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Schadenfreude and Sympathy Following President Trump's COVID-19 Diagnosis: Influence on Pre-Election Voting Intentions

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Supplementary Materials: Materials [see Index of Supplementary Materials]



Abstract

Schadenfreude and sympathy are often experienced at the intergroup level; however, little research has been conducted to examine their role in one of the most prominent and emotionally evocative intergroup contexts: the political arena. In this study, we assessed a sample of 506 Americans' (Age M = 41.69 years, SD = 13.94; 57% women) schadenfreude and sympathy (and related cognitions) in response to then-President Trump's COVID-19 diagnosis (a salient misfortune of a contentious political figure), and how their schadenfreude, sympathy, and related cognitions were associated with shifts in voting intentions (own and public's) in the 2020 Presidential Election. We also examined trends in, and associations between, these variables by political affiliation (focusing on Democrats and Republicans) and gender (focusing on men and women). Unsurprisingly, compared to Republicans, Democrats expressed more schadenfreude and less sympathy. Contrary to previous research, however, Democrats' experiences of schadenfreude were tempered and were primarily driven by deservingness beliefs rather than intergroup competition or malice). Amongst Republicans only, men experienced stronger schadenfreude than women. Regarding voting intentions, participants were more likely to report that the diagnosis would impact shifts in the public's voting than their own voting, primarily in favor of the Democratic Party. Feelings of schadenfreude and sympathy were not significantly associated with anticipated shifts-rather, those who believed then-President Trump's diagnosis was deserved (cognition strongly associated with schadenfreude) were four times more likely to believe the public would change their vote to the Democratic Party. These findings are discussed in relation to research at the intersection of psychology and political science and have implications for politicians and psychologists who aim to understand emotions underlying partisanship and voting behavior.

Keywords

schadenfreude, sympathy, voting intentions, presidential election, COVID-19

Schadenfreude (i.e., pleasure at another's misfortune, Feather & Sherman, 2002) flourishes amid competition, conflict, and intergroup divide—factors that are particularly salient in the political arena (Combs et al., 2009; Finkel et al., 2020; Iyengar & Westwood, 2015). These contextual factors were heightened throughout Donald Trump's controversial presidency and were especially pervasive at the approach of the 2020 Presidential Election due to the COVID-19 pandemic in the United States (U.S.). Prior to the election, COVID-19 cases were on the rise and Americans' concerns about Trump's handling of the pandemic were mounting. As such, when it was announced that then-President Trump was diagnosed with COVID-19 on October 2nd, 2020 (just weeks before the Election), it is unsurprising that there was a staggering 30,500% increase in searches for the word "schadenfreude" that same day (Merriam-Webster Dictionary, n.d.).



To build upon scant research on schadenfreude (and its counterpart, sympathy) in political contexts, the present study investigated Americans' experiences of these emotions following then-President Donald Trump's COVID-19 diagnosis. We also examined the potential downstream effect of Americans' emotional responses on how they expected their own and the public's voting to shift. These data are unique and likely capture Americans' peak experiences of schadenfreude and sympathy because they were collected one week following the former President's diagnosis and three weeks before the 2020 Presidential Election. Importantly, this study was conducted in response to a real-life event opposed to hypothetical scenarios (Greenier, 2018) and thus, may shed light on actual election outcomes.

Defining Schadenfreude and Sympathy

Schadenfreude and sympathy are discrete morally relevant emotions and may occur at the situational (i.e., one's emotional response within a given context) and dispositional level (i.e., one's tendency to feel certain emotions across contexts; Rudolph & Tscharaktschiew, 2014). Both emotions arise in contexts that involve the misfortune of another individual or group (Cikara & Fiske, 2013; Combs et al., 2009; Mackie et al., 2009); however, schadenfreude is considered an undesirable emotion capable of inciting hostility (Cikara & Fiske, 2013; Schumpe & Lafrenière, 2016) and sympathy is argued to be the cornerstone of kindness (Smith, 1759). Researchers who have examined individual differences in schadenfreude have shown that those who experience high levels of envy and/or have low self-esteem also experience high levels of schadenfreude (e.g., Greenier, 2018), whereas higher sympathy has been associated with greater prosociality and agreeableness (e.g., Lee, 2009). There are also prominent gender differences in adults' experiences of these emotions whereby men report feeling more vengeance in schadenfreude-inducing situations (Sawada & Hayama, 2012) and higher dispositional-levels of schadenfreude (e.g., Powell & Smith, 2013, Van Dijk et al., 2015) compared to women. Conversely, women experience higher levels of situational and dispositional sympathy (Christov-Moore et al., 2014). These gender differences may be due, in part, to early gender socialization such that girls are socialized to show more nurturance and care while boys are socialized to be more assertive and competitive (Van der Graaff et al., 2018).

