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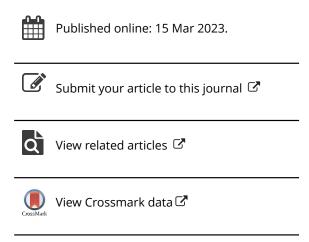
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On pins and needles: anxiety, politics and the 2020 U.S. Presidential election

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ABSTRACT

Contemporary U.S. politics is characterized by a high degree of political polarization and conflict. Consequently, scholars have become increasingly interested in understanding how political factors and events impact different dimensions of health, such as anxiety. Using data from a nationallyrepresentative, two-wave panel survey conducted before and after the 2020 U.S. presidential election, we develop a measure of political anxiety and examine how levels of political anxiety changed following the election. In general, we find that levels of political anxiety decreased following the presidential election. We then examine individual-level factors that influence post-election levels of political anxiety. Those who are highly politically engaged, interested in politics, and who score highly on negative emotionality felt more political anxiety than their counterparts after the election. Those who voted for Donald Trump, conservatives, and African Americans reported feeling less political anxiety than their counterparts following the election. Our findings regarding vote choice and ideology are somewhat surprising in light of previous research on the impact of electoral loss. We conclude with a discussion of what might be driving some of our counterintuitive results and provide ideas for future research.

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Introduction

High levels of political polarization and conflict have motivated scholars to produce a rapidly growing literature on the effects of politics on psychological and even physical health (e.g. Gonzalez, Ramirez, and Paz Galupo 2018; Stanton et al. 2010; Nayak et al. 2021; Panagopoulos et al. 2021; Fraser et al. 2022; Yan et al. 2021; Rosman et al. 2021; Morey et al. 2021; Smith 2022; Smith, Hibbing, and Hibbing 2019). Part of that effort has focused on anxiety, which in severe forms can lead to anxiety disorders, and even in

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milder, non-pathological forms, is known to influence attitudes and behavior, including in the political realm (e.g. Wagner and Morisi 2019; Marcus and MacKuen 1993). Politics is increasingly recognized as a proximate cause of anxiety for large numbers of people. A September 2020 survey by the American Psychological Association, for instance, found that 72% of Americans reported being extremely or somewhat anxious about the upcoming presidential election, 61% were extremely or somewhat anxious about "the impact of politics on my daily life," and 51% were extremely or somewhat anxious about "discussions about the 2020 election at work or in my personal life."² The potentially negative health effects of such high rates of "political anxiety" prompted the APA to provide a list of evidence-based advice to help people manage stress and anxiety related to politics.³ In short, evidence suggests that politics is a widespread cause of anxiety for large numbers of American adults, and the problem is severe enough that it may not only be influencing social attitudes and behaviors, but also negatively impacting psychological or mental health.

Those stakes highlight the importance of the key goals of this study: To better understand politically-related anxiety and its correlates and to assess how within-individual political anxiety changes in response to shifts in the political environment. Accordingly, we have two specific goals. First, we seek to construct and validate a multi-item general measure of political anxiety. Second, we seek to assess how levels of political anxiety changed in response to a major political event - the 2020 U.S. presidential election. We do so using a two-wave panel survey conducted pre- and post-election, first examining aggregate data on how average levels of political anxiety compared in the weeks immediately before and after the election and, second, by investigating the individual-level factors associated with changes. We find that several demographic, personality, and political variables have statistically significant effects on changes in levels of reported political anxiety.

We proceed as follows. In the next section, we provide an overview of previous research on anxiety and politics. We then discuss our expectations about factors that may be related to feelings of political anxiety around elections. Next, we provide an overview of our data and measures and then turn to an analysis of our empirical results. Finally, we conclude

¹Interestingly, during and after the 2016 and 2020 presidential elections, many media outlets published stories on the development of political or election anxiety. See, for example: https://www.nbcnews. com/better/lifestyle/election-stress-disorder-how-cope-anxiety-political-tensions-intensify-ncna1146951, or https://www.vox.com/science-and-health/2016/10/13/13259938/election-stress-aniexty-ahhh-poll, or https://time.com/4299527/election-mental-health/, or https://www.gq-magazine.co.uk/lifestyle/article/ political-anxiety-disorder

²https://www.psychiatry.org/newsroom/apa-public-opinion-poll-2020

³https://www.apa.org/news/press/releases/2020/10/election-stress



with several ideas for future researchers interested in studying political anxietv.

