespread existence of schadenfreude among the mass public, demonstrate that a segment of the electorate has a demand for candidate cruelty, and that the demand for candidate cruelty is driven in large part by schadenfreude. In sum, our results suggest that schadenfreude is not simply an alternative measure of one's partisan identity but is behaviorally consequential in its own right.

This paper proceeds as follows: first, we outline recent work on schadenfreude, affective polarization, and voting behavior in American politics. In doing so, we develop a theory as to why—and among whom—we should expect partisan schadenfreude to exist in the contemporary American electorate. We also link the existence of schadenfreude to the demand for candidate cruelty. Next, we describe our empirical methods and present a series of results consistent with our theoretical expectations. We then conclude with a discussion on the implication of these results for American politics.

### Schadenfreude, Affect, and Voting Intentions

Schadenfreude is a term that refers to the phenomenon whereby individuals take pleasure in seeing some misfortune befall another. Thus, schadenfreude measures the extent to which an individual experiences "joy in the suffering of others." Social psychology studies find that schadenfreude is most typically expressed by those who are envious (van de Ven et al., 2014), vengeful (Sawada and Hayama, 2012), anti-social (Greitemeyer, Osswald and Brauer, 2010), low in self-esteem (van

Dijk et al., 2011), feel others are deserving of misfortune (Feather, 1989), or stand to gain from another's misfortune (Smith et al., 2009). Other work has shown that schadenfreude is not simply an individual-level dynamic. Instead, some argue that schadenfreude is most likely to be expressed when certain group dynamics are met. In particular, individuals are most likely to experience schadenfreude toward another group's suffering when they feel that their own group is inferior to the suffering group on some dimension or set of dimensions (Leach et al., 2003). Schadenfreude is also driven by a strong sense of social dominance orientation, a psychological measure that captures the degree to which "individuals accept and promote group-based inequality" (Hudson, Cikara and Sidanius, 2019).

In addition to being present when there is a perceived status imbalance between groups, schaden-freude is commonly experienced when inter-group rivalries and competition are high. Indeed, a series of laboratory experiments to show that "competitiveness may ... be the underlying reason why schadenfreude is" elicited in inter-group relations (Ouwerkerk and van Dijk, 2014). Such a finding builds on earlier work that found that portions of the brain that govern the feeling of pleasure were activated when study participants witnessed a disliked baseball team perform poorly (Cikara, Botvinick and Fiske, 2011). Related work shows that empathic concern at the group-level also fuels schadenfreude, leading to affective polarization (Simas, Clifford and Kirkland, 2020). Thus, schadenfreude is best understood as an inter-group emotion.

Contemporary political disagreements—which often reflect emotionally-charged, inter-group rivalries—provide an opportunity for the observation of schadenfreude. Specifically, schadenfreude has been linked to strongly identifying with a political party (Combs et al., 2009). More recent work has shown that ideological extremity is also predictive of schadenfreude. In fact, the strength of one's ideological identity predicts a greater amount of acceptance of statements tapping into support for, and enjoyment of, partisan-directed violence. Ultimately, anywhere from 5-15% of the public supports—or enjoys—threats of violence directed towards the out-party (Kalmoe and Mason, N.d.).

Though prior work has linked schadenfreude and negative attitudes to support for accepting political violence, our work examines the linkage between schadenfreude (across a variety of issue dimensions) and voting intentions. That schadenfreude should be expected to predict voting intentions is grounded in canonical works in both social psychology and political science. In particular, we draw on human beings' tendency to seek pleasure and situate this behavior within a political environment that is governed by ideologically fueled heightened levels of inter-party animosity and antipathy.

Human beings are motivated primarily by a desire to obtain happiness and pleasure. Such a claim was popularized with the notion of the "pleasure principle," which argued that all behavior—whether conscious or unconscious—was motivated by the desire to maximize pleasure and minimize pain (Freud, 1900, 1920). Studied often in the context of *subjective well being*, scholars have debated whether people have happiness "set-points" (Brickman and Campbell, 1971; Easterlin, 2003), whether individuals are aware of what makes them happy or unhappy (Gilbert et al., 1998), and whether happiness and related states have a similar meaning across cultures (Markus and Kitayama, 1991).

Despite the many theoretical, conceptual, and contextual debates, scholars of happiness and pleasure have identified a number of correlates of individual subjective well being. Happiness and well-being have been found to be correlated with income (Larson, 1978), gender (Cameron, 1975), employment status (Catalano and Dooley, 1977), race (Bortner and Hultsch, 1970), and being socially active (Beiser, 1974). More tenuous evidence exists linking happiness to religiosity (Clemente and Sauer, 1976) and marriage (Glenn and Weaver, 1979). Happiness and well-being, then, vary at the individual-level and do so according to specific traits or characteristics.

What it means to seek happiness and contentment in terms of politics has changed in two key areas. First, Americans in previous eras largely exhibited positive attachments towards their own political party (Campbell et al., 1960). Today, however, Americans are prone to identifying *against* the party they dislike more than affiliating *with* the party they prefer (Abramowitz and

Webster, 2016, 2018). This suggests that happiness regarding politics in earlier eras was achieved through—among other things—seeing one's party win an election or pass a significant piece of legislation. In the current era, which is characterized by high levels of negativity and partisan rancor (Iyengar, Sood and Lelkes, 2012; Mason, 2015), the sources of happiness are potentially different. Because political identification and participation has become oriented around the parties and politicians that individuals oppose, rather than the ones they like, individual-level political happiness and well-being is most likely to be obtained when bad or undesired things happen to the out-party: a legislative setback in Congress, the loss of an election, a politician's forced resignation, or even physical harm to one's political rivals. When applying these general feelings of "happiness" to *specific policy issues*, we suspect that partisans may feel a sense of satisfaction when actions they deem improprietous (i.e., inconsistent with their partisan preferences) are met with negative consequences. Collectively, we call the happiness one feels when unfortunate events happen to the out-party and its supporters *partisan schadenfreude*.

The second major difference between contemporary American politics and earlier years of political competition is the rise of ideologically motivated citizens. While canonical works argue that ordinary Americans lack a coherent framework for organizing their ideas about politics (Converse, 1964), secular changes have produced an electorate that is more ideologically sophisticated than in decades past. The bulk of this change is attributable to party elites' tendency to send increasingly consistent cues about what it means to be a "good" Democrat or a "good" Republican. These signals have produced a party system wherein liberals have increasingly become Democrats and conservatives have increasingly become Republicans (Levendusky, 2009).

This ideological sorting of liberals and conservatives into the Democratic and Republican camps, respectively, has done much to change the nature of mass-level political behavior. Americans voters have become more ideological over time (Abramowitz and Saunders, 2008), and a concomitant increase in ideological consistency has led to a more engaged and attentive public (Abramowitz, 2010). As a result, modern American voters are animated in large part by their ideo-

logical proclivities. As Bafumi and Shapiro (2009) argue, the "ideologically innocent" mass-level behavior typical of the mid  $20^{th}$  century has given way to an era "that is both more ideological and more issue based along liberal-conservatives lines."

One consequence of the mass public's growing ideological sophistication has been the rise of affective polarization. Though it has many antecedents (Iyengar, Sood and Lelkes, 2012), affective polarization is driven in no small party by ideological differences between partisans. For instance, Rogowski and Sutherland (2016) show that mass-level affective dislike of the opposing political party is driven by ideological divergence among partisan elites. Notably, this effect was most pronounced for the most ideologically extreme and engaged citizens individuals. Related work suggests that holding ideologically extreme opinions on issues causes Americans to develop antipathy towards the both opposing party and its candidates (Webster and Abramowitz, 2017). Ideological extremity is a necessary and predominant component of affective polarization (Homola et al., 2023); partisan identities, by themselves, only generate a fraction of the inter-group animus that is attributable to ideological disagreements (Orr and Huber, 2020).