Nature of Schadenfreude and Sympathy: Related Cognitions

According to appraisal theory (e.g., Lazarus, 1991), discrete emotions are qualified by cognitive appraisals (i.e., one's interpretation of a situation). Indeed, individuals' thoughts, beliefs, and dispositions toward a target play a large part in prompting either schadenfreude or sympathy in a given context. For example, when a misfortune is perceived to be deserved, or when the target is disliked, envied, and/or part of one's out-group, an observer is more likely to experience schadenfreude (Cikara et al., 2011; Wang et al., 2019). Recently, researchers have begun to distinguish subtypes of schadenfreude based on the factors that predict its experience in order to determine its nature (i.e., whether it is helpful or harmful) and to understand its social function. Specifically, it is argued that deservingness-based schadenfreude, competition-based schadenfreude, and malice-based schadenfreude are qualitatively different and that these subtypes are associated with divergent behavioral outcomes (see Wang et al., 2019). The experience of sympathy also varies by cognitive appraisals and contextual factors, such that sympathy is likely experienced when misfortunes are perceived to be undeserved and/or when an in-group, cooperative and liked partner suffers a misfortune.

Schadenfreude and Sympathy in Political Contexts

The current political era is characterized by high levels of negativity and partisan rancor. As such, political happiness is often obtained when misfortunes happen to the out-group (Combs et al., 2009; Finkel et al., 2020; Iyengar & Westwood, 2015). Indeed, Webster and colleagues (2021) show that a sizable portion of Americans engage in partisan schadenfreude such that they express joy (not concern) when unfortunate events befall those with whom they disagree politically. Similar findings have been reported regarding political schadenfreude and sympathy in Lebanon (Ash & Dolan, 2021). Combs and colleagues (2009) also showed that the intensity of schadenfreude individuals express following hypothetical misfortunes of political leaders is directly related to political party affiliation (controlling for sympathy), such that the misfortune of a Democratic figurehead (out-group member) sparks high levels of schadenfreude in Republicans but not Democrats (and vice versa). Authors argue that schadenfreude in political contexts is driven by intergroup competition,



mirroring findings from schadenfreude in other competitive intergroup settings such as sports (e.g., Boecker, 2021). Nevertheless, researchers have paid little attention to the cognitive factors that may be associated with participants' experiences of schadenfreude and sympathy, omitting the potential nuances of these emotions.

The Case of Former President Trump's Misfortune

The COVID-19 pandemic was declared on March 11th, 2020 (World Health Organization, 2020). Then, on October 1st, 2020, former President Trump tested positive for COVID-19. The headline of USA Today on October 2nd, 2020 read: "President Donald Trump's coronavirus infection draws international sympathy and a degree of schadenfreude". Although public sympathy and schadenfreude were likely experienced following former President Trump's diagnosis, it remains unclear whether these emotions varied in predictable ways by group membership (i.e., political affiliation and gender). Indeed, even if an outcome or event is objectively negative (e.g., an individual falling ill), it may signal a small political victory for the group that is looking to gain an advantage and as such prompt schadenfreude (Combs et al., 2009). Thus, it is likely that the diagnosis emotionally affected Democrats and Republicans differently because of their partisan beliefs and intentions, which are salient because of the upcoming election. Additionally, because men are more likely to experience schadenfreude compared to women (and vice versa regarding sympathy), emotional reactions within Parties may also have been different.

If schadenfreude and sympathy were experienced following Trump's diagnosis, which cognitive factors prompted these emotions? One possibility is that Americans' schadenfreude in response to the diagnosis was rooted in *deservingness* (i.e., the former President got infected due to his own negligence) because Americans hold leaders accountable for their performance in office during times of crisis (especially when many deaths occur; Ashworth, 2012; Healy & Malhotra, 2013; Warshaw et al., 2020), and because Americans have expressed disapproval of how then-President Trump downplayed and handled the COVID-19 pandemic (Gollust et al., 2020; Summers, 2020). The opposite would be true for feelings of sympathy, such that concern may have been prompted by beliefs of undeserved suffering. Another possibility is that the misfortune may have incited schadenfreude rooted in *malice*, due to former President Trump's low approval rating overall (Keeter, 2021) and/or voters' interpersonal or inter-group dislike for Trump (Lardieri, 2019). Along this vein, Americans' sympathy may have been rooted in care due to interpersonal and intergroup liking (Dunn, 2021). A final possibility, supported by previous research on schadenfreude and sympathy in political contexts (Combs et al., 2009), is that schadenfreude and sympathy may have been driven by *competition*—particularly because this misfortune occurred prior to a competitive event (i.e., the 2020 Presidential Election). In this study, we assess participants' cognitions underlying their feelings of schadenfreude and sympathy to better understand the nature of these emotions in this political context.

Schadenfreude, Sympathy, and Effects on Voting

Emotions are motivating sparks that drive an individual to act (Izard, 1977). In the context of a political campaign, particularly close to an election, all political events (misfortunes or otherwise) are emotionally salient because each event may have implications for the victory or defeat of a political party. As such, emotions such as schadenfreude and sympathy may influence individuals' politically-relevant behavior, such as their voting. It is possible that strong feelings of schadenfreude (and related cognitions) strengthen intentions to vote *against* a candidate, spurring one's own (or others') political actions that perpetuate disadvantages for the out-group (Webster et al., 2021). On the other hand, strong feelings of sympathy may reinforce voting intentions for a candidate.