Previous research & expectations

Anxiety is defined as an emotional state where "individuals appraise a situation as being unpleasant, highly threatening, and uncertain" (Gadarian and Albertson 2014, 134). Like other emotional states – enthusiasm, disgust, anger, etc. – anxiety has been linked to political attitudes and behaviors (Brader 2005, 2006; Marcus 2002; Marcus and MacKuen 1993, 2001; Ladd and Lenz 2008; Albertson and Gadarian 2015). For example, several studies find anxiety increases the amount of information individuals seek out and decreases their reliance on predispositions (e.g. party identification) and heuristics when making political judgments (Marcus and MacKuen 1993; Redlawsk, Civettini, and Lau 2007; MacKuen et al. 2010; Marcus, Russell Neuman, and MacKuen 2000; Albertson and Gadarian 2015; Clifford and Jerit 2018).

While its relevance to political cognition is broadly recognized, as far as we are aware, there is no standardized approach to measuring politically-related anxiety. Instead, scholars have used a number of measurement approaches. One approach, used mostly in experimental studies, is to induce anxiety, e.g. by asking subjects recollect a situation that made them anxious, or to write a response to a stimulus designed to trigger anxiety. Such efforts to induce anxiety are not necessarily linked to anything political, though we note that some scholars have used political objects (e.g. campaign ads) to induce anxiety (Wagner and Morisi 2019; Searles and Mattes 2015). In survey-based research, anxiety is typically measured by simply asking respondents whether some person or issue makes them feel anxious (e.g. a candidate, the president, immigration, crime, etc.; see Ladd and Lenz 2008; Mutz 2021; Fitzgerald, Amber Curtis, and Corliss 2012). While this approach links anxiety to the political realm, it does so in a highly specific way.

Rather than inducing anxiety or focusing on a specific issue or person as a source of anxiety, we instead seek to develop a general measure of anxiety about politics. Our aim is to index the degree to which a range of features and situations commonly associated with the contemporary political environment – polarization and conflict, the lack of interest in politics by ordinary people, etc. - make people anxious. Having constructed that index, we want to isolate the individual traits associated with it, and how levels of anxiety do or do not respond to a highly salient political event. This approach contrasts with most of the existing studies on anxiety and politics which use anxiety as an independent variable to predict variation in political behavior (e.g. vote choice, information gathering). Our focus is on anxiety as a dependent variable.

Though we focus on the causes (or at least predictors) of politically related anxiety rather than its consequences, the existing research provides a rich source of insights into what individual-level characteristics predict both levels of and changes in political anxiety. As a starting point for exploring the underpinnings of political anxiety, we borrow from the personality psychology literature a conceptual distinction between "traits" and "states." According to Schmitt and Blum (2020), "Traits are characteristic patterns of thinking, feeling, and behaving that generalize across similar situations, differ systematically between individuals, and remain rather stable across time. States are characteristic patterns of thinking, feeling, and behaving in a concrete situation at a specific moment in time." We expect considerable individual-level variation in political anxiety, on the assumption that it can manifest as a trait and a state. We expect some individuals are simply more predisposed to chronic anxiety, and that political anxiety in some sense will function as a trait-like emotional state similar to (and perhaps an extension of) the broader personality trait of negative emotionality (neuroticism), which "refers to individual differences in the propensity to experience and react with negative emotions, such as sadness, anxiety, fear and anger" (Kann et al. 2017, 1511). Conceptually, our primary measurement is more focused on state anxiety, i.e. anxiety triggered by the circumstances of the current political environment. Politically-specific state anxiety will almost certainly reflect, at least in part, underlying individual-level predispositions toward anxiety generally (see Baker 2020). What we seek to construct, however, is a valid measure of political anxiety that covaries with salient events. In other words, the analytical target is to capture anxiety particularly tied to the political environment at a given time. A valid measure developed for such purposes should capture the wax and wane of states of politicallyrelated anxiety that change as circumstances in those environments shift.