Collectively, then, American political behavior today is more negatively oriented and more ideologically driven than it was in earlier years. Moreover, as we have documented, a growing body of scholarship suggests that it is precisely the most ideologically extreme individuals who are most likely to express antipathy towards those with whom they disagree politically. Because schadenfreude is an inter-group emotion, rooted in antipathy, that arises when conflict between groups is high (Cikara et al., 2014), and because those who are the most ideologically extreme are most likely to exhibit such antipathy, we expect that ideological extremity will predict the expression of schadenfreude across a range of domains.

Analogous to affective polarization, we expect partisan schadenfreude to have important behavioral implications for American political behavior. However, given its status as a form of "malicious joy" (Shamay-Tsoory, Ahronberg-Kirschenbaum and Bauminger-Zviely, 2014), we expect schadenfreude's behavioral implications to be more consequential than those of affective polariza-

tion. To the extent members of the mass public enjoy seeing unfortunate events befall supporters of the opposing political party, we should expect to see individuals take actions that perpetuate the experience of their schadenfreude. In particular, we expect that those individuals who take joy in the suffering of partisan others—that is, those who experience schadenfreude—will be more likely than others to cast a vote for a candidate who seeks to inflict some sort of political harm on the out-party and its supporters. More specifically, we expect that those who are experiencing partisan schadenfreude will support candidates who seek to do this legislatively by passing policies that "disproportionately harm" supporters of the opposing party. By voting for these candidates, those Americans who are prone to partisan schadenfreude are facilitating a climate in which they can continue to both experience and enjoy the suffering of those with whom they disagree politically.

## Data & Design

We begin our study by first examining whether Americans do, in fact, engage in partisan schaden-freude. To do so, we draw on a series of three datasets fielded via the Lucid Theorem platform. Although data from Lucid is not nationally representative, Lucid uses quota sampling to target representativeness on factors like age, race, income, sex, partisan identification, and region of residence. Moreover, data from Lucid has been shown to be much more reflective of nationally representative benchmarks than conventional convenience sample data (see, e.g., Coppock and McClellan, 2018). In our case, the data mirrors the partisan, ideological, and demographic breakdowns found in the American National Election Studies (ANES). Table 1 summarizes our three data sources and the studies contained in each. Full summary statistics of our data, as well as precise question wordings, are available in the Appendix.

In addition to asking a series of sociodemographic questions, our first study—fielded in January 2019 to more than 3,000 respondents—contained questions that asked respondents to place themselves on the standard 7-point party identification and ideological leanings scales (higher

				Studies			
Study	Date	Sample Size	Schad.	Global Warming	COVID-19	Voting	Experiment
Lucid #1	Jan. 2019	4034	✓	✓		✓	
Lucid #2	Dec. 2020	996			$\checkmark$		
Lucid #3	Mar. 2022	4051					$\checkmark$

Table 1: Summary of Datasets. This table shows a summary of the data used in this paper. Our first Lucid study contains the data for our analysis of the correlates of schadenfreude ("Schad."), the global warming analysis, and our observational voting analysis. The second Lucid study contains the data for our COVID-19 study, and our third Lucid study contains the data for our experimental analysis. Note that the sample sizes listed here include those who identify as "completely independent."

values indicate a more Republican and ideologically conservative identity, respectively). To measure the correlates of schadenfreude, survey participants were first presented with one of two vignettes about a new neighbor's political behavior. Following an approach used in prior work, Democratic respondents were told that a new resident in their neighborhood that had typically voted for Democrats voted for a Republican in the most recent election and, subsequently, lost her government-subsidized health insurance (Allamong and Peterson, 2020). Republican respondents were told that a new resident in their neighborhood that had typically voted for Republicans voted for a Democrat in the most recent election and, as a result, saw her monthly take-home pay decrease in the wake of newly enacted taxes.

After these vignettes, survey respondents were asked to rate their level of agreement with three different statements designed to measure schadenfreude. Drawn from van de Ven et al.'s (2014)

<sup>&</sup>lt;sup>1</sup>The full text of this vignette is as follows: Suppose a new resident of your neighborhood had previously identified as a Democrat. However, during the most recent election, she voted straight-ticket for Republicans. She has subsequently lost her health insurance, which was provided to her through government subsidies.

<sup>&</sup>lt;sup>2</sup>The full text of this vignette is as follows: Suppose a new resident of your neighborhood had previously identified as a Republican. However, during the most recent election, she voted straight-ticket for Democrats. She has subsequently seen her amount of take-home pay each month decrease due to tax increases.

work on schadenfreude, these statements are: "I would be a little amused by what happened to her;" "I would be pleased by the little misfortune that happened to her;" and, finally, "I'd find it difficult to resist a smile." There are seven possible responses for each question, ranging from "not at all" to "very much so." The correlation between individuals' responses to these statements range from .65 – .67. Each constituent item of the schadenfreude scale ranges from 0-6, with 0 denoting a response of "strongly disagree", 3 denoting a response of "neither agree nor disagree", and 6 denoting a response of "strongly agree". For simplicity in interpretations, responses to these items are then added together and divided by three in order to obtain each individual's overall schadenfreude score.

To measure the demand for candidate cruelty within the mass public, we presented survey respondents with a vignette about a hypothetical candidate running for the United States Senate from their state. This vignette was designed to present individuals with a candidate whose ideological leanings and policy preferences were not known; the only information given to respondents was that this candidate had voiced support for enacting policies that are harmful to supporters of the other party. The full text of the vignette is as follows:

The [Democratic/Republican] Senate candidate in your state is a relative newcomer to politics. Accordingly, little is known about his ideological leanings and policy preferences. However, he has regularly stated that he favors enacting policies that disproportionately harm the welfare of [Republicans/Democrats] throughout the country. Knowing only these facts, how likely would you be to vote for this candidate?

To assess our expectation that *partisan* schadenfreude should alter vote intentions, Democratic respondents were given information about a Democratic Senate candidate who wanted to pass policies that harmed the welfare of Republicans. By contrast, Republican respondents were given information about a Republican Senate candidate who supported passing laws that harmed the welfare of Democrats. After seeing this vignette, respondents rated their likelihood of voting for

this candidate on a 0-100 scale, where zero represents "not at all" and 100 indicates that they would "definitely" vote for this candidate.

In addition to studying the link between partisan schadenfreude and the demand for candidate cruelty, we present evidence that schadenfreude exists across various issue-areas. Specifically, we examine schadenfreude pertaining to the issues of climate change and public health. In our first study, we asked our survey respondents two sets of questions about climate change. First, we asked individuals their views about the issue. Respondents could indicate that they do not know whether climate change is occurring; that climate change is not occurring; that climate change is occurring and is caused by "natural causes;" and, finally, that climate change is occurring and is caused by "human activities." Second, if people indicated a belief that human activities are primarily responsible for climate change, we then followed up by asking them whether or not "people who don't believe in climate change get what they deserve" when naturally occurring disasters strike where they live. Importantly, because our question wording does not mention policymakers or specific policies, this measure captures individual-level schadenfreude and not an individual's belief that climate change deniers must accept the consequences of policies. Respondents were asked to indicate their agreement with this statement using the standard seven-point scale (ranging from Strongly Disagree to Strongly Agree).