Here, we assessed associations between schadenfreude and sympathy (affective intensities and related cognitions) and voting intentions prior to the 2020 Presidential Election to garner insight into whether these emotions translate into political behavior or whether they are merely ends in themselves (Hersh, 2017). We examined how individuals anticipated the diagnosis to affect the public's voting intentions in addition to how it would affect their own voting intentions. This is because research shows that individuals may underestimate the effects of the news on themselves compared to others (i.e., third-person effect; Perloff, 1999)—a phenomenon that has recently been demonstrated at the intersection of the COVID-19 pandemic and politics (Yang & Tian, 2021). Further, individuals may be better at anticipating how others will act compared to themselves (Vazire & Carlson, 2011) and, as the Theory of Reasoned



Action posits, because intentions are partly influenced by the (anticipated) behaviors of others and relevant social norms (Fishbein & Aizen, 1977).

The Present Study

Using a quantitative-qualitative approach, the overarching goal of this study was to investigate the American public's schadenfreude and sympathy in response to former President Trump's COVID-19 diagnosis. Due to the temporal proximity of the diagnosis to the 2020 Presidential Election, we were interested in examining how these emotions may influence shifts in voting intentions. We conducted our research five to nine days after news broke of President Trump's COVID-19 diagnosis and 25 to 29 days prior to the 2020 election. We first assessed levels of schadenfreude and sympathy in American voters (overall and by group membership). We hypothesized that both schadenfreude and sympathy would be present in the sample, but that there would be individual differences in these emotions by political affiliation (i.e., higher schadenfreude and lower sympathy in Democrats compared to Republicans; see Combs et al., 2009) and by gender (i.e., higher schadenfreude in men than women, e.g., Powell & Smith, 2013). Our next aim was to investigate the nature of schadenfreude and sympathy. Specifically, we analyzed participants' thoughts about the then-President's diagnosis. We expected cognitive factors related to themes of competition to support schadenfreude, but also expected themes of deservingness and malice to emerge due to former President Trump's negligence surrounding COVID-19 and previous unethical behavior. We anticipated sympathy to be supported by cognitions related to care. Our final aim was to examine whether participants' schadenfreude, sympathy and related cognitions would predict voting shifts (both own intentions and anticipated shifts in public's voting) and which emotions/cognitions would be more strongly associated with shifts. We examined the role of these emotional/cognitive facets in addition to, and separate from, group membership because we were interested in the potential repercussions of these emotions for anyone who experiences them in this sort of political context. We expected a third-person effect, such that individuals would anticipate former President Trump's diagnosis to affect the intentions of the public more than their own. Due to the novelty of our research question, we did not have specific hypotheses regarding relative strength of associations between intentions and emotions/cognitions; however, we broadly anticipated that feelings of schadenfreude and associated malicious cognitions would be associate with shifts to a Democratic vote (both own and public voting shifts) while sympathy and cognitions related to care would prompt anticipated shifts to a Republican vote.

Method

Participants

Five-hundred and six adults residing in the United States who were of legal voting age at the time of this study participated ($M_{\rm age} = 41.69$ years, SD = 13.94; 57% women, 42% men, 1% other gender). Our participants were 74.9% white non-Hispanic (national average is ~62%), 9.1% Black or African American (national average is ~12%), 0.4% Native American or Alaska Native (national average is ~1%), 9.5% Asian (national average is ~6%), 3.8% Latinx or Hispanic (national average is ~19%), 1.8% mixed ethnicity/race (national average is ~3%), 0.2% other (0.4% missing). Regarding political affiliation, 50% of the sample identified as Democrat or leaning Democrat, 24.1% identified as Republican or leaning Republican, 22.0% identified as independent or other affiliation, and 5.0% did not identify as having a political affiliation (national averages are 33% for Democrats, 26% for Republicans, 37% for independents; Pew Research Center, 2018). See Table 1 in the Supplementary Materials for details regarding participant demographics.

Procedure

An online survey was developed and disseminated simultaneously via social media advertisements (Facebook; 2% of participants) and TurkPrime (98% of participants). Although TurkPrime employs features that limit bias in sample representativeness (Litman et al., 2017), we remain cautious in our interpretations of the national representativeness of the sample. The voluntary questionnaire was available for participants to complete from October 6th until October 10th,



2020, to capture the peak of participants' reactions to the diagnosis. Using both open-ended and closed-ended response formats, the survey assessed participants' thoughts and feelings in response to former President Trump's COVID-19 diagnosis, and their opinions regarding how the diagnosis would affect voting behavior in the 2020 Presidential Election. We also collected information about participants' political affiliation, how pervasive the COVID-19 pandemic had been for them, and other demographics (see Table 1 in the Supplementary Materials). Participants were told that completion of the survey was voluntary, and they could skip any (and all) questions they wished. No personally identifying information was collected to maintain anonymity and to discourage responses motivated by social desirability. Participants were compensated for completing the survey.

Measures

Schadenfreude and Sympathy, and Related Cognitions

Schadenfreude and sympathy were measured using a mixed-method approach via open-ended prompts and standardized scale items. We chose a close-ended approach to examine affective components of schadenfreude and sympathy because we were specifically interested in participants' intensities of these emotions and chose to assess supporting cognitions via open-ended questions to allow participants to freely express a range of thoughts as they pertained to the event in question.