To achieve this objective, we leverage the 2020 U.S. presidential election, a highly salient political event that existing evidence suggests was a significant source of anxiety for many American (APA 2020). Our initial hypothesis is that this event was likely to increase levels of politically-related anxiety among those who were attentive to the election, knowledgeable about the stakes, and were invested in the outcome, concepts that we operationalize in our analysis using measures of political participation, political interest, and political knowledge. The basic idea here stems directly from existing research that suggests being highly aware of and invested in an outcome that is uncertain and potentially unwelcome will promote anxiety (Baker and Nofsinger 2010).

For similar reasons, we are also interested how partisan and political attachments may be related to anxiety. In any presidential election, one side inevitably loses. Especially after the outcome is known, the losing side may be particularly vulnerable to appraising the political environment as "unpleasant, highly threatening, and uncertain" (Gadarian and Albertson

2014, 134). This may be particularly the case given the unusual circumstances immediately following the 2020 election, which was unprecedented in the sense that the loser not only declined to concede but actively supported a narrative that the election was illegitimate. To investigate these hypotheses, we use three related variables – presidential vote choice, political ideology, and political partisanship. According to research on social identity theory, political orientations like partisanship, ideology, and candidate support are genuine identities and people generally feel the need to protect and advance their identities (Huddy 2001; Huddy and Bankert 2018; Greene 2004). According to Huddy and Bankert (2018), an "internalized sense of partisan identity means that the group's failures and victories become personal" (5). Research by psychologists has repeatedly found that threats to identity can lead to negative responses among those who perceive or experience a threat, such as decreased self-esteem and even discrimination against out-group members (Scheepers, Ellemers, and Sintemaartensdijk 2009; Scheepers and Ellemers 2005). Johnson et al. (2011) found that perceptions of defeat are associated with psychological issues, including depression and anxiety. Given this, our expectation is that Trump voters, conservatives, and Republicans will report feeling greater political anxiety following the 2020 presidential election than Biden voters, liberals, and Democrats, respectively. This expectation is also consistent with research in political science on the effects of electoral loss (Pierce, Rogers, and Snyder 2016; Gerber and Huber 2010), which shows that when one's preferred party or candidate loses, people generally report more negative feelings than the winners on a variety of dimensions (e.g. lower levels of happiness or well-being, worse perceptions of the state of the economy, etc.).

Finally, we are interested in the role of several demographic attributes in shaping feelings of political anxiety. We are especially interested in the role that age, race, and gender play in influencing feelings of political anxiety. Regarding age, our expectation is that younger people will report higher levels of post-election anxiety than older people. This expectation is anchored in recent research by Smith (2022) finding that younger people were more likely than older people to report negative health impacts from politics. One possibility is that because younger people tend to be the most active on social media (Pew 2021) and are constantly inundated with stories, ads, and information about the current state of politics, they will be the most likely to feel overwhelmed and anxious. Similarly, Smith also reported some the possibility of gender effects on self-reports on the negative impact of politics. Though the evidence was mixed and the effect sizes relatively small, males seemed to be somewhat more likely to report experiencing negative health effects attributed to politics. Smith also reported effects by race, though puzzlingly these suggested that Blacks were somewhat less likely to report negative psychological and emotional health impacts attributed to politics. Given the Trump administration's rocky

record on race and race relations (McClain 2021; Jacobson 2020) and the overwhelming support for the Democratic candidate by Black voters, we hypothesize that the election would decrease general levels of political anxiety among this demographic group.

Data & Measures

To study political anxiety, we use a panel survey conducted by YouGov before and after the 2020 presidential election. During the first wave, fielded between October 20-22, 2020, YouGov interviewed 834 respondents who were then matched down to a sample of 700.4 During the second wave, fielded between November 16-30, 2020, respondents who completed the first wave of the survey were recontacted for participation in the post-election survey. In total, 618 people completed both waves of the survey.⁵

