

To appear in: *Emotion* [Volume/Issue not yet assigned]

Citation: Walker, A. C., Son, J. Y., Teoh, Y. Y., & FeldmanHall, O. (in press). The emotional cost of political engagement. *Emotion*.

The Emotional Cost of Political Engagement

Alexander C. Walker¹, Jae-Young Son¹, Yi Yang Teoh¹, and Oriel FeldmanHall^{1,2}

¹ Department of Cognitive and Psychological Sciences, Brown University, Providence, RI, USA

² Carney Institute for Brain Science, Brown University, Providence, RI, USA

Author Note

Alexander C. Walker  <https://orcid.org/0000-0003-1431-6770>

Jae-Young Son  <https://orcid.org/0000-0002-3852-1237>

Yi Yang Teoh  <https://orcid.org/0000-0001-8995-414X>

Oriel FeldmanHall  <https://orcid.org/0000-0002-0726-3861>

We have no conflicts of interests to disclose. All data and study materials have been made available at the following link: <https://osf.io/3dyr7>

We thank K. Danowski and E. Rosenthal for their work coding Study 1 diary entries. We also thank I. Aslarus for her helpful feedback during the early stages of this project. This research was supported by a Social Sciences and Humanities Research Council of Canada Banting Postdoctoral Fellowship (A.C.W), a Robert J. and Nancy D. Carney Institute for Brain Science Innovation Grant (O.F.H), and a National Institute of General Medical Sciences Center of Biological Research Excellence Grant (O.F.H). The funders had no role in study design, data collection and analysis, decision to publish or preparation of the paper.

Correspondence concerning this article should be addressed to Oriel FeldmanHall, 190 Thayer Street, Providence, RI, 02912, United States. Email: oriel.feldmanhall@brown.edu

Abstract

Political polarization is increasingly recognized as a critical threat to individual and collective well-being. Prevailing frameworks suggest that political engagement diminishes well-being by evoking negative emotions, which act as chronic stressors. However, the relationship between politics and emotion has largely been investigated by relying on static snapshots of emotional reactions to political events, overlooking how well-being is impacted by the temporal dynamics of political engagement and associated emotional responses. Across two longitudinal experience-sampling studies that include long-form ‘diary’ responses ($N = 259$, 1,788 observations), we examine how political engagement shapes daily affective experiences. Contrary to the prevailing notion that engaging with politics leads to sustained negative moods, we find that political engagement is characterized by heightened *affective instability*—i.e., frequent and large fluctuations in affective states—which, in turn, predicts lower well-being (i.e., greater anxiety). Politically polarizing events are particularly destabilizing when they are highly salient and when individuals spontaneously engage with these events. Strong partisans on both ends of the political spectrum also show the greatest fluctuations in daily affect, characteristic of an unstable emotional life. By observing that political engagement is intimately tied to increased affective instability, this research reveals an overlooked emotional cost of political involvement. These findings open new avenues for understanding and mitigating the emotional and mental health consequences of political engagement in an era of deepening divides.

Keywords: politics, emotion, affect, affective dynamics, well-being

The Emotional Cost of Political Engagement

On May 25th, 2020, George Floyd was murdered when Minneapolis police officer Derek Chauvin knelt on Floyd's neck for 9 minutes and 29 seconds. Hours later, bystander footage of Floyd's fatal encounter with police went viral, igniting national outrage and sparking mass protests against police brutality and racial inequality. This footage was the catalyst for the largest protests in U.S. history (Buchanan et al., 2020), protests that were not only emotionally charged, but also politically polarizing (Horowitz, 2021; Jackson & Newall, 2020). The public outcry laid bare deep societal divisions, exemplifying how political events can influence collective and individual well-being (American Psychological Association, 2024; Stanton et al., 2010; Van Bavel et al., 2024). Indeed, emerging research suggests that political engagement and partisan hostility comes with a psychological and emotional toll (Ford et al., 2023; Nayak et al., 2021; Roche & Jacobson, 2019; Smith, 2022). Although there is growing concern that political engagement amplifies discord and distress, the mechanisms through which political involvement undermines emotional functioning and well-being remain poorly understood. At a time when ideological divisions are deepening and outgroup animosity is surging, understanding how politics shapes our emotional and psychological well-being is crucial to mitigating its harmful effects and fostering a healthier civic climate.

Human well-being is intimately tied to our emotions, which serve as the bedrock of our social lives. We feel emotions like love, frustration, joy, and disgust whenever we are with others, and in many cases, because of others (Mesquita & Boiger, 2014). These emotions are not static, but continually unfolding and changing as we engage with the world around us (Larsen et al., 2009). In fact, changing emotions are a critical signal for responding adaptively to environmental changes (Frijda, 2007; Larsen, 2000; Scherer, 2009). However, not all temporal dynamics are conducive to well-being, as certain patterns of change are associated with mental health disorders

(Houben et al., 2015). For example, on one end of the spectrum, the persistence of negative mood states is characteristic of depression (Kuppens et al., 2010; Kuppens et al., 2012; Nelson et al., 2020; van de Leemput et al., 2014), and on the other end, rapid emotional shifts are a defining symptom of borderline personality disorder (American Psychiatric Association, 2022; D'Aurizio et al., 2023). In short, *how* emotions fluctuate offers a window into an individual's mental health and well-being.

Despite the dynamic nature of emotion and its close link to well-being, research investigating the relationship between politics and emotion largely relies on static snapshots of individuals' emotional reactions to political phenomena. For example, a subject may be asked to report the extent to which they feel various negative emotions after viewing political content, or to report their feelings towards different political groups (Iyengar et al., 2019). These approaches reveal that political phenomena evoke negative emotions that are associated with diminished well-being (Ford et al., 2023; Nelson, 2022), but they cannot address just how variably emotions unfold over time in response to political events. To better understand how political engagement impacts emotional functioning and psychological well-being, it is essential to examine how political events shape the *temporal dynamics* of people's emotional experiences. One particularly useful approach for studying the temporal dynamics of emotion is to characterize changes in an individual's core affect (FeldmanHall & Heffner, 2022; Frijda, 2007; Scherer, 2009), affective responses which vary along the dimensions of valence (i.e., pleasurableness) and arousal (i.e., intensity). These affective measurements can be used to quantify several distinct emotion dynamics, including *affective instability*, *variability*, and *inertia* (Houben et al., 2015).

Affective instability is a widely-used metric that reflects frequent, unpredictable changes in affective states from one moment to the next (Marwaha et al., 2014). Individuals with high

affective instability experience volatile emotional lives characterized by heightened reactivity to environmental stressors (Jahng et al., 2008). In contrast, affective variability captures the *breadth* of a person's affective experiences (Kuppens et al., 2007). Those with high levels of variability experience a wide affective range, including extreme emotions indicative of poor regulatory control (Kuppens & Verduyn, 2015). Finally, affective inertia reflects the degree of continuity between a person's past and present affective states (Kuppens et al., 2010). High levels of inertia signal that a person's emotional state has a tendency to remain consistent and is resistant to changes over time, which acts as a marker of emotional 'stickiness' or rigidity. Such stickiness is often seen in depression, when feelings of sadness persist even after the initial trigger has been resolved (Kuppens et al., 2012; van de Leemput et al., 2014). Examining how these different signatures of affective dynamics are evoked by political events can help deepen our understanding of the adverse effects of political engagement on well-being.