Likert Scale Responses — Participants reported the intensity of their feelings of schadenfreude and sympathy in response to President Trump's diagnosis using a 5-point Likert scale ($1 = not \ at \ all \ true$ to $5 = definitely \ true$). Participants were prompted with the statement "when I think of President Trump's coronavirus diagnosis, ...", then asked about their feelings of schadenfreude and sympathy. Five items were used to assess schadenfreude ("I actually enjoy it", "I can't resist a little smile", "it gives me satisfaction", "I feel schadenfreude [i.e., joy at his misfortune]", "I actually have to laugh a little") and six items were used to assess sympathy (e.g., "I feel worried for him", "I feel concerned for him", "I feel sympathy", "I feel compassion", "I think it is uncomfortable", "I would like him to recover quickly") adapted from Van Dijk and colleagues (2015). Items were aggregated across emotions. Cronbach's α for schadenfreude was .96 and for sympathy was .92.

Open-Ended Responses — To understand the nature of participants' schadenfreude and sympathy, we drew from their thoughts about then-President Trump's diagnosis—i.e., "what do you think about the recent news that US President Donald Trump has tested positive for coronavirus?" Participants were free to express as much as they wished about their thoughts on the matter. We employed an open-ended qualitative approach here because this approach allows for a rich understanding of the complex reality and the meaning of emotions or actions in-context (Queirós et al., 2017). Responses were coded using thematic analysis (see Coding and Reliability section below) and the presence (1) or absence (0) of themes were quantified into binary variables for analyses.

Anticipated Shifts in Voting Intentions

Participants reported whether they believed the diagnosis would affect their own and the public's voting intentions using 5-point Likert scales (1 = definitely yes to 5 = definitely not; see Inbar et al., 2012 for similar approach). Specifically, the questions read: "Has the diagnosis affected how you will decide to vote on Election Day?" and "Do you think the President's diagnosis will affect how the public will decide to vote on Election Day (November 3rd, 2020)?" If participants selected "definitely yes" or "probably yes" to the above questions, they were asked "In which direction has the diagnosis swayed [your/the public's] vote?" and selected whether their vote or the public's vote would be swayed toward the Democratic party, Republican party, a different party, or toward not voting at all. Participants were also asked why the diagnosis has or has not swayed their vote and the public's vote to understand why they anticipated shifts.



Political Affiliation

Participants reported their political affiliation by selecting whether they were Democrat, leaning Democrat, Republican, leaning Republican, Independent, other, or no political affiliation. Democrat and leaning Democrat responses, and Republican and leaning Republican responses were combined for analyses (see Participants section for distributions) to simplify our findings and because there were no differences between leaners and partisans in our main study variables within preliminary analyses.

Pervasiveness of COVID-19 (Control Variable)

We asked participants to report whether they and/or someone in their social circle had been diagnosed with COVID-19 as recent research has shown that schadenfreude may be influenced by attitudes about the COVID-19 pandemic (Webster et al., 2021) and individuals may experience sympathy if they have personal experience dealing with COV-ID-19. Options included: "I have been diagnosed", "one of my relatives has been diagnosed", "one of my friends has been diagnosed", "an acquaintance or co-worker has been diagnosed", or "no, I have not been diagnosed or do not know anyone who has been diagnosed". Participants could select all options that applied. Responses were binary coded for analyses and sum scores were calculated to assess the magnitude of impact individuals have faced (0 = has not been impacted to 4 = has been impacted in all ways). We assessed extent of exposure as we anticipated that the prominence of the virus within one's life may be more likely to influence their emotions and attitudes about others getting infected.

Coding and Reliability

Open-ended responses (thoughts regarding former President Trump's diagnosis and reasoning for anticipated voting behavior shifts) were coded using thematic analysis. We extracted themes from a subset of the data (inductive category development) until no new themes emerged to create coding schemes. Two independent raters then coded 20% of the data for inter-rater reliability. Discrepancies amongst coders were discussed and resolved prior to the final coding. Cohen's κ was .88 for cognitions and was .90 (own voting) and .94 (public's voting) for participants' reasoning behind anticipated shifts in voting behavior. The coding schemes are included in Tables 2 and 3 in the Supplementary Materials.

Data Analytic Strategy

Descriptive analyses were first conducted across our main study variables. We focused on Republicans and Democrats in our analyses as there are clearer distinctions between these two political groups (compared to Independents) and previous research has focused on these two groups in their investigation of schadenfreude and sympathy (see Combs et al., 2009). Next, a repeated-measures ANCOVA was employed to investigate within-subjects differences in emotion (schadenfreude and sympathy; dependent variable) by political affiliation, gender, and affiliation by gender (controlling for age, race/ethnicity [white =1] and pervasiveness of COVID-19). To understand the potential nature of schadenfreude and sympathy, frequencies and group differences in cognitions were tested. Then, we conducted a MANCOVA with schadenfreude and sympathy as our dependent variables (to account for their correlation) to investigate mean differences in schadenfreude and sympathy by cognitions (deservingness, malice, care; independent dichotomous variables). We controlled for age, gender (women = 1), race/ethnicity (white = 1), political affiliation (Democrat = 1), and pervasiveness of COVID-19. Patterns in participants' own and anticipated voting intentions of the public were examined (overall and by political affiliation) via a repeated-measures ANOVA. Finally, we conducted a binary logistic regression in Mplus (Muthén & Muthén, 2017-2021) using the maximum likelihood robust to non-normality estimator to investigate whether emotions (schadenfreude or sympathy) and/or related cognitions (deservingness, malice, care) influenced anticipated shifts in voting (dependent variable) above and beyond group characteristics. We employed post-stratification weighting (raked weights) to reflect US population rates of political affiliation and gender in our regression analysis.