In both waves, respondents were asked an identical set of items probing the extent to which various aspects of the political environment make them feel anxious. Specifically, respondents were asked about the following eight situations: (1) The election of a disliked candidate or political party, (2) The level of polarization and conflict in the current political climate, (3) That the American public is insufficiently informed about politics, (4) That you care too much about politics, (5) That you are insufficiently informed about politics, (6) The poor quality of political leaders/candidates, (7) The uncivil nature of modern politics, (8) The extent to which ordinary people are disinterested in politics. Responses to were recorded on a 1-10 scale where 1 corresponds to "no anxiety at all" and 10 corresponds to "a great deal of anxiety." These items were selected in an attempt to tap into anxiety individuals associate specifically with the contemporaneous political environment. While item construction was guided by the goal of specificity with regard to politics, the approach was also designed to be general enough to be relevant to any political environment. We deliberately avoided using items that were tied to a particular set of environmental circumstances (e.g. we did not ask about anxiety related to claims of election fraud surrounding the 2020 election). In keeping with our primary focus on state-related anxiety, the idea was to produce a valid instrument capable of indexing politically-related anxiety that would vary within individuals across time as the political environment changes. Psychometrically, these items scaled well, with high levels of

⁴The respondents were matched to a sampling frame on gender, age, race, and education. The frame was constructed by stratified sampling from the full 2017 American Community Survey (ACS) 1-year sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file).

⁵YouGov provides a weight to correct for any imbalances in the sample. Our analyses make use of the sampling weight.

⁶We recognize that other scholars may construct similar measures using alternative items, and we encourage refinements along these lines in extensions of this work.

internal consistency. The Cronbach's alpha score for the wave 1 items is 0.89, and it is 0.91 for the wave 2 items. Accordingly, we generated an overall political anxiety scale based on the eight items within each survey wave (scaled from 1-10). The wave 1 and wave 2 political anxiety scales correlate with each other at r = 0.69. This correlation suggests a fairly high degree of stability but also significant within-individual variation – scores on the political anxiety scale two weeks before the election explain slightly less than 50 percent of the variance in the same scale two weeks after the election. We take this as prima facie evidence not only that the items scale well (they are internally consistent), but that the index is capturing state- as well as trait-related anxiety (levels substantively change in response to a politically-salient event).

Respondents were also asked a variety of questions about their personality traits, demographic attributes, levels of political engagement, and political orientations. All of these measures (except 2020 presidential vote choice) were collected in Wave 1 of the survey. To capture individual-level predispositions to anxiety, i.e. political anxiety as an expression of a trait rather than a state, we use three items recommended by Soto and John (2017) to capture negative emotionality. Specifically, we asked about the extent to which each respondent "worries a lot," "feel depressed and blue," and "is emotionally stable, not easily upset" (reverse coded). We created an overall measure by summing these items and coding the measure from 1-5. The alpha score for this measure is 0.66.

Political knowledge was measured using the number of correct responses to seven factual questions about politics (e.g. Who casts tie-breaking votes in the U.S. Senate? Which amendment to the U.S. Constitution determines the number of terms a president can serve?). The Cronbach's alpha score for our knowledge measure is 0.78. Political participation was measured by summing the number of political activities (out of 5 possible) each respondent participated in, such as working or volunteering for a political campaign in any capacity or contacting an elected official. The measure ranges from 0-5 and has a Cronbach's alpha score of 0.68. We measured political interest using an item probing attention to what is going on in politics and public affairs. Answers were recorded on a 4-point scale ranging from "most of the time" (4) to "hardly at all" (1).

⁷In the Supplementary Materials (Tables 2a and 3a), we include correlations matrices showing how the eight items are correlated with each other in each survey wave. We also note that within each survey wave, we conducted factor analyses of the items. In both waves, there is evidence that the items load on one factor. In wave 1, the eigenvalue for the first factor was 4.21 (.26 for the second). In wave 2, the eigenvalue for the first factor was 4.56 (.32 for the second factor).

⁸In the Supplementary Materials (Figures 1a, 2a, 3a, 4a), we include histograms showing the distribution of each anxiety item for each wave and histograms showing the distribution of the overall political anxiety scales for each wave.

⁹Descriptive statistics for all variables included in this study are provided in the Supplementary Materials (Table 1a).