We used these metrics of affective dynamics to test three (not mutually-exclusive) hypotheses of how political engagement could impact everyday affective experiences and psychological well-being. First, it is possible that political engagement has a destabilizing effect, such that people exhibit large fluctuations in affective states when engaging with political events. Political engagement has been linked with both negative (e.g., anger) and positive (e.g., enthusiasm) emotions (Combs et al., 2009; Groenendyk & Banks, 2014; Huddy et al., 2015; Taber & Lodge, 2006). Partisans tend to experience negative affect when exposed to information that threatens their political group or ideals (e.g., election losses and ideologically-incongruent arguments), and positive affect when encountering information that increases their group's status or affirms their values. Therefore, repeated exposure to both ideologically congruent and incongruent stimuli may result in greater affective fluctuation during periods of political

engagement—fluctuations that, over time, may diminish well-being. Second, political engagement may increase affective variability. Prior research suggests that political events often evoke strong emotional responses (Ford et al., 2023; Pierce et al., 2016), particularly among partisans who staunchly identify with a particular political party (Huddy et al., 2015; van Prooijen et al., 2015). Individuals may therefore experience a wider affective range—including more extreme emotions—when politically engaged, which may, in turn, undermine their well-being. Third, given that political events frequently evoke negative emotions (Ford et al., 2023; Hoyt et al., 2018), it is possible that political engagement results in greater affective inertia, triggering negative moods that persist for hours, days, or even weeks (Roche & Jacobson, 2019).

To test these three accounts, we leverage a longitudinal experience sampling design to capture how the dynamics of people's day-to-day affective experiences are shaped by their engagement with politically-polarizing events (Study 1) or partisan political attitudes (Study 2). In Study 1, we assess the temporal patterns of participants' affect following the murder of George Floyd. During an eight-week period encompassing 23 data collection points, we measured affective responses using a dynamic affect grid (FeldmanHall & Heffner, 2022; Russell et al., 1989; Fig 1) and political engagement using naturalistic open-ended diary prompts. This allowed us to repeatedly record people's affective states to see how affect at one timepoint predicts affect at subsequent timepoints, given whether individuals were engaging with the ongoing national discourse around racial inequality (Fig 2). We were then able to link these repeated measurements to metrics of well-being, particularly anxiety and depression. Given that ideologically-extreme individuals engage more with partisan news (Levendusky, 2013; Pew Research Center, 2020) and have stronger emotional reactions to political stimuli than their more moderate peers (Bakker et al., 2021; van Prooijen et al., 2015), we explicitly test in Study 2 whether strong partisans

experience larger affective shifts. By connecting the extremity of an individual's political beliefs with the dynamics of their everyday affect, we highlight a previously overlooked emotional consequence of partisanship—one that may contribute to the diminished well-being of politically-polarized individuals.

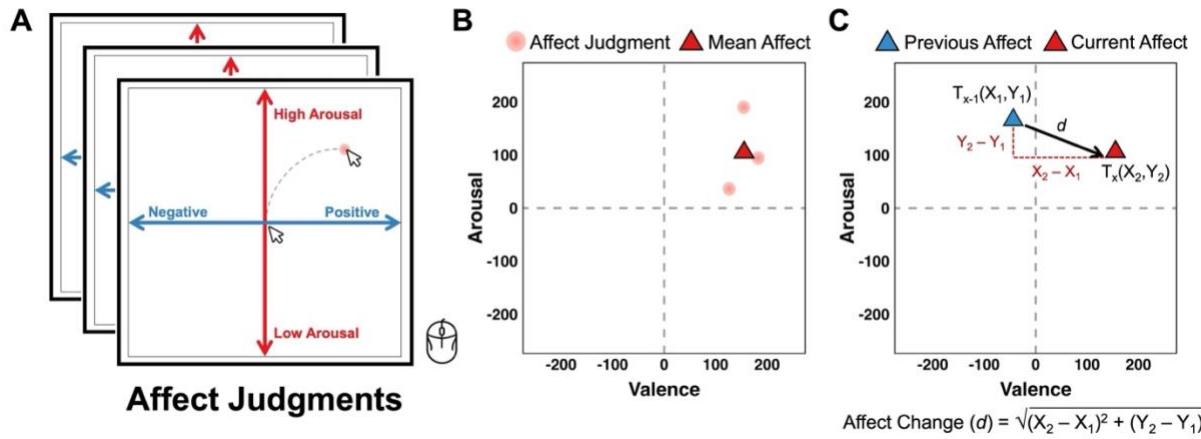


Figure 1 | Study 1: Affect Judgments. **A)** During each study session, participants reported three events from their past two days and indicated how they felt about each event by clicking within a 500x500 pixel affect grid. **B)** We calculated the mean affect (valence and arousal) of these judgments as a measure of participants' affect at each timepoint. **C)** We measured the overall magnitude of participants' timepoint-to-timepoint changes in affect by calculating the Euclidean distance between participants' current valence and arousal (T_n) and their valence and arousal at the previous time point (T_{n-1}).

Study 1

Methods

Participants

We recruited 138 United States residents from the Prolific online labor market, a sample size consistent with past work using longitudinal experience-sampling designs (Wrzus & Neubauer, 2023), including those investigating affect and well-being (Goicoechea et al., 2025; Heller et al., 2019; Lenneis et al., 2024). We excluded participants who failed to complete at least two questionnaires ($n = 25$), as affective dynamics cannot be assessed with data from a single timepoint. The final dataset consisted of 113 participants ($M_{age} = 30.42$, $SD_{age} = 9.98$; 69 Female,

43 Male; 71 White, 17 Asian, 13 Black, 6 Hispanic/Latinx, 6 Mixed/Other), each of whom completed multiple questionnaires ($M = 13.58$, $SD = 7.15$), yielding a total of 1,534 assessments. This intensive longitudinal approach—spanning 23 timepoints—improved statistical power and precision by leveraging within-subject variability and reducing error variance. All participants received monetary compensation for their participation. All study procedures were approved by Brown University’s Institutional Review Board, and all participants provided informed consent prior to their participation.