Results

Preliminary Analyses

Table 1 presents means, standard deviations, and correlations between our main study variables. The proportion of participants who reported being white (versus non-white [or mixed race] participants) differed by political affiliation, such that more non-white individuals reported being affiliated with the Democratic Party than the Republican Party and more white individuals reported being affiliated with the Republican Party than the Democratic Party, $\chi^2(1, N = 373) = 6.09$, p = .014. There were no differences in gender between political parties. Regarding pervasiveness of COVID-19, correlations show a marginally positive correlation between schadenfreude and pervasiveness of COVID-19 (p = .060) and a negative correlation between related cognitions of malice and pervasiveness (p = .041).

Table 1Means (Standard Deviations) and Correlations of Study Variables Overall and by Political Affiliation

	Overall (N = 506)		Democrats (n = 251)		Republicans (n = 122)									
Variable	М	SD	M	SD	M	SD	1	2	3	4	5	6	7	8
1. Schadenfreude	2.62	1.39	3.13	1.28	1.64	1.06	-							
2. Sympathy	2.96	1.24	2.52	1.13	3.94	0.95	70***	-						
3. Deservingness	42%	49%	54%	50%	21%	41%		32 ^{a***}	-					
4. Malice	5%	22%	5%	21%	2%	13%	.21 ^{a***}	19 ^{a***}	20 ^{b***}	-				
5. Care	16%	36%	7%	25%	34%	47%	32 ^{a***}	$.40^{a^{***}}$	37 ^{b***}	10 ^{b*}	-			
6. Voting intentions (own)	1.64	1.25	1.71	1.32	1.59	1.17	.06	.05	00 ^a	$.10^{a^{\star}}$	$.04^{a}$	-		
7. Voting intentions (public)	3.09	1.14	3.34	1.08	2.81	1.17	.30***	19***	$.12^{a^{**}}$	$.10^{a^{\star}}$	12 ^a **	.33***	-	
8. Pervasiveness of COVID-19	0.83	0.88	0.96	0.84	0.59	0.78	.08	02	$.01^{a}$	10 ^{a*}	02 ^a	05	01	_
9. Age	41.69	13.94	41.56	14.64	44.29	13.41	13**	.14***	$.12^{a^{**}}$	07 ^a	.05 ^a	04	10*	08

Note. Means of Deservingness, Malice, and Care variables are displayed as percentages. Voting intentions reflect the extent to which the diagnosis has affected one's own and the public's voting intentions (scale from 1 to 5).

Emotion by Political Affiliation and Gender

On average, participants reported significantly higher levels of sympathy than schadenfreude, F(1, 365) = 54.617, p < .001. When examining group differences in emotion, as predicted, we found a significant effect of emotion by political affiliation, F(1, 365) = 153.475, p < .001, $\eta_p^2 = .30$, and effect of emotion by gender, F(1, 365) = 5.45, p = .020, $\eta_p^2 = .015$. That is, Democrats reported higher intensities of schadenfreude than sympathy (the reverse pattern was true for Republicans) and men reported higher intensities of schadenfreude than women (there was no significant gender difference in sympathy). These effects were further qualified by a significant emotion by political affiliation by gender interaction, F(1, 365) = 7.15, p = .008, $\eta_p^2 = .02$ (see Figure 1). Specifically, Republican men reported higher schadenfreude than women (p = .002) and lower sympathy than Republican women (p = .028). A gender difference in emotion was not found amongst Democrats.

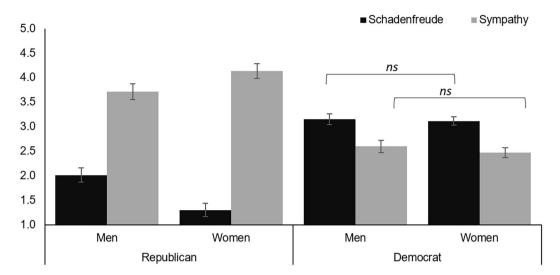


^aPoint-biserial correlations. ^bPhi coefficient.

p < .05. p < .01. p < .01. p < .001.

Figure 1

Intensity of Schadenfreude and Sympathy by Political Affiliation and Gender



Note. ns = non-significant. Non-significant effects are marked. All other group comparisons are statistically significant at least below p < .05.