Table 1. OLS regression models predicting pre-election political anxiety scale.

| | Model 1 | Model 2 | Model 3 |
|-------------------------|---------|---------|---------|
| | b/se | b/se | b/se |
| | | | |
| Negative Emotionality | 0.582* | 0.584* | 0.555* |
| | 0.104 | 0.088 | 0.108 |
| Political Knowledge | 0.149* | 0.124* | 0.140* |
| | 0.074 | 0.058 | 0.073 |
| Political Participation | 0.224* | 0.278* | 0.304* |
| · | 0.085 | 0.069 | 0.073 |
| Political Interest | 0.473* | 0.568* | 0.423* |
| | 0.188 | 0.126 | 0.158 |
| Age | 0.003 | 0.002 | 0.006 |
| | 0.007 | 0.005 | 0.006 |
| Male | -0.169 | -0.206 | -0.216 |
| | 0.213 | 0.189 | 0.192 |
| Black/African American | -0.860* | -0.577* | -0.228 |
| | 0.359 | 0.282 | 0.286 |
| Trump Voter (2016) | -0.628* | | |
| | 0.23 | | |
| Partisanship (GOP) | | -0.132* | |
| | | 0.043 | |
| Ideology (Conservative) | | | -0.161* |
| | | | 0.090 |
| Constant | 1.883* | 1.740* | 1.989* |
| | 0.686 | 0.500 | 0.608 |
| Adj R ² | 0.26 | 0.27 | 0.22 |
| N of Obs. | 431 | 646 | 614 |

Notes: Cell entries are unstandardized coefficient/SE. * p < .05, one-tailed tests.

To capture political orientations, we used who each respondent reported voting for in the 2020 presidential election (coded 1 = Trump, 0 = Biden), political ideology (coded on a 1–5 scale ranging from very liberal = 1 to very conservative = 5), and party identification (coded on a 1–7 scale ranging from strong Democrat = 1 to strong Republican = 7). Finally, we use guestions measuring age (coded in years), sex (coded 1 = male, 0 = female), and race (coded 1 = Black/African American, 0 = rest).

Results & Analysis

Although we are primarily interested in *changes* in political anxiety surrounding the 2020 presidential election, we begin our examination of political anxiety by seeking to simply isolate its covariates. To do so, we take individual pre-election scores on the anxiety measure and regress them on the measures described above. Table 1 reports the results (the only difference between the three models presented is the measure of political orientation used). We separated out the models this way because all three measures were highly correlated (r = 0.83 between partisanship and vote choice, r =0.68 for ideology and vote choice, and r = 0.74 for ideology and partisanship; we are using vote choice reported for the 2016 presidential election in these analyses since the wave 1 survey occurred before the 2020 election).

The results in Table 1 suggest that, at least pre-2020 election, the covariates of political anxiety partially support our hypotheses. Negative emotionality is a strong, positive predictor, indicating that general levels of political anxiety are, at least in part, anchored in personality characteristics associated with trait anxiety. Similarly, political knowledge, interest, and attention are also statistically significant with sizeable, positive effects. In other words, people who are more engaged with and better understand the political system are more likely to report higher levels of political anxiety. Those who lean to the political right – Trump voters, conservatives, and Republicans - reported lower levels of anxiety pre-election. Given that Trump, the GOP and conservative champion, held the political system's most powerful office at the time, this makes sense. Where our hypotheses failed to find much support are with the demographic variables. Age and gender were statistically insignificant, and even if the consistent directions of the coefficients are treated as substantive, the effect sizes are small. The demographic variable that proved to be the strongest and most consistent predictor of political anxiety was race, and this was in the unexpected direction: Blacks/African Americans report lower levels of pre-election political anxiety than people who belong to other racial/ethnic groups. Given that Black/African American well-being declined during the Trump presidency, this is finding is puzzling (Clayton, Moore, and Jones-Eversley 2019).

The models reported in Table 1 provide insight into what does (and what does not) predict political anxiety, but our main interest is in how political anxiety potentially changes in response to events in the political environment. To do that, we look at pre/post-election, within-individual differences in political anxiety. Table 2 reports the differences between wave 1 (mid-October 2020) and wave 2 (mid-November 2020) means for the overall political anxiety scales and for each of the eight anxiety items. This analysis strongly suggests that levels of political anxiety decreased significantly following the election, i.e. that Trump's loss and Joe Biden's victory reduced

Table 2. Difference of means tests, pre- and post-election measures

| Measure | Pre-election mean | Post-election mean | Difference |
|---|----------------------|--------------------|-------------|
| Election of disliked candidate/party | 6.00 | 5.43 | 57* |
| Level of polarization and conflict | 6.33 | 5.70 | 63* |
| American public insufficiently informed | 6.26 | 6.17 | 09 |
| That you care about politics too much | 3.85 | 3.56 | 29* |
| That you are insufficiently informed | 3.77 | 3.06 | 71 * |
| Poor quality of candidates/leaders | 6.37 | 5.76 | 61* |
| Uncivil nature of modern politics | 6.32 | 6.00 | 32* |
| Extent to which ordinary people are disinterested | 5.20 | 4.90 | 30* |
| Overall anxiety (based on 8-items) | 5.51 | 5.07 | 44* |

Notes: All items are scaled from 1 to 10. *p < .05 using a paired t-test.