Studying schadenfreude on this issue is both important and timely. In fact, those who deny the scientific consensus on the causes of climate change (that human activity is primarily to blame for climate change) have been on the receiving end of high-profile "victim blaming" in recent years. For example, an article run in *The Guardian* in the fall of 2018 received substantial backlash from other journalists and on social media after it suggested that "victims of Hurricane Michael voted for climate deniers." Of course, studying the issue of climate change is likely to allow for an examination of schadenfreude on only one side of the political divide. Indeed, given the tight

<sup>&</sup>lt;sup>3</sup>https://amp.theguardian.com/environment/climate-consensus-97-per-cent/2018/oct/11/victims-of-hurricane-michael-voted-for-climate-deniers

relationship between Democratic party identification and belief in human-caused climate change (McCright and Dunlap, 2011; Funk and Kennedy, 2016), the issue of climate change is likely to elicit schadenfreude primarily among a certain partisan subset (i.e., Democrats and those on the ideological left) of the American electorate.

Consequently, we fielded a follow-up study in December 2020 (N = 996)—again using the Lucid Theorem platform—designed to observe evidence of issue-specific schadenfreude on both sides of the partisan aisle. To elicit schadenfreude across the political spectrum, we asked respondents a series of questions pertaining to the COVID-19 pandemic. This topic is useful for our purposes because the ideological left and right focused on different issues during the government's response to the pandemic. Specifically, Democrats and liberals were comparatively more likely to be concerned about the pandemic's impact on public health; Republicans and conservatives, on the other hand, were more likely to be concerned about pandemic's effects on the performance of the economy (Pickup, Stecula and van der Linden, 2020; de Bruin, Saw and Goldman, 2020; Impelli, 2020). These differences closely mirror the rhetorical and policy differences among partisan elites. For example, Democratic elites were more likely to indicate support for government intervention in service of containing the virus' spread and were quicker to support the adoption of stringent social distancing guidelines. Republicans, by contrast, frequently downplayed the virus' public health risks in the pandemic's early stages (Gollust, Nagler and Fowler, 2020; Motta, Stecula and Farhart, 2020; Green et al., 2020; Adolph et al., 2020). On the other hand, Republican elected officials were more likely than Democrats to support policy efforts to re-open state and local economies in the wake of stay-at-home orders. Democrats, meanwhile, were more likely to express reservations about the possibility of lifting those measures prematurely (Green et al., 2020; Chiacu, 2020).

Correspondingly, we measure COVID-19 issue-specific schadenfreude in two ways. First, to measure schadenfreude on the ideological left, we ask respondents to report the extent to which they agree (on a standard five-point Likert scale) with the following statement: "people who do not follow CDC-recommended physical distancing guidelines get what they deserve if and when they

contract COVID-19." Given Democrats' elevated levels of concern about the pandemic's impact on public health, we expect to see more evidence of schadenfreude in responses to these questions on the ideological left.

Second, to measure schadenfreude on an aspect of COVID-19 more pertinent to Republicans and conservatives, we asked respondents to report the extent to which they agree or disagree with the following statement: "people who support restrictions on how businesses operate get what they deserve if and when they lose their jobs." Because Republicans were comparatively more concerned with the pandemic's economic effects, this question gives us the opportunity to observe evidence of schadenfreude on the ideological right.

In order to better understand the causal effect of candidate promises of cruelty on voter behavior, we conducted one additional study in March 2022. Fielded via the Lucid Theorem platform, the survey asked respondents a series of standard sociodemographic and political questions such as their gender, racial identification, educational attainment, partisan affiliation, and ideological leanings. We also asked the same series of partisan-directed vignettes about health care and taxation that were asked in Study 1. As in that study, respondents here were then asked the same series of three questions about their response to the vignettes in order to measure schadenfreude.

Finally, respondents were then randomized into one of four experimental conditions. One condition, which serves as our control group, told respondents that their party's candidate for the House of Representatives in their district is a newcomer to politics and, accordingly, little is known about their ideological leanings and policy preferences. The second condition told respondents this same set of information but added that the candidate has "regularly stated that he favors enacting policies that harm supporters" of the opposing party throughout the country. A third condition presented respondents with the information given to the control group but added that the candidate wanted to pass policies that helped supporters of the in-party *and* harmed supporters of the out-party. The fourth and final condition presented respondents with the information given to the control group but noted that the candidate had stated favoring enacting policies that help supporters of both par-

ties. After being presented with one of these four conditions, respondents were asked to rate how likely they would be to vote for this candidate along a 0-100 scale. As in Study 1, higher scores on this measure indicate a greater willingness to vote for the candidate. If schadenfreude is related to a demand for candidate cruelty, then being presented with information about a cruel candidate should be most receptive to those individuals who exhibit the greatest amount of schadenfreude.

### **Results**

### Schadenfreude and the Demand for Candidate Cruelty

We begin by presenting summary statistics of our schadenfreude measure from Study 1. The distribution of responses to the constituent parts of the schadenfreude measure can be seen in Figure 1. For Democrats, the mean score on the schadenfreude measure is 2.57; the standard deviation is 1.64, demonstrating both the presence of partisan schadenfreude and substantial variation in partisan schadenfreude across Democrats. For Republicans, the mean score on the schadenfreude measure is 2.81; the standard deviation is 1.47, which demonstrates a similar dynamic across partisan lines. Scores on the "amused" ( $\mu_{\text{Democrat}} = 3.02$ ,  $\sigma_{\text{Democrat}} = 1.86$ ;  $\mu_{\text{Republican}} = 3.31$ ,  $\sigma_{\text{Republican}} = 1.64$ ), "pleased" ( $\mu_{\text{Democrat}} = 2.05$ ,  $\sigma_{\text{Democrat}} = 1.75$ ;  $\mu_{\text{Republican}} = 2.26$ ,  $\sigma_{\text{Republican}} = 1.64$ ), and "smile" ( $\mu_{\text{Democrat}} = 2.69$ ,  $\sigma_{\text{Democrat}} = 1.94$ ;  $\mu_{\text{Republican}} = 2.89$ ,  $\sigma_{\text{Republican}} = 1.78$ ) sub-scales follow a similar pattern across partisanship, with the mean values being slightly higher for Republicans and the standard deviation being greater for Democrats. However, because Democrats and Republicans received different vignettes, we cannot interpret these differences as substantively meaningful.

Next, we present summary statistics of our measure of the demand for candidate cruelty. The scale ranges from 0-100, where zero indicates no desire to vote for the candidate who promises to pass policies that "disproportionately harm" supporters of the opposing party, 50 represents indifference, and 100 represents an absolute desire to do so. The mean value on our measure is

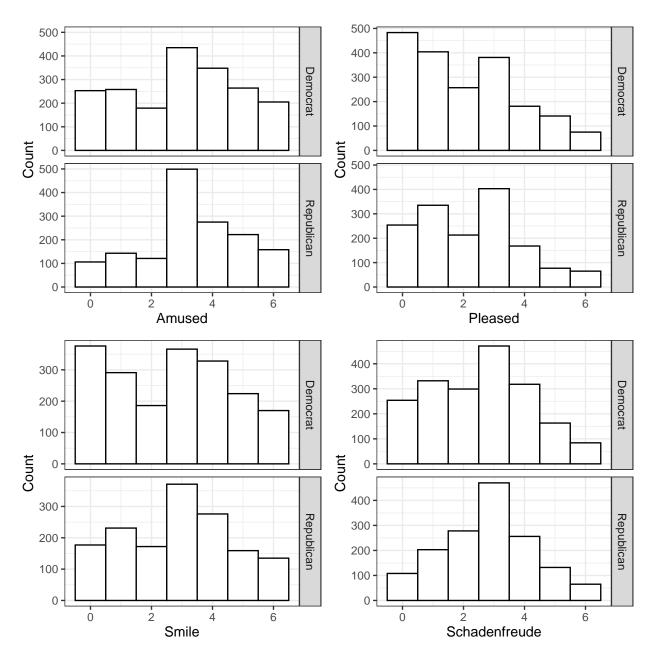


Figure 1: Measurement of Schadenfreude in the Mass Public. This figure shows the distribution of scores on the three constituent terms, as well as the schadenfreude index, for both Democrats and Republicans.