The Nature of Schadenfreude and Sympathy: Associated Cognitions

We found various themes within participants' thoughts about then-President Trump's COVID-19 diagnosis. As expected, a substantial portion of the sample (43%) reported that they thought former President Trump *deserved* his COVID-19 diagnosis. Sixteen percent expressed *care* for his welfare. Surprisingly, only a small proportion (5%) expressed *malice* toward the President. Contrary to previous research (e.g., Combs et al., 2009), we did not find any themes of competition between political parties (e.g., expected repercussions of the diagnosis on the election). To address potential motivations for schadenfreude and sympathy present in the sample, we tested associations between the themes present in participants' open-ended responses and the degree of schadenfreude and sympathy reported on the scale items. We found main effects of deservingness (Pillai's Trace = .07, p < .001), malice (Pillai's Trace = .06, p < .001), and care (Pillai's Trace = .04, p = .002) on these two emotions. Specifically, participants who expressed thoughts that then President Trump deserved his diagnosis, F(1, 363) = 22.43, p < .001, $\eta_p^2 = .06$, and those who expressed malice toward him, F(1, 363) = 20.18, p < .001, $\eta_p^2 = .05$, reported higher levels of schadenfreude than those who did not report these thoughts. Conversely, as expected, we found opposite trends in sympathy by deservingness, F(1, 363) = 14.91, p < .001, $\eta_p^2 = .04$, and malice, F(1, 363) = 11.34, P = .001, $\eta_p^2 = .03$, showing that those who did not report these themes reported more intense sympathy. Those who expressed care for the then-President reported higher sympathy than those who did not, F(1, 363) = 12.62, P < .001, $\eta_p^2 = .03$; no differences in schadenfreude by care were found.

Influence of Trump's COVID-19 Diagnosis on Anticipated Voting Intentions

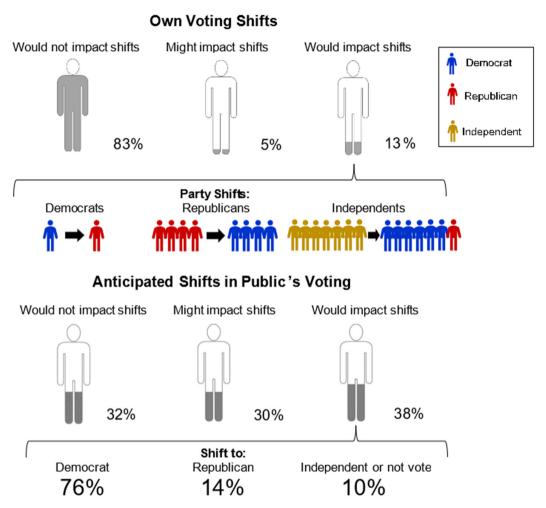
Participants were more likely to report anticipating shifts in the public's voting than shifts in their own voting in response to Trump's COVID-19 diagnosis, F(1, 366) = 337.47, p < .001, $\eta_p^2 = .48$. We found an intentions by political affiliation interaction, F(1, 366) = 6.33, p = .012, $\eta_p^2 = .02$, such that Republicans and Democrats did not differ in anticipating their own voting shifts, but Democrats were more likely to anticipate the public's voting to shift due to the diagnosis, F(1, 366) = 17.24, p < .001, $\eta_p^2 = .05$.

See Figure 2 for a graphical representation of the summary of our findings regarding shifts in own versus public's voting intentions by political affiliation. Regarding own voting shifts, the majority of the sample (83%; n = 395) reported that the diagnosis would "definitely not" or "probably not" impact how they personally would decide to vote; only 13% (n = 61) stated that the diagnosis would "definitely" or "probably" affect their vote, and 5% (n = 23) were unsure whether it would affect their vote. When examining changes in voting by political party, of the 61 individuals who indicated the



diagnosis would impact their voting, 12 participants (0.02% of total sample) reported cross-party shifts in voting (i.e., changes in voting from one party to another). Specific Party shifts are denoted in Figure 2.

Figure 2
Summary of Anticipated Shifts in Participants' Own Voting and Public's Voting Intentions



Note. Only those who expressed Party shifts in their own voting are depicted in the Own Voting Shifts section. Within the Party Shifts section, one character depicts one participant.

Regarding participants' anticipated shifts in the public's vote, 32% (164 participants) reported that the diagnosis would not change voters' decisions, 30% (150 participants) reported that it might or might not change their opinions, and 38% (192 participants) believed that it would influence the public's voting decisions. Of those who believed it would change voting, 76% (n = 145) reported that voters would be more inclined to vote for the Democratic Party (most were Democrats, 66%) and 14% (n = 27) believed that voters would be more inclined to vote for the Republican Party (59% of whom were Republicans). When assessing reasoning behind voting, most (54%) expressed that the diagnosis would help voters realize that the President has been ineffectively handling the pandemic. For example, one participant stated:

"I think it won't change 90% of Americans minds because I believe that many people have been decided about their vote for the past 4 years but for the 10% who are undecided, I do think it will sway them to look at his handling of the virus."



Schadenfreude, Sympathy, Related Cognitions and Links With Voting Shifts

We could not assess own voting intentions due low variability in reports. Nevertheless, we examined how the intensity of schadenfreude and sympathy and participants' related cognitions were associated with predicting shifts in voting intentions of the public, and which of the two were more strongly associated with anticipated shifts (see Table 2). We found that sympathy and schadenfreude were not significantly associated with anticipated shifts in voting. Amongst cognitions, however, those who believed Trump deserved his misfortune were four times more likely to anticipate shifts in the public's voting in favor of the Democratic party.