Table 3. OLS regression models predicting post-election political anxiety scale,

controlling for pre-election political anxiety.

| | Model 1 | Model 2 | Model 3 |
|---------------------------|---------|---------|---------|
| | b/se | b/se | b/se |
| Pre-election Anxiety | 0.572* | 0.587* | 0.593* |
| , | 0.047 | 0.044 | 0.045 |
| Negative Emotionality | 0.218* | 0.208* | 0.170* |
| | 0.099 | 0.087 | 0.089 |
| Political Knowledge | 0.023 | 0.033 | 0.041 |
| | 0.055 | 0.053 | 0.053 |
| Political Participation | 0.129* | 0.169* | 0.147* |
| | 0.067 | 0.065 | 0.066 |
| Political Interest | 0.314* | 0.269* | 0.247* |
| | 0.157 | 0.144 | 0.145 |
| Age | 0.002 | 0.000 | 0.004 |
| | 0.005 | 0.005 | 0.004 |
| Male | -0.025 | -0.044 | 0.024 |
| | 0.159 | 0.157 | 0.160 |
| Black/African American | -0.999* | -0.743* | -0.730* |
| | 0.359 | 0.313 | 0.325 |
| Trump Voter | -0.465* | | |
| · | 0.180 | | |
| Partisanship (Republican) | | -0.046 | |
| | | 0.038 | |
| Ideology (Conservative) | | | -0.188* |
| | | | 0.065 |
| Constant | 0.247 | 0.304 | 0.601 |
| | 0.487 | 0.492 | 0.488 |
| Adj R ² | 0.51 | 0.52 | 0.51 |
| N of Obs. | 516 | 582 | 560 |

Notes: Cell entries are unstandardized coefficient/SE. * p < .05, one-tailed tests.

politically-related anxiety across the board. This finding holds regardless of whether individual items or the overall index is used. In every case but one (American public insufficiently informed), post-election means are significantly lower than pre-election means. The overall political anxiety scale pre-election mean was 5.51, dropping to 5.07 post-election (p < .05). That effect - approximately 0.50 - is a good summary of the overall impact of the election.

The within-individual design of the tests reported in Table 2 provide persuasive evidence that levels of political anxiety declined following the 2020 election. But what factors drove those changes? Was this simply a Trump effect tied to political sophistication or partisanship, that anxiety among the more politically engaged and left leaning dropped in the wake of Trump's defeat? Or was something happening more broadly? Table 3 reports a series of OLS regression models that seek to address these questions. Here the dependent variable is the wave 2 political anxiety scale, with the wave 1 political anxiety scale included as an independent variable. What we are attempting to do here is control for all causes of pre-election levels of political anxiety in order to isolate the particular individual traits that predict changes in anxiety occurring as a result of the



election. 10 Similar to Table 1, Table 3 reports three versions of our model, the differences being the variable used to measure political orientation.

Unsurprisingly, the most powerful predictor in our models is pre-election anxiety – people who reported high political anxiety before the election also scored high in political anxiety following the election. Negative emotionality (also sometimes called neuroticism) was also unsurprisingly a significant predictor - those more predisposed to anxiety were more likely to see anxiety levels increase following the election. This may be particularly unsurprising given what happened in the wake of the election, i.e. a sitting president declined to accept the election outcome and, without evidence, actively promoted a narrative of election fraud that was widely viewed as destabilizing trust in the political system.

More unexpected perhaps are the results for the political knowledge, attention and engagement variables. All else equal, higher levels of knowledge had no detectable relationship with pre/post changes in political anxiety. Political attention and interest, though, clearly demonstrated systematic covariance. Perhaps because of the unprecedented resistance to accepting the election outcome, people who were more attentive to and engaged in politics scored higher in political anxiety following the election, all else held constant. These changes are non-trivial. Given the average shift in pre/post-election scores, a reduction of approximately 0.50 points on our scale, the coefficients for these variables are estimating relatively sizable effects (see discussion on substantive impacts below).