Political Event Salience

The 8-week time frame of Study 1 coincided with the sharp rise—and subsequent fall—of national interest in politically-polarizing protests against police brutality and racial inequality (Fig 2A). To estimate the cultural salience of these protests, we used data from Google Trends (google.com/trends) to quantify how frequently terms related to these protests were searched for in the United States during each study timepoint (Chykina & Crabtree, 2018). Specifically, we acquired a daily Google Trends search interest score for five search terms over the course of Study 1 (May 26 to July 19, 2020): “George Floyd”, “Riots”, “Protests”, “BLM”, and “Derek Chauvin.” Search interest scores reveal the proportion of Google searches for a given term, relative to the peak search volume in the dataset (in this case, “Riots” on May 31). Therefore, higher scores indicate that a greater number of Americans searched for a term on a given day. The popularity of all search terms followed a similar trajectory, peaking around May 31, with search frequency diminishing considerably by mid-June. Here, we use the term “George Floyd” as our primary measure of event salience, as it was the most frequently searched term across the full study period and represents a direct index of all events related to Floyd’s murder, subsequent protests, and politically-polarizing discourse surrounding both. Robustness checks reveal that all effects

replicate when measuring event salience using the aggregated day-to-day popularity of all event-related terms and when controlling for the salience of the concurrent coronavirus pandemic, indexed by the frequency of Google searches for “coronavirus” in the United States (Supplementary Materials).

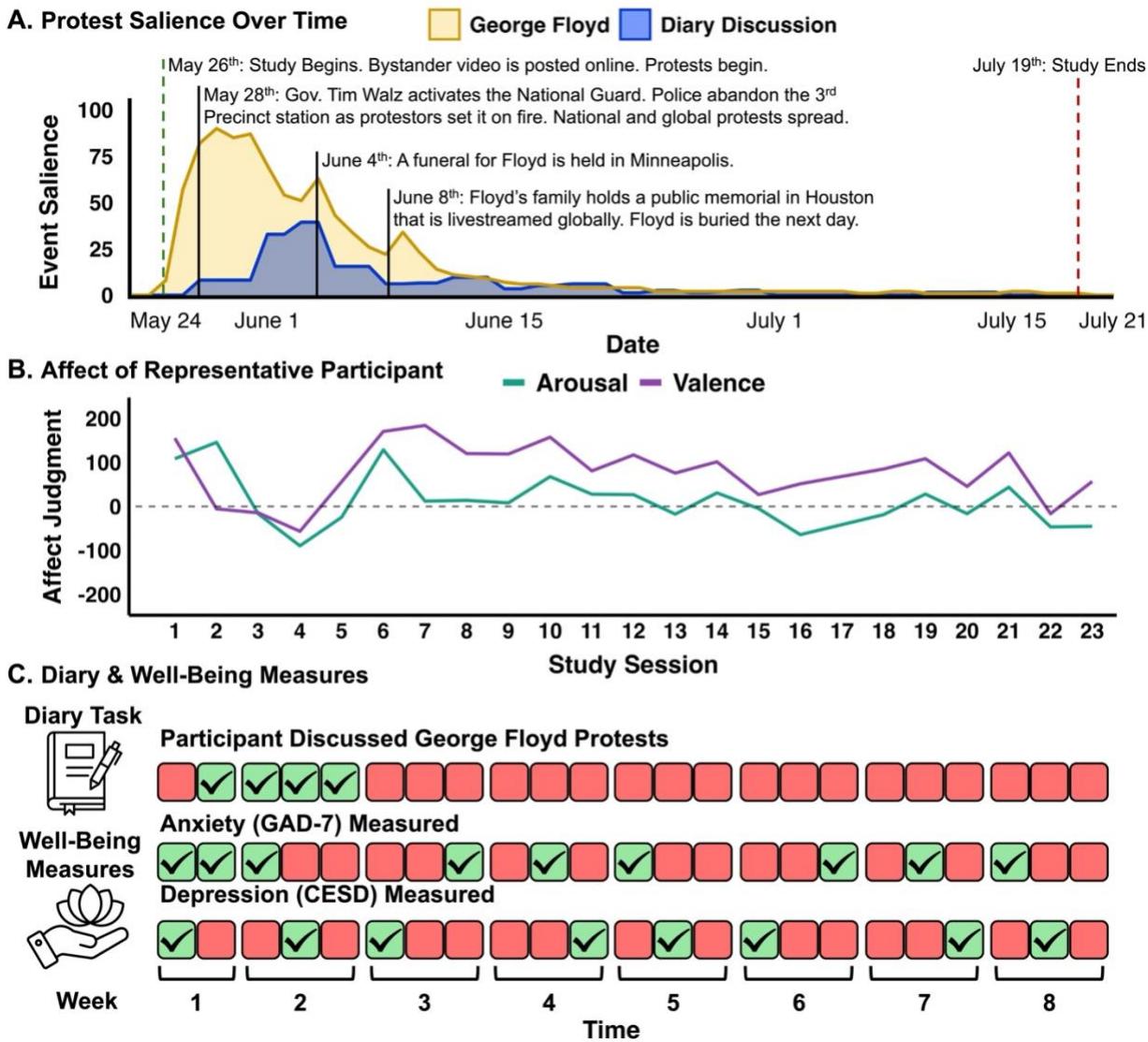


Figure 2 | Study 1 Design. **A)** Study 1 began the day after George Floyd was murdered by Minneapolis police officer Derek Chauvin. We measured the salience of the mass demonstrations that followed Floyd's death using data from Google Trends and text from participants' diary entries. Data from Google Trends revealed the amount of times the term “George Floyd” was searched as a proportion of the highest number of daily searches in our Google Trends dataset. Diary discussion scores reflect the proportion of participants who discussed the George Floyd protests. The salience of these protests fluctuated over the course of Study 1, as did participants' discussion of them, allowing us to capture the effect of event salience and engagement on participants' affect and well-being. **B)** One

representative participant's affect over the course of the study. The time axis is aligned with panel A, revealing a large shift in affect corresponding to the George Floyd protests. Participants reported their affective experiences three times a week, completing a total of (up to) 23 study sessions over an 8-week period. C) In addition to affect judgments, we collected text data from a freeform diary-writing task, as well as two measures of well-being from standardized questionnaires. Participants began each study session by completing a diary task in which they were asked to reflect and write about their last two days. For each timepoint, we assessed whether participants spontaneously discussed the George Floyd protests in their diary response (coded as a yes/no binary variable). The representative participant's explicit discussions of the George Floyd protests are depicted with green checkmarks, which appear to correspond with the large shift in affect shown in panel B. At select timepoints (once per week), participants also completed the GAD-7 and CES-D questionnaires, which measure anxiety and depression symptoms, respectively.

Design and Procedure

Participants completed (up to) 23 online questionnaires over the course of 8 weeks (May 26 to July 19, 2020). They began each questionnaire by writing a freeform 'diary' entry about their past two days (*Diary Task*). Next, from all the events participants wrote about, they selected three events and reported their feelings towards each event using a 500x500 affect grid (*Affect Judgments*). Depending on the questionnaire, participants concluded the study session by responding to questions assessing their anxiety and/or depression symptomology (*Psychological Well-Being*; Fig 2C).