 Table 2

 Logistic Regression Predicting Public's Voting Shifts to Democratic Party

Variable				95% CI for OR		
	Estimates	SE	OR	LL	UL	
Controls						
Age	0.06**	0.02	1.06	1.02	1.10	
Race/Ethnicity	-0.38	0.56	0.68	0.23	2.04	
Gender	-1.17*	0.52	0.31	0.11	0.86	
Pervasiveness of COVID-19	-0.31	0.24	0.73	0.46	1.17	
Political Affiliation	1.38*	0.58	3.99	1.27	12.51	
Main Predictors						
Schadenfreude	-0.41	0.29	0.67	0.43	1.03	
Sympathy	-0.52	0.24	0.60	0.34	1.06	
Deservingness	1.39*	0.62	4.02	1.19	13.57	
Malice	1.48	1.25	4.41	0.38	50.66	
Care	0.44	0.60	1.55	0.48	5.00	
R^2	0.43					
N	148					

Note. Gender was coded as men = 0, women = 1; race/ethnicity was coded as white = 1; political affiliation was coded as 0 = Republican, 1 = Democrat. Deservingness, Malice, and Care are dichotomous predictors (1 = presence of respective reasoning). Voting behavior was coded as 0 = shift to Republican, 1 = shift to Democrat.

Abbreviations: SE = standard error; OR = odds ration; CI = confidence interval; LL = lower limit; UL = upper limit. *p < .05. **p < .01.

Discussion

This study is one of the first to examine participants' reports of schadenfreude and sympathy, and related cognitions, following a real-life misfortune of a political leader and associations between these emotions, related cognitions, and anticipated voting behavior. This study demonstrated that, unsurprisingly, American voters' schadenfreude and sympathy in response to former President Trump's COVID-19 diagnosis varied by political affiliation and gender; however, participants' emotional expressions of schadenfreude were tempered and not driven by competitive concerns. Rather, feelings of schadenfreude were driven by concerns of deservingness and only a small proportion was driven by malice. Further, we found that these emotions and associated cognitions influenced how Americans anticipated the public to vote in the upcoming presidential election. Ultimately, this work highlights the intersectionality of research on emotion, morality, and political decision-making and may have implications for politicians, political scientists, and psychologists who aim to understand partisanship and pre-election political behavior.

In terms of schadenfreude and sympathy in response to former President Trump's COVID-19 diagnosis, our findings showed that individuals tended to report higher intensities of sympathy than schadenfreude. This finding may reflect individuals' proclivity to mask schadenfreude with mock concern—particularly surrounding events that affect public



figures (Combs et al., 2009). Unsurprisingly, Democrats reported higher levels of schadenfreude than Republicans (who by comparison reported higher intensities of sympathy). This bolsters the notion that schadenfreude and sympathy are prominent intergroup emotions (Cikara & Fiske, 2013) and may play an important role in partisanship (e.g., Hibbing et al., 2014; Inbar et al., 2012). This finding also corroborates research showing that voters have divergent moral emotional responses (e.g., anger, contempt, disgust) to moral violations when they share party identity with a politician (Combs et al., 2009; Walter & Redlawsk, 2021). It is worth mentioning that differences in schadenfreude and sympathy by political affiliation may have been due to reporting bias. That is, research shows that conservatives have a stronger tendency to evaluate the self more favorably than liberals (Wojcik et al., 2015). In the context of our study, this may have resulted in dampened schadenfreude (an unfavorable emotion) and exaggerated sympathy (a favorable emotion) amongst Republicans.

Unlike previous research (e.g., Combs et al., 2009) intensities of schadenfreude were minimal amongst Democrats in this sample. This may be because misfortune severity attenuated schadenfreude, such that participants perceived a COVID-19 diagnosis to be too severe to merit schadenfreude. Nevertheless, tempered schadenfreude may have still served an important function. As Pierce (2020) argues, the purpose of Americans' schadenfreude in response to the former Presidents' diagnosis may have been to restore emotional symmetry in the public by relieving individuals of their anger stemming from his downplaying of the virus. In cases where political leaders do not take responsibility for the injustices they have perpetuated, schadenfreude may relieve individuals of previously harbored negative emotions.

We also found an expected gender difference in schadenfreude and sympathy such that, on average, men reported more intense schadenfreude and less intense sympathy compared to women (Conejero et al., 2014). Unexpectedly, this gender effect differed by political affiliation such that Democrat men and women expressed similar levels of schadenfreude and sympathy while Republican men reported higher schadenfreude and less sympathy than Republican women (see Figure 1). One possible explanation is that Democrat women may have been strongly affected by Trump's history of misogynistic epithets, which, in turn, might have incited more schadenfreude and less sympathy than expected in response to his diagnosis (Jurkowitz & Mitchell, 2020). Nevertheless, more research is required to understand this unexpected gender by political affiliation effect.

A large proportion of the sample (more Democrats than Republicans) reported that Trump's diagnosis was deserved, expressing that the former President downplayed the severity of COVID-19 and thus received his just deserts (Gollust et al., 2020). Unexpectedly, only a small percentage of participants expressed malice. It is possible that social desirability also played a role, such that participants may not have revealed their dislike for the President in light of his diagnosis. As expected, both deservingness and malice were positively associated with feelings of schadenfreude. Surprisingly, no themes of competition were expressed, despite this misfortune occurring prior to an election. This may be because both groups were relatively confident in their own Party's standing prior to the election and thus did not expect the diagnosis to affect their Party's overall standing. Care was also a prominent cognition expressed and was positively associated with feelings of sympathy, which bolsters the other-oriented, prosocial nature of sympathy for a suffering other (Batson, 1991).