 $48.72~(\mu_{\text{Republican}}=49.16;\mu_{\text{Democrat}}=48.32)$  and the standard deviation is  $27.55~(\sigma_{\text{Republican}}=27.23;\sigma_{\text{Democrat}}=27.87)$ . Thus, while the average response to this measure represents indifference as to whether an individual would vote for this candidate, there is a considerable amount of vari-

ance. Indeed, 37% of our respondents reported a greater than 50% likelihood of voting for this candidate with 30% expressing a greater than 60% likelihood of doing so.

We now present results of our analysis of the relationship between an individual's level of schadenfreude and their willingness to vote a candidate from their own political party that promises to pass policies that "disproportionately harm" supporters of the opposing political party. To do this, we run three linear models (estimated via OLS), each of which has the following form:

$$\mathsf{Vote}_i = \alpha + \beta_1 \mathsf{Schadenfreude}_i + \beta_2 \mathsf{Ideological} \ \mathsf{Extremity}_i + \beta_3 \mathsf{Strong} \ \mathsf{Partisan}_i + \lambda_i + \epsilon_i$$

where Vote<sub>i</sub> is each respondent i's score on the 0-100 measure of voting for the candidate who promises to pass policies that "disproportionately harm" supporters of the opposing party,  $\beta_1$  is the coefficient estimate for our schadenfreude measure (dichotomized at its median value),  $\beta_2$  captures each individual's ideological extremity (a dummy variable, where individuals are coded as a 1 if they are above the median ideological extremity value and 0 otherwise),  $\beta_3$  is a dummy variable for those who identify as a "strong partisan," and  $\lambda_i$  contains a series of sociodemographic variables for each respondent: race (dummy variable for non-White), gender (dummy variable for male), age (measured in years), and educational attainment (options include high school graduate or G.E.D; some college but no degree; associates degree; bachelor's degree; and, finally, a post-graduate or professional degree). All control variables are scaled to range from 0-1. Because the schadenfreude measures were obtained after respondents saw a vignette that varied based off of their own partisanship, we subset our models by party (i.e., by producing separate estimates for Democrats and Republicans) in addition to estimating this model on our pooled sample.

Figure 2 shows the coefficient estimates for schadenfreude and voting for the candidate who seeks to enact harm on supporters of the opposing political party. We also present the coefficient estimates for ideological extremity and for individuals who identify as a "strong partisan." Moreover, we present these coefficient estimates across three model specifications: one on the pooled sample of all individuals in our sample, one restricted to self-identifying Democrats, and one restricted to

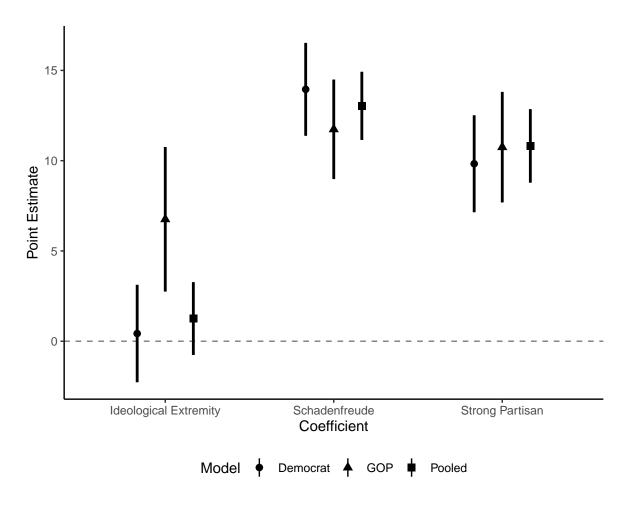


Figure 2: Schadenfreude, Ideological Extremity, Strong Partisanship and Vote Choice. This figure shows the coefficient estimates of schadenfreude, ideological extremity, and strong partisanship and voting for a candidate who promises to "harm supporters of the opposing party." The ideological extremity and schadenfreude variables are dichotomized at their median values. Though not shown here, controls for race, gender, age, and educational attainment are included in all specifications. Vertical lines represent 95% confidence intervals.

#### self-identifying Republicans.

The analyses reveal three noteworthy results. First, our analyses suggest that partisan schadenfreude is a powerful predictor of voting intentions in the United States. Moving from below the median to above the median on our schadenfreude measure predicts an increase of approximately 13 points on our dependent variable. This finding is largely consistent across model specifications. In the pooled sample, the schadenfreude coefficient estimate is 13.04 ( $\hat{\sigma} = 0.96$ ; p = .001; 95% CI = [11.16, 14.91]). For the Democratic model, the schadenfreude coefficient estimate is 13.95 ( $\hat{\sigma}=1.31; p=.001; 95\%$  CI = [11.39, 16.52]). For the Republican model, the schadenfreude coefficient estimate is 11.74 ( $\hat{\sigma}=1.40; p=.001; 95\%$  CI = [9.00, 14.48]). Collectively, these coefficient estimates indicate that schadenfreude plays an important role in shaping Americans' voting intentions in the contemporary era of hostile politics. Moreover, supplemental analyses that allow the ideological extremity and partisanship measures to vary across the full range of possible values suggest that the relationship between schadenfreude and voting for a cruel candidate is robust to various model specifications. The results of these models can be found in the Appendix.

As an alternative way of illustrating the importance of schadenfreude in predicting the demand for candidate cruelty, we ran a series of eight empirical models with all possible subsets of schadenfreude, ideological extremity, and our measure of strong partisanship. Comparing the  $R^2$  values across these specifications indicates that schadenfreude is the most important predictor of the demand for candidate cruelty. Our baseline model (containing only sociodemographic variables) produces a  $R^2$  value of .02. With just schadenfreude added to this baseline model, we obtain a  $R^2$  value of .12; with just strong partisanship added to the baseline model, the  $R^2$  value is .07; and, finally, the  $R^2$  value is .03 when just ideological extremity is added to the baseline model. When all three variables are added to the baseline model, we obtain a  $R^2$  value of .16. Thus, while all of these measures offer some degree of predictive power, it is our measure of partisan schadenfreude that offers the most purchase in terms of explaining the variance in individuals' desire to vote for a cruel candidate. All eight of these model specifications can be found in the Appendix.

Second, our analyses shed light on the relative impact of schadenfreude and possessing a strong partisan identity on the likelihood of voting for a candidate who promises to pass policies that "disproportionately harm" supporters of the opposing political party. While the majority of the existing body of scholarship on polarization and antipathy in the United States attributes these divisions to the strength of partisan identities (Mason, 2018; Iyengar, Sood and

Lelkes, 2012), our results suggest that possessing a strong partisan identity is not the most important factor predicting the demand for candidate cruelty. And, while our comparison of the  $R^2$  values across model specifications illustrates the predictive power of schadenfreude vis-àvis identifying as a strong partisan, we can also view these differences by comparing coefficient estimates. For the Democratic model, our coefficient estimate for being a strong partisan is 9.83 ( $\hat{\sigma}=1.36$ ; p=.001; 95% CI = [7.17,12.48]); for the Republican model, the coefficient estimate for being a strong partisan is 10.75 ( $\hat{\sigma}=1.52$ ; p=.001; 95% CI = [7.77,13.72]); and, finally, the coefficient estimate for being a strong partisan in the pooled sample is 10.82 ( $\hat{\sigma}=1.02$ ; p=.001; 95% CI = [8.82,12.81]). In each model specification, the coefficient estimate for the strong partisan variable is smaller than that of the schadenfreude measure.