Materials and Measures

Diary Task. Participants began each questionnaire by writing about their last two days. They were told that there was no right or wrong way to write their response, but were encouraged to be thoughtful and detailed, and indeed, descriptive statistics indicate that participants took this instruction seriously (word count: *Mean* = 181, *SD* = 165, *Median* = 134). Diary task instructions included prompts such as "What were the activities you engaged in, and the events that you found important?" and "What were the thoughts you had, and the emotions you experienced?". Study instructions made no reference to politics or ongoing political events. Thus, all discussion of

political events within diary entries were unprompted, reflecting a participant's personal view that one or more political events were an important part of their past two days.

We used data from this freeform diary task to capture participants' personal engagement with the George Floyd protests at each timepoint, yielding 1,534 diary entries across all participants and timepoints. Two trained research assistants (RAs), blind to study hypotheses, judged whether participants engaged with this politically-polarizing event. Prior to reading diary entries, RAs were provided information detailing the murder of George Floyd and the global protests that followed. For each diary response, they were asked to judge whether a participant (based on their diary text) showed "engagement with the events surrounding the murder of George Floyd, the demonstrations and/or civil unrest that took place afterwards, and/or the general topics of police brutality and racism." RAs provided a rating of "0" to diary responses (94.5% of diary entries) that made no reference to this event or related topics, a rating of "1" to diary responses (3.0% of diary entries) that indicated moderate engagement, and a rating of "2" to diary responses (2.5% of diary entries) that indicated strong engagement (Fig 3). We collapsed ratings of "1" and "2" to create a binary variable reflecting whether a participant engaged with the George Floyd protests over the last two days. Participants judged to have engaged with this event reported a range of activities, including attending demonstrations, donating to protest-related charities, participating in extended conversations about racial inequality, and actively following news coverage of the event. Consistent with past work (Mannerström et al., 2017; Verba et al., 1997), our operationalization of "political engagement" did not always involve direct political action, but did consistently reflect participants' attentive following of this event, with all engaged participants providing an unprompted discussion of the George Floyd protests when asked to describe meaningful events from their past two days. RA judgments showed almost perfect agreement

(Cohen's kappa = 0.86, 95% CI [0.80, 0.92]), disagreeing on only 2.3% of cases. Instances of disagreement were discussed by RAs until a consensus was formed. Overall, 47 participants (42% of the sample) mentioned the George Floyd protests in at least one diary entry.

Rating	Diary Snippet
1	<p>“... Last night, [Name] and I did not really play games like I thought but really just talked for a couple of hours. He kept bringing up the protests and other current events and it was clear we disagreed on most things and it was awkward trying to avoid any conflicts.”</p>
1	<p>“Watching the protests in general and Trump with his photo at St John Episcopal. Mixed feelings as I am not sure everyone can separate the peaceful protests from the looting. Frustration with TV media which had been mostly focused on the negative. Disappointed about needing to carefully cull through the internet to find positive stories on an intense time in the nation.”</p>
1	<p>“... I met up with [Name’s] friends and we talked about politics, and sociopolitical issues. ... I have been following the current protests which made me feel hopeless about this country.”</p>
2	<p>“Yesterday, I attended a Christian protest at the capitol advocating for racial equality and justice. This was my first time participating in a protest and I was really nervous. I wasn't exactly sure what to expect, and was antsy leading up to my participation. During the protest, things were unexpectedly calm, and I was also surprised by the number of people in attendance. I didn't feel all that comfortable there, but felt happy that I was able to get a feel for what the protests were actually like. I was also hopeful hearing about what could happen moving forward.”</p>
2	<p>“... When I got to work, there were several customers there that were complaining about the Black Lives Matter protesters, saying that the people involved were just looking for an excuse to loot and steal. I got very upset, especially since I felt like I couldn't say anything back to them since I was currently working. ... I also decided that I was going to donate all my tips from those racist customers to the Black Lives Matter movement. I posted a few more articles, showing my support for the rioting, and had a few arguments with conservative friends who blindly support the police. Although there is a part of me that feels like I shouldn't engage with them, another part of me feels that as a white person, it is a part of my duty to try to help other white people have compassion for marginalized groups.”</p>
2	<p>“... the thoughts of injustice in this country are far too great to think of anything else. I went home and the protest in my hometown was cancelled due to racist threats. Me and my friends decided that by not going the racists would win. ... The first protest was very nice, peaceful and calm. The second of the day was peaceful and calm as well, I'm glad it went that way but am still upset over the racism that persists in this country.”</p>

Figure 3 | Representative Diary Excerpts illustrating Political Engagement. Example of diary entries coded as showing moderate (Rating = 1) or strong engagement (Rating = 2) with the George Floyd protests. Each snippet is from a different participant. Minor edits were made to protect anonymity and improve readability (e.g., removing names and correcting spelling).

Affect Judgments. Following each diary entry, participants picked three events they had just wrote about. For each event, they described the event in a few words (e.g., “called my

mother”), and provided an affect judgment that reflected their feelings towards it. Affect judgments were made using a granular 500x500 pixel affect grid that captured emotional experiences on two dimensions: valence (pleasurableness, x-axis) and arousal (intensity, y-axis; Fig 1A). Participants were instructed on how to use the affect grid and then rated the pleasurableness (valence) and intensity (arousal) of their feelings regarding each event by clicking within the 500x500 grid, producing two ratings for every event (i.e., one on each dimension) that varied from -250 to +250. Thus, during each questionnaire, participants provided three affect judgments reflecting their feelings towards recent events that were important to them. We calculated the mean valence and arousal of each participant’s judgments as our measure of their affect at a given timepoint (Fig 1B), which we then used to quantify affective dynamics.

We quantified the overall magnitude of short-term changes in affect by calculating the Euclidean distance between a participant’s self-reported valence and arousal at one time point (T_n) and their valence and arousal at the preceding time point (T_{n-1} ; Fig 1C). We also captured longer-term affective dynamics using classic measures of affective instability, variability, and inertia, ensuring in all cases, as is common practice, that these measures were based on a minimum of three consecutive time points (Houben et al., 2015). Affective instability was calculated as the mean squared successive difference (MSSD) between consecutive timepoints for each participant within a given period (Jahng et al., 2008). Affective variability was calculated as the 95% confidence intervals of each participant’s (two-dimensional) affective judgments for a given period. This approach extends canonical measures of affective variability in unidimensional judgments (Kuppens & Verduyn, 2015), to simultaneously account for variability in both valence and arousal. Affective inertia was calculated separately for the valence and arousal dimensions by

taking the autocorrelation of each participant's valence and arousal judgments across time (Kuppens et al., 2010).