So, what accounts for the overall drop in post-election anxiety scores reported in Table 2? Results in Table 3 suggest two main answers. The first is race. These models report an average drop in anxiety levels among African Americans/Blacks that is fairly substantial (on the order of .75-1.0 points) (see discussion below). Unlike the somewhat puzzling findings on race reported in Table 2, these changes align with the general expectation that a Trump defeat would lessen anxiety among a minority population that often felt targeted by the Trump administration and voted overwhelmingly voted for Biden (Clayton, Moore, and Jones-Eversley 2019).

What is less clear are the results for right-leaning voters who, all else equal, felt less politically anxious after the election compared to before the election. This is especially so given the literature showing that people often report feeling worse on a variety of dimensions (e.g. happiness or well-being, etc.) when their preferred party/candidate loses (Pierce, Rogers, and Snyder 2016; Gerber and Huber 2010). Potentially, this finding could signify rightleaning voters metaphorically exhaling following the exit of a controversial

¹⁰In the Supplementary Materials (Tables 4a, 5a, and 6a), we include for interested readers tables showing the influence of our independent variables on each of the eight items that make up our political anxiety scale.

Table 4. Predicted levels of post-election political anxiety (controlling for pre-election political anxiety).

| Variable | Predicted Post-election Anxiety Level when Variable at Min. | Predicted Post-election Anxiety Level when Variable at Max. | Difference (Max-Min) |
|------------------------------------|---|--|-------------------------|
| Pre-election Anxiety | 2.47 | 7.62 | 5.15 |
| Political Participation | 4.91 | 5.56 | 0.65 |
| Political Interest | 4.35 | 5.29 | 0.94 |
| Negative Emotionality | 4.74 | 5.62 | 0.88 |
| African American/ Black (dummy) | 5.20 | 4.20 | -1.00 |
| Trump Voter (dummy) | 5.31 | 4.85 | -0.46 |
| ldeology (conservative) | 5.34 | 4.59 | -0.75 |

Notes: For dummy variables, min refers to a value of 0 and max refers to a value of 1. All effects derived from Model 1, Table 3 except for ideology (which is derived from Model 3, Table 3).

champion they were never fully comfortable with as president. 11 Arguing against that interpretation, though, is that the biggest impact estimated for the political orientation variable comes in Model 1, i.e. the model employing the 2020 presidential vote choice variable. 12 The model estimates that Trump backers were about a half-point lower than Biden supporters on the anxiety scale following the election. Perhaps this reflects a conviction that the election outcome was, as Trump supporters actively argued, going to be overturned. These interpretations, though, are speculative - the data available cannot provide empirical comfort to any of these possibilities. All we can say is that the model rather robustly predicts that, relative to Biden voters, following the election right-leaning voters reported being less politically anxious, all else equal.

In order to provide a sense of the substantive impact of the variables discussed above, Table 4 shows the predicted levels of post-election political anxiety when each of the statistically significant variables in Table 3 takes on its minimum and maximum value. Given that our post-election anxiety variable is measured on a 1-10 scale, many of the effects in Table 4 are quite substantial. For instance, African American/Black respondents have a post-election political anxiety score of 4.20, which is a full point lower than those who belong to other racial/ethnic groups (mean post-election political

¹¹An alternative possibility is that the decrease in anxiety among Republicans could be due to increases in anger, but it is beyond the scope of the current study to unpack these mechanisms completely. Still, we hope subsequent research will adjudicate these possibilities more directly (e.g., by measuring different types of emotion in the context of the same study).

 $^{^{12}}$ We code vote choice as 1 = Trump voter and 0 = Biden voter (with those voting for some other candidate coded as missing; only 3% of our sample reported voting for some other candidate). To check the robustness of our results, we also generated a measure of vote choice where 1 = Trump voter, 0 = Biden voter, and 0 = voted for some other candidate. Comfortingly, when we use this alternative coding, we get nearly the same results as are shown in Model 1, Table 3.

anxiety is 5.20 when race is set to 0). Political interest and negative emotionality also have fairly large substantive effects. Those who are the most politically interested, for example, have a post-election anxiety score of 5.29 compared to 4.91 for those who are the least interested in politics (difference of 0.94). Similarly, those who have the highest scores on our measure of negative emotionality have a post-election political anxiety score of 5.62 compared to 4.74 with the lowest score (difference of 0.88). Lastly, we note that vote choice and ideology also have sizeable effects on post-election political anxiety. Trump voters have a post-election anxiety score of 4.85 on average, which is about a half point lower than Biden voters (5.31). Among those who are very conservative, the estimated post-election anxiety level is 4.59 compared to 5.34 for those who are very liberal (difference of 0.75).