Regarding our final research aim, we found that voters were much more likely to believe that former President Trump's diagnosis would impact how the public would vote in the election (~1/3 of the sample) than it would impact their own voting (1/10 of the sample). Lack of anticipated shifts in own voting may be because participants were already set on who they were voting for prior to former President Trump's misfortune, and thus believed they were less swayed by the event (Pronin, 2007). As expected, the majority of participants in this study who anticipated changes in the public's voting expected more people to vote for the Democratic Party because, as expressed in participants' qualitative responses, they believed the diagnosis would help others realize that former President Trump had mismanaged the pandemic. This is in line with previous research regarding decreases in support for former President Trump and the Republican Party due to their handling of the pandemic (Warshaw et al., 2020).

Examining how individuals expect others to behave may indirectly provide important information about individuals' own behavioral intentions. Research on the third-person effect (see Perloff, 1999) has shown that the media and news influence those who anticipate reactions on the part of third persons. Our findings support the notion that individuals can and do separate perceptions of how political events impact others and the self by reporting greater anticipated shifts in others' versus own voting. This effect may be explained by biased optimism, such that people judge themselves less



likely than others to experience negative consequences—in this context, they may be less likely to believe one event could cause them to waiver in their political beliefs (Gunther & Mundy, 1993). Additionally, individuals are sometimes better at anticipating how others will behave than how they themselves will behave (Vazire & Carlson, 2011), and may inaccurately estimate whether they will vote in an election (Epley & Dunning, 2000). Further, there is evidence showing that individuals consider how they expect others to behave when deciding how they will behave (Gerber & Rogers, 2009). Taken together, it is possible that our measure of others' voting intentions may be a window into the mechanisms underlying individuals' own voting behavior in the 2020 election.

We did not find an effect of schadenfreude (nor sympathy) on how participants expected the public to vote. We did, however, find that schadenfreude-related cognitions pertaining to deservingness were related to anticipated shifts toward the Democratic Party. Recently, researchers have argued that feelings of schadenfreude in political contexts might not have strong direct links to behavior (perhaps only at high levels of partisan schadenfreude, see Webster et al., 2021)—rather, it is argued that schadenfreude may catalyze action through communication. Individuals who experience schadenfreude are likely to express it, which may in turn influence what others think and how they feel about the target of schadenfreude (Crysel & Webster, 2018; Dasborough & Harvey, 2017). This may be particularly true for schadenfreude rooted in deservingness because this type of schadenfreude is more likely to be communicated (particularly if the victim is a figurehead; Dasborough & Harvey, 2017). As a result, these messages are likely to go viral, be "caught" by others, and change the course of political events (Brady et al., 2017). As evidenced by the 30,500% increase in searches for the word "schadenfreude" following former President Trump's diagnosis (Merriam-Webster Dictionary, n.d.), American voters' feelings of schadenfreude may have indeed been spread through communication (online or otherwise) and influenced others' opinions, feelings, and possibly their voting intentions.

Limitations and Future Directions

This study has some limitations and important future directions. First, we gathered self-reports of emotions and thus could not account for how partisanship may affect the ways in which participants responded to our questionnaire items. Multi-method research is needed to better assess schadenfreude, and disentangle partisanship and social desirability from emotion reporting. Similarly, we only measured voting intentions. Future research would benefit from examining voting intentions and actual voting behavior to assess the true impact of salient political events on election outcomes. We also did not measure participants' dispositional characteristics related to schadenfreude and sympathy (e.g., just-world beliefs, justice-sensitivity, competitiveness). These traits may help us better understand why individuals express certain types of schadenfreude. Future research may also consider other relevant emotions such as anxiety and moral outrage in response to political events, as these emotions have been associated with political behavior. It would also be beneficial to measure potential mediators in the relation between schadenfreude/sympathy and voting intentions, including mobilization and communication of emotion. Further, a larger sample collected within the U.S. and internationally (via various recruitment methods) would provide insight into regional differences in responding to emotionally evocative political events. Finally, it would be beneficial to gather more data from voters of various races/ ethnicities in order to assess racial/ethnic variation in interpretations and reactions to President Trump's COVID-19 diagnosis. This is an important future direction due to differences in political attitudes and affiliation by race/ethnicity (Schildkraut & Marotta, 2018).

Conclusion

The COVID-19 pandemic ravaged the United States, forcing Americans to turn toward leadership for protection. How then-President Trump responded to and was personally affected by the pandemic likely influenced Americans' emotions, beliefs, and political decision-making prior to the 2020 Presidential Election. This research highlights the complexity of political decision-making in times of crisis and underscores the importance of considering Americans' thoughts and emotions when investigating reactions to political events.



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Supplementary Materials

The Supplementary Material includes participant demographic information (Table 1), the coding scheme we developed to code for themes in participants' cognitions related to schadenfreude and sympathy (Table 2), and a coding scheme we developed to analyze participants' reasons for anticipated shifts in voting (Table 3) (for access see Index of Supplementary Materials below).

Index of Supplementary Materials

Peplak, J., Klemfuss, J. Z., & Ditto, P. H. (2022). Supplementary materials to "Schadenfreude and sympathy following President Trump's COVID-19 diagnosis: Influence on pre-election voting intentions" [Participant demographics and coding schemes]. PsychOpen GOLD. https://doi.org/10.23668/psycharchives.7756

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