Psychological Well-Being. We used well-validated measures of anxiety and depression, measured weekly, to index well-being. Anxiety was assessed using the Generalized Anxiety Disorder Assessment (GAD-7), a seven-item instrument used to measure the severity of generalized anxiety disorder (Spitzer et al., 2006). Participants indicated how often they had been bothered by different anxiety-related symptoms (e.g., "worrying too much about different things") over the past week. Responses to GAD-7 items were provided on a 4-point scale that ranged from 0 (Not at all) to 3 (Nearly every day). Responses to all seven items were summed to create a GAD-7 score for each participant, with higher scores reflecting greater anxiety. Depression was assessed using the Center for Epidemiologic Studies Depression Scale (CES-D), a 20-item measure of depressive symptomatology (Radloff, 1977). Participants reported how often they felt or behaved in ways connected to depressive symptoms (e.g., "I could not get going") over the last week using a 4-point scale that ranged from 0 (Rarely or none of the time) to 3 (Most or all of the time). Responses to all twenty CES-D items were summed to create a CES-D score for each participant, with higher scores reflecting greater depression.

Statistics and Software

All analyses were conducted in RStudio v2024.12.0+467 (Posit Team, 2024) with R v4.4.2 (R Core Team, 2024) with the exception of multilevel mediation models which were fitted in Stata v18 (StataCorp, 2023). Linear mixed-effects models, with maximal random effects where possible, were fitted to participant data using the lme4 package v1.1.35.5 with degrees of freedom estimated using the Satterthwaite method (Bates et al., 2015; Kuznetsova et al., 2017). Bonferroni correction was used to correct for multiple comparisons. Plots of participant data and model predictions were

generated using the *ggplot2* (v3.5.1; Wickham, 2016) and *ggeffects* (v1.7.2; Ludecke, 2018) packages, respectively.

Transparency and Openness

For both studies, we collected the full sample prior to data analyses and report all data exclusions, all manipulations, and all measures used. All measures and materials presented within Studies 1 and 2 can be viewed in the supplementary materials. Neither study was preregistered. All data and analysis scripts have been made publicly available at (<https://osf.io/3dyr7>).

Results

Politically Polarizing Events Evoke Unstable Negative Affect

First, we assessed how the cultural salience of a politically-polarizing event (i.e., the George Floyd protests) impacted the dynamics of participants' affect. Before testing our main hypotheses about longer-term affective dynamics, we first validated our method by measuring whether short-term changes in affect fluctuated as a function of day-to-day changes in the salience of George Floyd's murder and subsequent protests. We quantified the overall magnitude of short-term affective change as the Euclidean distance between a participant's valence and arousal at one time point (T_n) and their valence and arousal at the preceding time point (T_{n-1} ; Fig 1C). As expected, a linear mixed-effects model reveals that greater national search interest for "George Floyd" was associated with a greater magnitude of affect change between study timepoints ($b = 0.25$, 95% CI [0.04, 0.47], $t(237) = 2.30$, $p = .022$, *semi-partial r*² = .005), even after controlling for affect and search interest at T_{n-1} . We observe similar effects when using other event-related search terms and when controlling for the cultural salience of the concurrent coronavirus pandemic (Supplementary Materials). Further analyses probing how event salience shaped affect on the

valence dimension reveals that participants' affect became more negative as searches for the term "George Floyd" increased ($b = -0.41$, 95% $CI [-0.65, -0.17]$, $t(167) = -3.34$, $p = .001$, *semi-partial r*² = .009). Conversely, searches for "George Floyd" were not associated with movement towards either higher or lower arousal states ($b = -0.07$, 95% $CI [-0.30, 0.16]$, $t(73) = -0.63$, $p = .532$, *semi-partial r*² < .001).

We next tested our main hypotheses concerning longer-term affective dynamics. First, we assessed the extent to which different measures of affective dynamics and mood were correlated over time. These analyses revealed minimal overlap between measures, with the exception of instability and variability which were moderately correlated (Supplementary Materials). Next, leveraging a multi-week longitudinal design and the prolonged salience of the George Floyd protests (Fig 2A), we examined whether participants' affective experiences exhibited distinct temporal patterns across periods of high compared to low event salience. Specifically, we tested whether participants displayed greater affective instability, variability, and inertia during a two-week period when American's interest in the George Floyd protests was highest (May 26–June 7, a period containing 80% of all searches for "George Floyd" during the study's time frame), compared to the following six-week period when interest remained much lower (June 8–July 19). To ensure sufficient data for assessing affective dynamics, we retained only participants who completed at least three study sessions in *both* periods, resulting in a sample of 51 participants for this specific analysis. Despite these exclusions, sensitivity power analyses indicate that our retained sample ($n = 51$) provided 80% power to detect a small-to-medium effect ($d = 0.40$) for the conducted paired-samples *t*-tests.

During the period when the George Floyd protests were most salient, participants displayed greater affective instability (Fig 4A) and variability (Fig 4B) compared with the lower-salience

period (Table 1). These results were replicated when using the popularity of all event-related search terms to define periods of high versus low event salience (Supplementary Materials). Participants also exhibited less affective inertia on the valence dimension, but inertia on the arousal dimension did not reliably differ between periods. We also tested whether participants' general mood changed across periods of high compared to low event salience, where mood is operationalized as participants' mean valence and arousal for each period. Participants exhibited more negative valence but no significant changes in arousal during the period when the George Floyd protests were highly salient. However, unlike the effects above, the effect of negative mood did not survive correction for multiple comparisons. In sum, participants' affect was less stable and more variable during the peak of America's interest in the George Floyd protests.