Finally, in the majority of the model specifications, our analyses indicate that ideological extremity has little-to-no relationship with voting for the candidate who seeks to pass policies that harm supporters of the opposing party. Moreover, the relationship between ideological extremity and voting for a cruel candidate is weaker than the relationship between the demand for candidate cruelty and either schadenfreude or being a strong partisan. In addition to the  $R^2$  comparisons, we see this when comparing the coefficients to each other. In the pooled sample, the coefficient estimate for ideological extremity is 1.25 ( $\hat{\sigma}=1.02; p=.22; 95\%$  CI = [-0.74, 3.25]); among Democrats, the estimate is 0.43 ( $\hat{\sigma}=1.37; p=.76; 95\%$  CI = [-2.26, 3.11]); and, finally, among Republicans the estimate is 6.76 ( $\hat{\sigma}=1.87; p=.001; 95\%$  CI = [3.09, 10.42]). Thus, in all but one case, the relationship between being above the median value on our measure of ideological extremity and preferring to vote for a candidate who promises to pass policies that "disproportionately harm" supporters of the opposing party is not statistically distinguishable from zero. It is only among Republicans that we find any evidence of a relationship between ideological extremity and voting for such a candidate.

#### Partisan Schadenfreude in Other Issue Areas

Though these results suggest that partisan schadenfreude predicts the types of political candidates that Americans prefer, one potential concern might be that the results are driven by our focus on health care and taxation in order to measure schadenfreude. Therefore, to examine whether mass-level schadenfreude exists beyond these two issue-areas we now present results from a series of analyses that examine schadenfreude across two different issue-areas: global climate change, and the COVID-19 pandemic.

To begin, we present results from our study of schadenfreude and climate change. Recall that, in order to assess the degree of schadenfreude over this issue, we asked respondents who agree with the scientific consensus about the man-made nature of climate change whether those who do not believe that climate change is occurring "get what they deserve" when disasters strike where they live. We find that over a *third* of respondents who indicated a belief that climate change is primarily caused by human activity agreed with the idea that natural disaster victims who do not accept climate science "get what they deserve" when disasters occur where they live. The overwhelming majority (68%) of these individuals were Democrats, although some Republicans (22%) and Independents (10%) held these feelings as well.

To better understand why some people who accept the scientific consensus on climate change engage in schadenfreude over the issue, we regressed a dummy variable indicating whether or not an individual agreed that climate change deniers "get what they deserve" on a series of political and sociodemographic variables (those who "somewhat agree," "agree," and "strongly agree" are coded as agreeing that climate deniers "get what they deserve"). These variables include dummy variables for Democrats and Republicans, as well as the standard 7-point ideology scale (where higher values indicate a more conservative ideology). We also include measures of each respondent's age, gender, racial identity, and educational attainment. Only those who believe that climate change is occurring and is happening primarily due to human activity are included in the model. Estimation is via logistic regression.

Our results suggest that Americans do experience schadenfreude over this issue, and that ideology (coded such that higher values indicate a more conservative ideological outlook) is a strong predictor of holding these extreme partisan attitudes. In the empirical model, the coefficient estimate on our ideology variable is -.12 ( $\hat{\sigma}=0.03; p=.001; 95\%$  CI = [-0.19, -0.06]). This result suggests that, when it comes to the issue of climate change, it is the most ideologically liberal Americans who are the most likely to express schadenfreude. Figure 3 plots the predicted probability of engaging in schadenfreude over the issue of climate change. The regression coefficients used to produce this figure, as well as robustness checks with alternative model specifications, can be found in the Appendix.

To provide further evidence that it is both widespread and consequential for American politics, we next present evidence from Study 2 suggesting that the mass public exhibits partisan schaden-freude over the COVID-19 pandemic. To understand the sources of variation in the expression of schadenfreude over COVID-19, we fit a logistic regression with the following specification for both the health-based and job-based measures of COVID-19-related schadenfreude:

Get Deserve<sub>i</sub> = 
$$\alpha + \beta_1$$
Conservatism<sub>i</sub> +  $\beta_2$ Democrat<sub>i</sub> +  $\beta_3$ Republican<sub>i</sub> +  $\lambda_i + \epsilon_i$ 

where Get Deserve<sub>i</sub> is a dichotomous variable drawn from respondents' answers to the five-point Likert scale described above (coded as 1 if respondents answer "strongly agree" or "agree" and 0 otherwise),  $\beta_1$  is a variable measuring ideological conservatism,  $\beta_2$  is a dummy variable for Democrats,  $\beta_2$  is a dummy variable for Republicans, and  $\lambda_i$  contains demographic control variables: age, gender (a dummy variable for males), and educational attainment (a dummy variable for those who possess a college degree). All coefficients are scaled to range from 0-1.

The predicted probabilities drawn from these regressions, shown in Figure 4, once again suggest that schadenfreude is an attitude most commonly held by those on the ideological extremes. The tables containing the regression output can be found in the Appendix. When examining

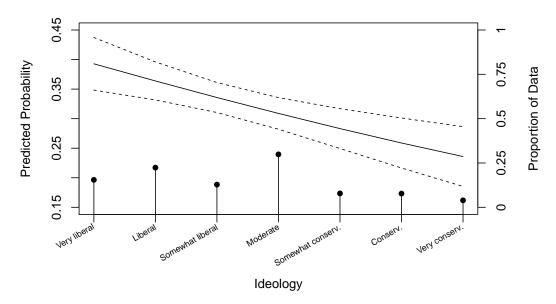
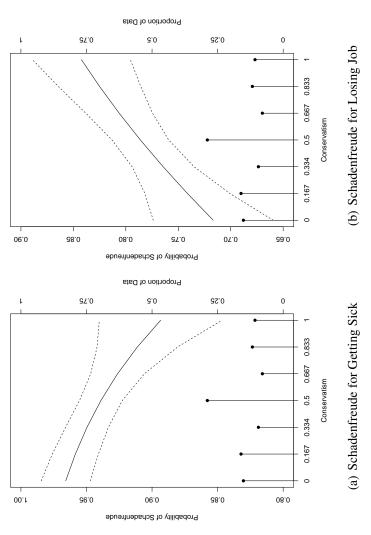


Figure 3: Predicted Probability of Engaging in Schadenfreude (Climate Change). This figure shows the predicted probability, conditional on partisanship, of engaging in schadenfreude for each of the seven ideological self-placement categories. Error bands indicating 95% confidence intervals are included. Vertical lines indicate the proportion of the data at each ideological label.

schadenfreude over getting sick from COVID-19 after not following social distancing and mask guidelines (Figure 4(a)), we find that these attitudes are most commonly expressed by the most liberal individuals ( $\beta_{Conservatism} = -1.22$ ;  $\hat{\sigma} = 0.46$ ; p = .01; 95% CI = [-2.11, -0.32]). As we document in Figure 4(a), the predicted probability that the most liberal respondents in our sample experience health-related COVID-19 schadenfreude is 97%. This same figure is 89% for the most conservative respondents in our sample.