Discussion & Conclusion

The central aims of this paper were to develop a general measure of political anxiety, isolate the covariates of general political anxiety, and assess the impact of a highly salient political event on changes in political anxiety. We found that a set of items tapping feelings of anxiety tied to various aspects of the political environment scaled well and seemed to reflect a fairly unidimensional psychological construct. We also found that, as expected, political anxiety is partially trait-like - it is consistently predicted by the personality trait of negative emotionality – and, at least at the time of the 2020 election, consistently associated with political attention, engagement and knowledge. Political anxiety also has a distinct political tilt, with those on the political right consistently reporting lower levels of political anxiety than their counterparts regardless of the specific measure of political orientation employed. Surprisingly, the only demographic measure that consistently predicted political anxiety was race, and that suggested that overall African Americans/Blacks had less political anxiety than people of other races. This finding seems counterintuitive. Even though previous research has reported similar findings on race and politically-related health measures, the Trump administration was not considered particularly friendly to minority interests, so our expectation was the relationship would be in the opposite direction. It is possible this negative relationship reflects broader patterns of racial differences in politicallyrelated affect. Phoenix (2019), in particular, has made a persuasive case that there are important differences between racial groups in how they engage emotionally with politics. Phoenix (2019) focuses primarily on anger, an emotion Black communities are posited to have less freedom to express politically compared to Whites, and also suggests that engagement in politics among Black communities may be more driven by positive emotions, such as pride and hope. Anxiety is not synonymous with anger,

but it is certainly not a positive emotion. As such, it may simply play a different role in affectively connecting Blacks to politics.

We also found clear evidence that political anxiety is state-like, shifting in response to salient events in the political environment (see Table 1). A key takeaway from our multivariate analyses is that political anxiety levels dropped fairly dramatically among Blacks/African Americans post-election. This suggests that our expectations about political anxiety with respect to race were not completely erroneous. Blacks may have started with lower overall levels of anxiety, but Trump's election loss clearly seems to have reduced those levels more relative to Whites. Curiously, given that the GOP presidential candidate lost, right leaning voters also reported lower levels of political anxiety post-election. Given the numerous controversies swirling around Trump and his administration, perhaps even those whose causes he championed experienced some relief that these would not continue for another four years. It is also worth underlining that, even controlling for pre-election levels of anxiety, post-election anxiety related to politics increased among the politically interested and engaged.

There are a number of limitations to our study. Our measure scales well and all indications suggest it works well at capturing individual perceptions of how various dimensions of the political environment trigger anxiety. It does not, however, fully disentangle state from trait anxiety, and it is not clear whether the levels of anxiety measured, or their response to the unique circumstances of the 2020 election, are products of a particular political environment at a particular time. The question of how the anxiety measure performs psychometrically in different political contexts we leave to future research. That said, we are fairly agnostic about whether our data captures chronically high levels of political anxiety that reflect the ongoing polarized nature of contemporary politics, or whether anxiety was - for whatever reason - particularly acute at the end of the Trump administration. The shift following Trump's defeat in the 2020 election could be interpreted as a sign that the exit from office of a particularly controversial president lowered the political temperature and left people feeling less anxious. Presumably, though, if salient events can decrease political anxiety, they can also increase it, but it remains to be determined what sort of events have the capacity to systematically generate such effects; the magnitude of any such effects also remains an open question. Based on our findings, we suspect that political anxiety is chronically high and that salient events only marginally shift those levels, though particular events may have more dramatic impacts for particular groups. That conclusion, though, is largely speculative: our data does not allow us to address these questions with any degree of confidence. Still, we believe questions about the levels of political anxiety across time and how political events trigger anxiety (or not) are societally important and ripe for subsequent scholarly scrutiny.



Declarations from the authors

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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