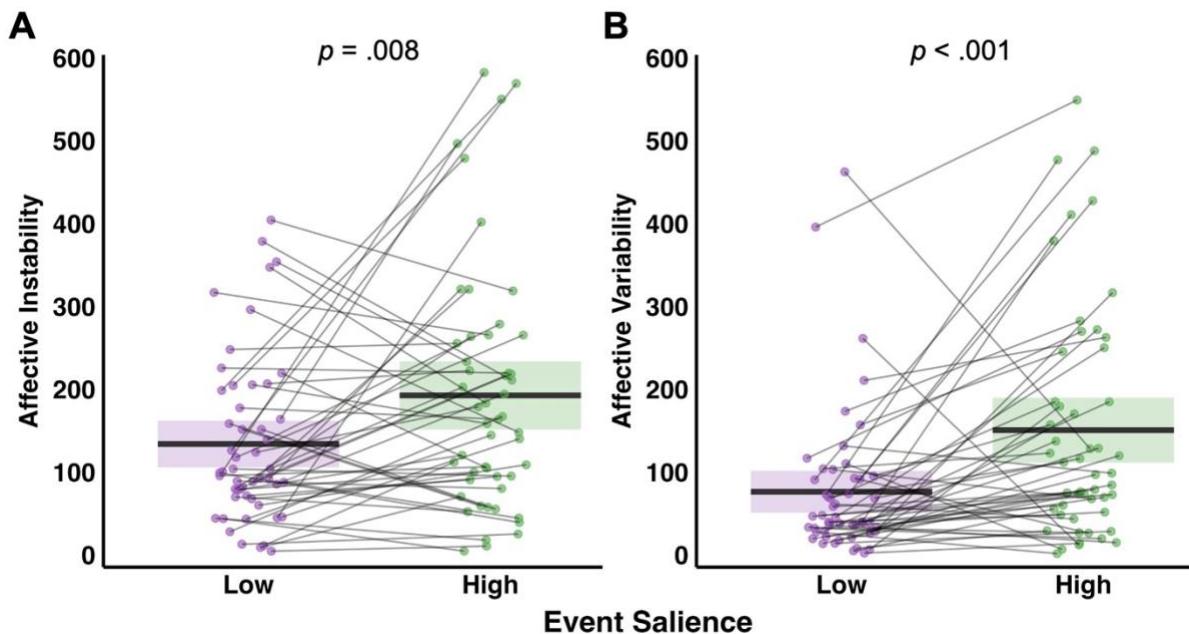


Figure 4 | Study 1: Affective Dynamics Associated with Event Salience. Solid black lines show the mean level of affective instability (Panel A) and variability (Panel B) during periods of low compared to high event salience. Boxes represent the 95% confidence intervals around these means. Dots represent participant-level affective instability and variability during periods of low (purple) vs. high (green) event salience. Lines connect within-participant datapoints.

Table 1 | Comparing Affective Experiences across Periods of High vs. Low Event Salience

Affect Measure	<i>t</i>	df	<i>p</i>	<i>d</i>	95% CI for <i>d</i>	
					Lower	Upper
Instability	2.77	50	.008	0.39	0.10	0.67
Variability	3.80	50	< .001	0.53	0.24	0.82
Inertia (Valence)	-2.88	50	.006	-0.40	-0.69	-0.12
Inertia (Arousal)	-1.83	50	.074	-0.26	-0.53	0.02
Mood (Valence)	-2.08	50	.043	-0.29	-0.57	-0.01
Mood (Arousal)	0.04	50	.969	0.00	-0.27	0.28

Note. Results of paired-samples *t*-tests comparing affective dynamics and mood across periods of high vs. low event salience. Only *p*-values in bold survive correction for multiple comparisons (Bonferroni-corrected threshold *p* = .008 at $\alpha = .05$ for six comparisons).

Political Engagement Destabilizes Affect

While these results suggest that highly-polarizing and culturally-salient events are reflected in people's affective dynamics, they do not explicitly tether participants' affect to their *personal* engagement with political events. Therefore, to assess the emotional impact of political engagement within our sample, we drew upon data from a freeform diary-writing task administered throughout the study, assessing whether participants provided an unprompted discussion of the George Floyd protests that reflected engagement with this event (coded as a binary yes/no variable). Therefore, while the Google search interest data from the previous set of analyses captures the cultural salience of these polarizing protests, participants' discussions of these protests in their diary entries reflect their personal engagement with this event.

Mirroring our approach with Google search data, we first validated that we could predict the overall magnitude and direction of participants' day-to-day changes in affect based on their personal engagement with politically-polarizing protests. Remarkably, nearly half of the sample (42%, $n = 47$) organically mentioned the George Floyd protests in one or more diary entry. When

explicitly mentioning the George Floyd protests in their diary entry, participants exhibited larger changes in affect ($b = 0.32$, 95% $CI [0.15, 0.50]$, $t(20) = 3.73$, $p = .001$, *semi-partial r*² = .012), and greater movement towards negative affective states ($b = -0.46$, 95% $CI [-0.70, -0.21]$, $t(38) = -3.85$, $p < .001$, *semi-partial r*² = .019). These effects remained when accounting for the frequency of searches for “George Floyd,” with both personal engagement and increased search interest independently predicting larger and more negative day-to-day affective shifts (Supplementary Materials). Conversely, political engagement was not associated with movement towards either higher or lower arousal states ($b = 0.10$, 95% $CI [-0.10, 0.31]$, $t(41) = 0.98$, $p = .334$, *semi-partial r*² = .001), replicating analyses using Google search data. In short, participants’ everyday affective experiences were associated with their personal engagement with political events, as they experienced larger affective shifts—predominantly to more negative affective states—when politically engaged.

We next assessed how political engagement relates to affective dynamics. We measured political engagement on a week-to-week basis, capturing whether participants’ diary responses reflected engagement with the George Floyd protests during a given week. We then used this measure to predict the temporal dynamics of participants’ affect (i.e., instability, variability, and inertia) during the same time frame, allowing us to link participants’ affective dynamics to their personal engagement with a politically-polarizing event. Linear mixed-effects models (each predicting a distinct component of affective dynamics) reveal that participants exhibit greater affective instability (Fig 5A) and variability (Fig 5B) when politically engaged (Table 2). However, only the association between political engagement and affective instability remained significant after correction for multiple comparisons. For this primary effect, a post-hoc simulation-based power analysis based on the fitted instability model (1,000 simulations; $\alpha = .05$)

estimated power at 0.83. Notably, the association between engagement and instability persisted even after controlling for national search interest, suggesting that personal engagement with the George Floyd protests was linked to increases in affective instability above and beyond the broader cultural salience of this event (Supplementary Materials). Participants did not exhibit greater affective inertia on either the valence or arousal dimensions when politically engaged. We additionally tested whether participants' mean valence or arousal during each week (i.e., their mood) was associated with the George Floyd protests being top of mind. Contrary to our expectation, political engagement was not associated with more negative valence or greater arousal. Therefore, rather than evoking persistent negative moods, political engagement is associated with distinct patterns of affect change—marked by high instability—which suggests that affective destabilization could explain why political engagement lowers well-being.