Conversely, we find that ideological conservatism is associated with a statistically significant increase in the probability of expressing schadenfreude as it pertains to COVID-19 related economic loss ( $\beta_{Conservatism} = 0.75$ ;  $\hat{\sigma} = 0.28$ ; p = .01; 95% CI = [0.20, 1.30]). As the predicted probabilities in Figure 4(b) make clear, schadenfreude over this issue is increasing in ideological conservatism. Among the most liberal respondents in our sample, the predicted probability of



predictor variables at their means; dashed lines represent the 95% confidence intervals. Vertical lines indicate the proportion of freude about getting sick from the novel coronavirus (left) and losing one's job due to following government regulations on business pertaining to COVID-19 (right) at various levels of conservatism. Predicted probabilities are calculated holding all other Figure 4: Predicted Levels of Schadenfreude About COVID. These figures show the predicted probability of engaging in schadenthe respondents at each level of conservatism.

experiencing schadenfreude when one loses their job due to following government regulations pertaining to COVID-19 is 72%. The predicted probability of experiencing schadenfreude over this issue increases monotonically along the range of conservatism. For the most conservative respondents, the predicted probability of experiencing schadenfreude is 84%.

Collectively, these results suggest that schadenfreude is not limited to electoral considerations. Additionally, because schadenfreude exists across issue-areas, these results suggest that our models of voting intentions are likely not driven by our focus on health care and taxation when measuring schadenfreude. Accordingly, this study has shown that schadenfreude exists as a meaningful attitude among the American public, that it varies among Democrats and Republicans, and that it predicts attitudes of substantive importance.

### **Schadenfreude and Candidate Cruelty**

The results from our previous studies have shown that schadenfreude exists among the American mass public, that it is present across salient issue areas, and that it predicts voting for candidates who promise to pass policies that harm the opposing party's supporters. Moreover, we have shown that this predictive power is on par with that of identifying as a strong partisan. However, left unanswered is how the individual-level expression of schadenfreude moderates the willingness to vote for a cruel, as opposed to a non-cruel, candidate. To address this question, we turn now to our results from a survey experiment embedded within Study 3.

Recall that our experimental design has four randomization conditions: a baseline condition in which no information about the candidate's policy preferences is given; a condition in which the candidate is described as wanting to pass policies that harm supporters of the opposing party; a condition that tells respondents that the candidate wants to pass policies that help the in-party and harm the opposing party; and, finally, a condition that describes the candidate as wanting to pass policies that benefit supporters of both parties. If mass-level schadenfreude plays a role in determining voting intentions, those who score highest on our measure of schadenfreude and were

exposed to one of the conditions that described the candidate as wanting to pass policies that harm supporters of the opposing party should exhibit a greater willingness to vote for the candidate compared to those who exhibit less schadenfreude. The results of these models are shown in Table 2.4

The first column of Table 2 compares those who were randomized into the condition that described the candidate as wanting to pass policies that harm supporters of the opposing party to those who were randomized into the control group (i.e., those who were given no information about the candidate's preferred policies). The coefficient estimate on our dichotomous treatment variable suggests that those respondents who were randomized into this condition rated their likelihood of voting for this candidate 21.2 points lower than those who were randomized into the control. However, the relationship between those who were randomized into the treatment condition and voting intention differs according to one's level of schadenfreude. Indeed, the positive interaction term that we observe suggests that, among those who were randomized into the treatment group, higher levels of schadenfreude predicts a greater likelihood of voting for the candidate.

One potential concern with this finding is that survey respondents might be conflating a candidate's willingness to pass policies that harm supporters of the opposing party with a desire to pass policies that help supporters of the in-party. Given the zero-sum nature of contemporary American politics, such a concern is warranted. To address this possibility, Column 2 compares those who were randomized into the condition that described the candidate as wanting to pass policies that help supporters of the in-party *and* harm supporters of the out-party to those who were randomized into the condition that described the candidate as wanting to pass policies that help both parties' supporters.<sup>5</sup> The results of this comparison are substantively similar to those in Column 1: on av-

<sup>&</sup>lt;sup>4</sup>Results are calculated only on those who did not fail an attention check ("what color is the sky?").

<sup>&</sup>lt;sup>5</sup>To the extent American politics is seen as a zero-sum competition, using the randomization condition that tells survey respondents that the in-party candidate wants to help supporters of both parties as our reference group is the only way to isolate the effect of an in-party candidate's promise to legislatively harm supporters of the opposing party on a voter's preferences at the ballot box. Indeed, if one believes that a promise to help the in-party is analogous to harming the out-party (as would be the case in a purely zero-sum setting), then using a condition that states that the in-party candidate wants to help supporters of the in-party as our reference group would likely introduce a belief

	Vote for Crue	Vote for Cruel Candidate		
	(1)	(2)		
Hurt Out-Party	-21.207***			
•	(2.348)			
Help In-Party, Hurt Out-Party		-17.578***		
·		(2.260)		
Schadenfreude	3.457***	0.693		
	(0.659)	(0.638)		
Hurt Out-Party x Schadenfreude	3.913***			
	(1.042)			
Help In-Party, Hurt Out-Party x Schadenfreude		4.439***		
		(1.021)		
Constant	51.812***	60.738***		
	(1.529)	(1.419)		

Table 2: Schadenfreude and Candidate Cruelty. This table shows the results of our experimental design. Column 1 compares those who received the "hurt the out party" prime to the no information condition; Column 2 compares those who received the "help the in-party and hurt the out-party" prime to the "help both parties" condition. Estimation includes robust standard errors.

erage, cruel candidates are disliked; however, the promise of candidate cruelty is more acceptable to those individuals who are most prone to exhibiting schadenfreude. These results suggest that there is little reason to be concerned that survey respondents are conflating a candidate's promise to legislatively hurt the opposing party with outcomes that would help the in-party.

To more clearly illustrate the effect of our treatments on voting intentions, Figure 5 shows the marginal effect of receiving the prompt that indicates that the candidate wants to pass policies that both help the in-party and hurt the out-party according to an individual's level of schadenfreude. A dashed horizontal line is plotted at zero. As can be seen, at low levels of schadenfreude the effect of the treatment is both negative and statistically significant. However, the effect of this treatment becomes *positive* and statistically distinguishable from zero at the absolute highest levels of schadenfreude. Thus, among those Americans who are most prone to engaging in schadenfreude, candidate cruelty is not passively accepted; on the contrary, for this subset of Americans, candidate cruelty is actively supported.

Notably, the results are not due to one party's supporters being disproportionately more likely to support cruel candidates. On the contrary, our experimental findings persist when we analyze the models separately for self-identifying Democrats and self-identifying Republicans. The relationship between schadenfreude and candidate cruelty, then, is bipartisan. Tables containing the results of the models shown in Table 2 estimated separately by partisanship can be found in the Appendix.

Collectively, these results underscore the role played by schadenfreude in assessing the acceptance of candidate cruelty. People who exhibit higher levels of schadenfreude, across the partisan spectrum, are more receptive to candidates who promise legislative cruelty compared to otherwise identical candidates who do not.

among those survey respondents in our reference category that the in-party candidate wants to legislatively hurt the out-party.

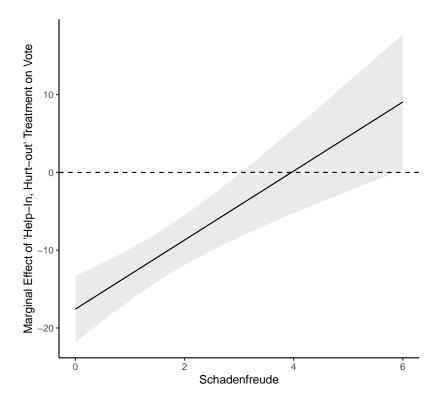


Figure 5: Marginal Effect of Treatment by Schadenfreude. This figure shows the treatment effect of "help in-party, hurt out-party" conditional upon levels of schadenfreude.