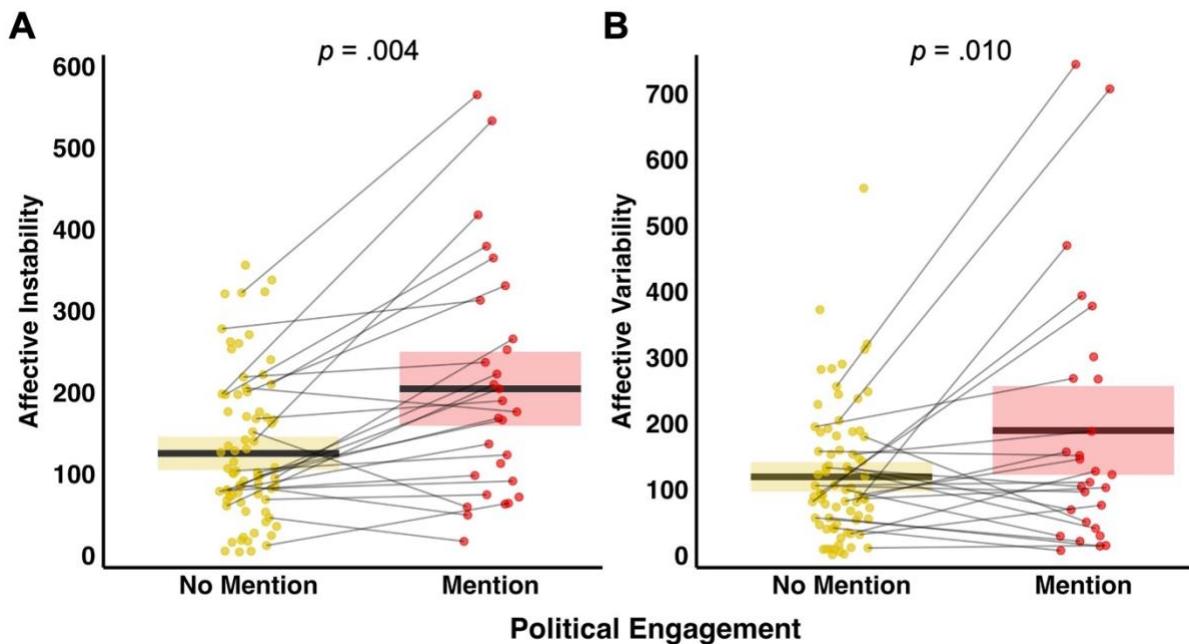


Figure 5 | Study 1: Affective Dynamics Associated with Political Engagement. Solid black lines depict the predicted magnitude of affective instability (Panel A) and variability (Panel B) from our mixed-effects model when participants did versus did not mention the George Floyd protests in their diary entry. Boxes represent the 95% confidence intervals around these estimates. Dots represent participant-level affective instability and variability when they did (red) versus did not (yellow) discuss the George Floyd protests in their diary response. Lines connect within-participant datapoints.

Table 2 | Political Engagement as a Predictor of Affective Dynamics and Mood

Affect Measure	Estimate	95% CI	t	df	p	R^2_{sp}
Instability	0.79	[0.29, 1.28]	3.16	30	.004	.030
Variability	1.68	[0.47, 2.89]	2.78	28	.010	.066
Inertia (Valence)	-0.15	[-0.63, 0.32]	-0.64	41	.528	.002
Inertia (Arousal)	-0.26	[-0.77, 0.26]	-0.99	304	.321	.003
Mood (Valence)	-0.15	[-0.34, 0.03]	-1.76	33	.088	.009
Mood (Arousal)	0.07	[-0.13, 0.28]	0.70	34	.492	.002

Note. Results of linear mixed-effects models, each predicting a distinct affective measure based on political engagement. All models included a random intercept and a random slope for political engagement, with the exception of the model predicting inertia on the arousal dimension for which this random slope was removed in order to allow the model to converge. Only the *p*-value in bold survives correction for multiple comparisons (Bonferroni-corrected threshold *p* = .008 at $\alpha = .05$ for six comparisons). R^2_{sp} = semi-partial r^2 .

Affective Instability, Evoked by Political Engagement, Reduces Well-Being

Given the known link between affective instability and decreased well-being (Houben et al., 2015), the natural next question is to test whether affective instability serves as a mechanistic pathway underlying the relationship between political engagement and diminished well-being. We used well-validated measures of anxiety (GAD-7; Spitzer et al., 2006) and depression (CES-D; Radloff, 1977), measured weekly, to index well-being. Having already documented that political engagement robustly predicts affective instability, we used multilevel mediation models to test the hypothesis that affective instability, evoked by political engagement, is a driver of diminished well-being (Fig 6).

A multilevel mediation model using anxiety to index well-being revealed that participants report greater anxiety when politically engaged (total effect: *p* = .036; Fig 6A). We also identified a significant indirect effect (*p* = .032): political engagement was associated with greater affective instability, which, in turn, predicted greater anxiety. After accounting for affective instability,

political engagement no longer predicted anxiety (direct effect: $p = .182$), leaving affective instability as the sole significant predictor ($p = .004$) and providing evidence of full mediation. In other words, affective instability appears to be at least one mechanism by which anxiety increases during political engagement.

We next performed the same multilevel mediation analysis using depression as an index of well-being (Fig 6B). Mirroring what we observed for anxiety, participants reported more severe symptoms of depression when politically engaged (total effect: $p = .028$). Furthermore, political engagement no longer predicted depression after accounting for affective instability (direct effect: $p = .095$), which remained a significant predictor of depression ($p = .040$). However, unlike with anxiety, the mediational pathway was only marginally significant (indirect effect: $p = .083$). Together, our findings suggest that people exhibit increased anxiety when engaging with politics because political engagement is affectively destabilizing. At the same time, our results hint at the possibility that the same affective mechanism explains why people exhibit increased depression during political engagement, though this link is less robust.

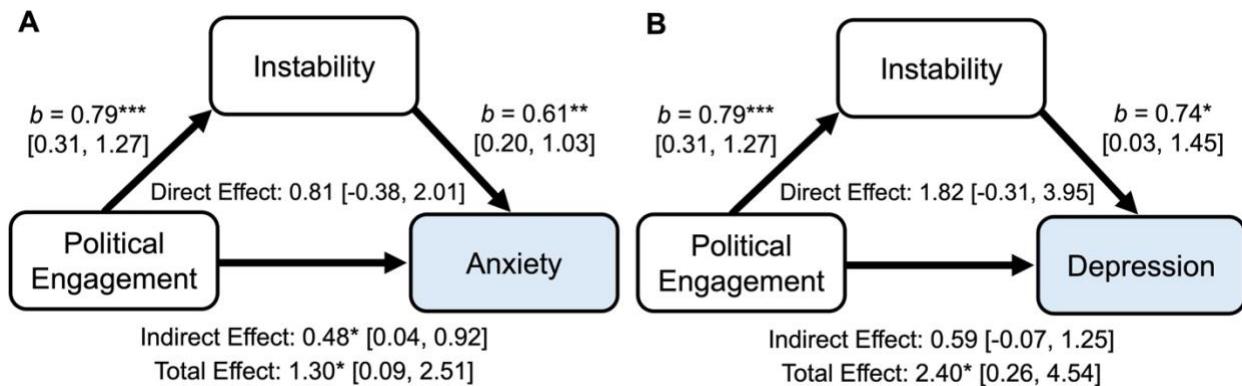


Figure 6 | Study 1: Multilevel Mediation Analyses. Results of multilevel mediation analyses assessing a mediational pathway in which political engagement increases anxiety (Panel A) and depression (Panel B) by increasing affective instability. The direct, indirect, and total effects from each model are shown above, as are effects depicting the relationship between political engagement and affective instability and affective instability and well-being. * $p < .05$, ** $p < .01$, *** $p < .001$.