## **Discussion**

American politics is increasingly divisive. While such a claim is relatively undisputed, few have attempted to study how those divisions psychologically motivate extreme and punitive forms of political participation. In this study we have taken an important first step in this regard. Utilizing a series of novel experimental and observational studies measuring the political attitudes of thousands of Americans, we have shown that a significant portion of the mass public is prone to engaging in what we have called *partisan schadenfreude*, or taking "joy in the suffering" of partisan others.

We have also provided both observational and experimental evidence that Americans are not averse to supporting cruel candidates. Specifically, our results from Study 1 suggest that a significant portion—over one-third—of the mass public is willing to vote for a candidate of unknown

ideological leanings who promises to pass policies that "disproportionately harm" supporters of the opposing political party. We then show in Study 3 that promises of candidate cruelty are most acceptable to those voters who exhibit the greatest amount of schadenfreude.

These findings provide important context to recent work that suggests that voters do not reward politicians who engage in negative partisanship-style campaigning at the expense of ideological representation (Costa, 2021). While our findings suggest that most Americans do disapprove of cruel candidates, they also provide evidence that a substantial portion of the electorate is receptive to such politicking. Thus, our findings add a degree of clarity as to whether the public passively accepts politicians who espouse punitive policies and rhetoric, or actively demands them. We find that, among those individuals who exhibit high levels of schadenfreude, cruel candidates are not merely passively accepted. On the contrary, for this subset of Americans, candidate cruelty is sought out.

We also show that Americans express schadenfreude over non-electoral forms of political attitudes. In particular, we have shown that schadenfreude exists as a meaningful construct when analyzing Americans' attitudes about climate change and the COVID-19 pandemic. In sum, our results suggest that partisan schadenfreude is widespread, occurs on both sides of the partisan divide, and has important consequences for American political behavior.

Though our study documents both the existence and consequences of schadenfreude in American politics, future work can improve upon these findings. First, future work should continue to explore schadenfreude in other issue areas—taxation or trade agreements, for instance—in order to determine whether schadenfreude works similarly across issues pertaining to domestic and foreign policy. Scholars should also examine schadenfreude longitudinally. Does schadenfreude co-occur with the development of partisan identity and then dissipate quickly? Or, do the effects of schadenfreude persist? In other words: is partisan schadenfreude best thought of as a psychologically-stable trait, or a state activated in moments of political tension and unrest? Future work might try to disentangle the psychological origins and political consequences of state versus

trait partisan schadenfreude (Nai and Otto, 2020). Finally, future work should consider whether schadenfreude in one area can spill over to assessments and evaluations of other areas. With Americans increasingly and durably divided along partisan lines, more precisely understanding the nature and the implications of schadenfreude is likely to be a fruitful line of research.

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## A Appendix

#### A.1 Tables

		Vote Harm	
	Pooled	Democrats	Republicans
	(1)	(2)	(3)
Schadenfreude	13.036***	13.951***	11.738***
	(0.958)	(1.309)	(1.400)
Non-White	3.405***	5.152***	1.498
	(1.050)	(1.318)	(2.027)
Male	4.649***	4.543***	4.532***
	(0.908)	(1.236)	(1.339)
Age	0.559	1.822	-2.116
	(2.082)	(2.874)	(3.050)
Education	-0.573	1.679	-2.910
	(1.325)	(1.798)	(1.970)
Ideological Extremity	1.252	0.426	6.755***
	(1.018)	(1.371)	(1.870)
Strong Partisan	10.818***		
	(1.017)		
Strong Democrat		9.830***	
		(1.356)	
Strong Republican			10.748***
			(1.518)
Constant	35.023***	32.727***	38.220***
	(1.325)	(1.840)	(1.884)
N	3,311	1,850	1,461
$\mathbb{R}^2$	0.122	0.119	0.140

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table A.1: Schadenfreude and the Demand for Candidate Cruelty. This table shows the regression coefficients used to produce Figure 2 in the paper. Estimation is via OLS.

		Vote Harm	
	Pooled	Democrats	Republicans
Schadenfreude	13.010***	14.027***	11.950***
	(0.957)	(1.307)	(1.406)
Non-White	3.925***	4.974***	1.759
	(1.098)	(1.324)	(2.045)
Male	4.579***	4.646***	4.664***
	(0.911)	(1.237)	(1.346)
Age	0.292	1.696	-1.540
	(2.085)	(2.873)	(3.086)
Education	-0.386	1.897	-2.957
	(1.330)	(1.808)	(1.983)
Ideological Extremity	0.152	-0.059	0.373
	(0.345)	(0.459)	(0.537)
Weak Democrat	-8.671***	-8.585***	
	(1.504)	(1.556)	
Independent but lean Democrat	-11.602***	-11.516***	
-	(1.500)	(1.548)	
Independent but lean Republican	-10.337***		
	(1.636)		
Weak Republican	$-8.826^{***}$		1.587
-	(1.565)		(1.779)
Strong Republican	3.304**		13.600***
	(1.398)		(1.756)
Constant	44.424***	43.124***	35.472***
	(2.427)	(3.209)	(3.185)
N	3,311	1,850	1,461
$\mathbb{R}^2$	0.124	0.120	0.133

<sup>\*</sup>p < .1; \*\*p < .05; \*\*\*p < .01

Table A.2: Schadenfreude and Voting, Robustness Check. This table replicates our main observational finding pertaining to schadenfreude and voting for cruel candidates. However, our ideological extremity measure here ranges from 1-7 and we include dummy variables for various levels of partisan strength.

		Vote Harm	
	Pooled	Democrats	Republicans
Schadenfreude	5.220***	5.232***	5.260***
	(0.291)	(0.377)	(0.460)
Non-White	3.554***	4.541***	1.623
	(1.077)	(1.300)	(2.007)
Male	3.790***	3.885***	3.818***
	(0.896)	(1.217)	(1.326)
Age	1.304	2.770	-0.987
	(2.046)	(2.819)	(3.029)
Education	-0.025	2.092	-2.472
	(1.305)	(1.773)	(1.946)
Ideological Extremity	0.054	-0.169	0.360
-	(0.338)	(0.450)	(0.527)
Weak Democrat	-7.883***	-7.912***	
	(1.477)	(1.528)	
Independent but lean Democrat	-10.553***	-10.577***	
-	(1.474)	(1.522)	
Independent but lean Republican	$-10.871^{***}$		
-	(1.603)		
Weak Republican	-9.065***		1.845
•	(1.535)		(1.745)
Strong Republican	2.131		12.700***
0 1	(1.375)		(1.726)
Constant	35.689***	34.917***	25.499***
	(2.461)	(3.246)	(3.285)
N	3,311	1,850	1,461
$\mathbb{R}^2$	0.157	0.154	0.165

<sup>\*</sup>p < .1; \*\*p < .05; \*\*\*p < .01

Table A.3: Schadenfreude and Voting, Robustness Check #2. This table replicates our main observational finding pertaining to schadenfreude and voting for cruel candidates. However, our schadenfreude and ideological extremity measures are non-transformed and we include dummy variables for various levels of partisan strength.

				Vote	Vote Harm			
Schadenfreude		34.631*** (1.735)	31.509*** (1.737)	31.387*** (1.725)	33.911*** (1.754)			
Ideological Extremity			0.432 (2.028)	,	7.418*** (1.958)	3.784* (2.103)	12.744*** (2.032)	
Strong Partisan			10.395***	10.366*** (0.901)	,	12.649***	,	13.127*** (0.926)
Constant	44.363*** (1.284)	28.704*** (1.448)	26.128*** (1.861)	26.524*** (1.433)	24.018*** (1.884)	37.317*** (1.827)	35.801*** (1.868)	39.718*** (1.290)
Z	3,360	3,327	3,311	3,327	3,311	3,343	3,343	3,360
$R^2$ Adjusted $R^2$	0.016	0.121	0.156	0.153	0.125	0.073	0.027	0.070

 $^*p < .1; ^{**}p < .05; ^{***}p < .01$ 

of schadenfreude, strong partisanship, and ideological extremity. Schadenfreude offers the most explanatory purchase in terms of Table A.4: Subsets of Schadenfreude, Strong Partisanship, and Ideological Extremity. This table shows the eight different subsets predicting the demand for candidate cruelty.

	Get What They Deserve
Democrat	0.226
	(0.157)
Republican	0.347**
•	(0.175)
Ideology	-0.123***
	(0.034)
Age	-0.002
_	(0.003)
Male	0.617***
	(0.092)
Non-White	0.312***
	(0.103)
Education	-0.081**
	(0.034)
Constant	-0.594**
	(0.240)
N	2,158
Log Likelihood	-1,363.788
AIC	2,743.575

Table A.5: Schadenfreude and Climate Change. This table shows the predictors of expressing schadenfreude over climate change. Estimation is via logistic regression.

	Get What They Deserve
Democrat	0.058
	(0.135)
Republican	0.064
•	(0.151)
Ideology	$-0.101^{***}$
	(0.030)
Age	0.001
	(0.003)
Male	0.600***
	(0.081)
Non-White	0.216**
	(0.092)
Education	$-0.086^{***}$
	(0.030)
Constant	3.854***
	(0.210)
N	2,158
$\mathbb{R}^2$	0.037

Table A.6: Climate Change Denialism, OLS. This model replicates the climate change model in the main text of our paper. However, this model is estimated on our 7-point measure of climate change deniers getting what they deserve when disasters like hurricanes make landfall where they live. Estimation is via OLS.

	Get Sick	Lose Job
Democrat	0.539	-0.113
	(0.391)	(0.246)
Republican	-0.190	0.169
	(0.379)	(0.268)
Conservatism	$-1.216^{***}$	0.747***
	(0.456)	(0.280)
Age	0.264	$-1.270^{***}$
	(0.577)	(0.360)
Male	0.569**	0.455***
	(0.266)	(0.163)
Nonwhite	0.601	0.401**
	(0.369)	(0.202)
College	0.325	0.433***
	(0.260)	(0.164)
Constant	2.423***	0.824***
	(0.466)	(0.302)
N	995	995
Log Likelihood	-242.647	-513.722
AIC	501.294	1,043.443

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table A.7: Schadenfreude and COVID-19. This table shows the predictors of expressing schadenfreude over the COVID-19 pandemic. Estimation is via logistic regression.

	Vote for Cru	el Candidate
	(1)	(2)
Hurt Out-Party	-22.467***	
•	(3.024)	
Help In-Party, Hurt Out-Party		$-16.967^{***}$
		(2.881)
Schadenfreude	3.803***	0.660
	(0.924)	(0.884)
Hurt Out-Party x Schadenfreude	3.853***	
	(1.398)	
Help In-Party, Hurt Out-Party x Schadenfreude		4.601***
- •		(1.373)
Constant	51.620***	61.518***
	(1.988)	(1.900)

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table A.8: Schadenfreude and Candidate Cruelty (Democrats only). This table shows the results of our experimental design. Column 1 compares those who received the "hurt the out party" prime to the no information condition; Column 2 compares those who received the "help the in-party and hurt the out-party" prime to the "help both parties" condition. Estimation includes robust standard errors.

	Vote for Cru	el Candidate
	(1)	(2)
Hurt Out-Party	-19.397***	
•	(3.657)	
Help In-Party, Hurt Out-Party		-19.205***
		(3.677)
Schadenfreude	3.019***	0.827
	(0.921)	(0.925)
Hurt Out-Party x Schadenfreude	3.884**	
	(1.517)	
Help In-Party, Hurt Out-Party x Schadenfreude		4.531***
		(1.532)
Constant	52.162***	59.584***
	(2.317)	(2.127)

\*p < .1; \*\*p < .05; \*\*\*p < .01

Table A.9: Schadenfreude and Candidate Cruelty (Republicans only). This table shows the results of our experimental design. Column 1 compares those who received the "hurt the out party" prime to the no information condition; Column 2 compares those who received the "help the in-party and hurt the out-party" prime to the "help both parties" condition. Estimation includes robust standard errors.

## A.2 Question Wording

### A.2.1 Observational Study

Schadenfreude was measured in our observational study with the following prompts and questions.

For self-identifying Democrats:

Suppose a new resident of your neighborhood had previously identified as a Democrat. However, during the most recent election, she voted straight-ticket for Republicans. She has subsequently lost her health insurance, which was provided to her through government subsidies. Based on this information, please answer the following three questions.

### For self-identifying Republicans:

Suppose a new resident of your neighborhood had previously identified as a Republican. However, during the most recent election, she voted straight-ticket for Democrats. She has subsequently seen her amount of take-home pay each month decrease due to tax increases. Based on this information, please answer the following three questions.

Respondents then rated their level of agreement (on a 7-point scale) with the following statements.

- I would be a little amused by what happened to her.
- I would be pleased by the little misfortune that happened to her.
- I'd find it difficult to resist a smile.

Climate change

# A.3 Climate Change Schadenfreude

Respondents were first asked their opinion on climate change. Response options are: I don't know; Climate change is not occurring; Climate change is occurring but is due to natural causes; Climate change is occurring and is due largely to human activities.

Respondents who chose the last option were then shown the following statement: "people who don't believe in climate change get what they deserve when disasters like hurricanes make landfall where they live." Agreement is assessed along a 7-point scale; higher values indicate more agreement.

### A.4 Covid Schadenfreude

There are two measures of Covid schadenfreude.

- 1. People who do not follow CDC-recommended physical distancing guidelines get what they deserve if and when they contract COVID-19.
- 2. People who support restrictions on how businesses operate get what they deserve if and when they lose their jobs.

Agreement with each statement is measured along a 5-point scale; higher values indicate more agreement.

#### A.4.1 Experimental Study

Schadenfreude was measured the same as in the observational study. Additionally, there are four randomization conditions in the experimental analysis.

<u>Condition 1:</u> The [IN-PARTY] candidate for the House of Representatives in your congressional district is a relative newcomer to politics. Accordingly, little is known about his ideological leanings and policy preferences. Knowing only these facts, how likely would you be to vote for this candidate?

<u>Condition 2:</u> The [IN-PARTY] candidate for the House of Representatives in your congressional district is a relative newcomer to politics. Accordingly, little is known about his ideological

leanings and policy preferences. However, he has regularly stated that he favors enacting policies that benefit supporters of the [IN-PARTY] Party and harm supporters of the [OUT-PARTY] Party throughout the country. Knowing only these facts, how likely would you be to vote for this candidate?

Condition 3: The [IN-PARTY] candidate for the House of Representatives in your congressional district is a relative newcomer to politics. Accordingly, little is known about his ideological leanings and policy preferences. However, he has regularly stated that he favors enacting policies that harm supporters of the [OUT-PARTY] Party throughout the country. Knowing only these facts, how likely would you be to vote for this candidate?

Condition 4: The [IN-PARTY] candidate for the House of Representatives in your congressional district is a relative newcomer to politics. Accordingly, little is known about his ideological leanings and policy preferences. However, he has regularly stated that he favors enacting policies that benefit supporters of both parties throughout the country. Knowing only these facts, how likely would you be to vote for this candidate?

After this randomization process, respondents answered the following prompt: "Please rate how likely you would be to vote for this candidate along a 0-100 scale, where higher values indicate a greater likelihood of voting for the candidate."