Study 2

Study 1 demonstrates the affective consequences of engaging with a nationally salient and politically polarizing event: Political engagement is associated with greater affective instability, which, in turn, accounts for its positive association with anxiety. While these findings highlight the emotional and psychological costs of political triggers stemming from the external environment, it remains unclear whether individuals' internal political attitudes similarly shape their affective experiences. Prior research suggests that individuals on the ends of the political spectrum (strong partisans) exhibit more intense emotional reactions to political content (Bakker et al., 2021; Huddy et al., 2015; van Prooijen et al., 2015) and harbor greater hostility towards their political opponents (Finkel et al., 2020; Iyengar et al., 2019)—often to the detriment of their own well-being (Nelson, 2022; Van Bavel et al., 2024). These findings suggest that individuals with stronger, more polarized political beliefs may also be predisposed to less stable emotional lives. Yet, the day-to-day affective profiles of political partisans remain largely unexplored.

Study 2 was designed to address this gap. Moving beyond momentary engagement with a rapidly evolving political event, we examined whether individuals with stronger, more polarized political attitudes exhibit larger day-to-day changes in affect. Because political attitudes are relatively stable over short periods (Anscombe et al., 2008; Sears & Funk, 1999), we did not track within-person shifts in political attitudes or assess how these changes relate to long-term emotional and psychological well-being. Instead, we used a two-wave design to test whether individual differences in political attitudes predicted day-to-day affective change—a proxy for longer-term affective instability. This approach reflects a deliberate shift in focus, from the within-person affective consequences of engaging with a salient political event to the between-person affective profiles of politically polarized individuals across the ideological spectrum.

Methods

Participants

We recruited 370 individuals to complete a brief pre-screening questionnaire on Prolific. Due to our interest in characterizing the affective profile of political partisans, we only invited individuals to participate in Study 2 if they self-identified as a Democrat or Republican, *and* reported more positive feelings towards their own political party. From this initial set of 370 participants, we recruited 121 participants who met these criteria to complete Study 2. All participants endorsed English as their first language and possessed at least a 99% approval rating on Prolific. As in Study 1, we excluded participants ($n = 13$) who completed only an initial questionnaire, leaving data from 108 participants ($M_{age} = 41.84$, $SD_{age} = 11.21$; 66 Female, 38 Male, 4 Other; 50 Democrats, 58 Republicans; 70 White, 11 Asian, 12 Black, 10 Hispanic/Latinx, 5 Mixed/Other) each of whom completed two questionnaires, yielding a total of 216 assessments.

Design and Procedure

Participants completed a pre-screening questionnaire, responding to items assessing their political affiliation and feelings towards different political groups. We administered the pre-screening questionnaire on May 10, 2024. Next, participants completed two additional questionnaires two days apart. These questionnaires were administered between May 11, 2024 and May 19, 2024. Study 2 followed a similar procedure as Study 1. Participants began each questionnaire by writing about their past two days (*Diary Task*), summarized how they felt during this period using the affect grid (*Affect Judgments*), and completed items measuring their anxiety symptomology (*Psychological Well-Being*) and political attitudes (*Political Attitudes*).

Materials and Measures

Diary Task. The diary task presented to participants in Study 2 was the same as that administered to participants in Study 1. However, based on our interest in participants' political attitudes and the lack of a coinciding highly salient and politically-polarizing event, we did not analyze participants' diary entries in Study 2.

Affect Judgments. Affect judgments in Study 2 were elicited in the same manner as Study 1, with one exception: participants were not asked to select three events from their diary entry, but were instead asked to report how they generally felt over the past two days using the affect grid. Thus, participants in Study 2 provided a single affect judgment during each questionnaire that summarized their recent feelings. As in Study 1, we used affect change to quantify the magnitude of participants' timepoint-to-timepoint affective shifts (Fig 1C). However, because Study 2 used a two-wave design, it is not possible to compute longer-term affective dynamics, such as affective instability, variability, or inertia, all of which require at least three consecutive assessments. Instead, we focused on affect change—a shorter-term proxy for affective instability. While affect change differs from affective instability in temporal scope, the two are conceptually and mathematically related: affect change captures the size of a single affective shift, whereas affective instability reflects the broader pattern of these shifts over time. In Study 1, individual differences in affective instability, computed across the full eight-week period, were strongly correlated with individual differences in affect change between adjacent timepoints (mean $r = .51$, $SD = .11$, range = $.21\text{--}.68$), indicating that this single timepoint-to-timepoint measure captures meaningful between-person variation in longer-term affective instability.

Psychological Well-Being. Given the robust association between within-person affective instability and anxiety in Study 1, we again measured participants' anxiety symptomology in Study 2 using the GAD-7 (Spitzer et al., 2006). However, because Study 2 focused on the relation

between individual differences in stable political attitudes and affective change, it did not allow for analyses linking within-subject changes in political attitudes or affective dynamics to psychological well-being. Nonetheless, this design did allow us to explore the association between individual differences in political attitudes and anxiety symptomology, which we report in the supplementary materials.

Political Attitudes. Participants responded to multiple questions probing their political attitudes, allowing us to measure ideological extremity and affective polarization. During the first questionnaire, participants stated their level of agreement with five political statements (see supplementary materials) by positioning a slider on a 101-point scale that ranged from “0” (Strongly Disagree) to “100” (Strongly Agree). In doing so, they provided their attitudes regarding five politically-polarizing issues (abortion, immigration, climate change, gun control, and racism). We measured participants ideological extremity using their responses to these items. Responses were recoded onto a “0” (Strong Liberal Attitude) to “100” (Strong Conservative Attitude) scale depending on whether agreement with a statement was associated with a liberal or conservative ideology. Following this recoding, we calculated the extent to which participants’ mean rating diverged from a neutral (“50”) midpoint. Thus, ideologically-extreme participants consistently expressed strong liberal or strong conservative attitudes, while participants with lower levels of ideological extremity expressed more moderate (or ideologically-inconsistent) attitudes. Participants also stated their feelings towards the Democratic and Republican parties using a 101-point scale that ranged from “0” (Very cold or unfavorable) to “100” (Very warm or favorable). These questions were administered in a pre-screening questionnaire one day before the first questionnaire in Study 2. Following past work (Iyengar et al., 2019), we measured participants’ level of affective polarization by calculating the absolute difference between their feelings towards

the Democratic and Republican parties. Thus, participants showing high levels of affective polarization endorsed feeling considerably more warmth towards their political ingroup compared to the outgroup, while those showing low levels of affective polarization felt similarly towards both political parties.

Results

We first checked that participants' political attitudes varied sufficiently to test our hypotheses. Indeed, 33% of our sample had an ideological extremity score of at least 35 (out of 50), endorsing strong political attitudes that consistently aligned with either liberalism or conservatism. Similarly, 36% of our sample rated their political in-party at least 75 points higher than their political out-party on a 101-point feeling thermometer. The average ideological extremity of the sample was 27.46 ($SD = 13.79$), while the average affective polarization score was 59.56 ($SD = 27.36$). Sensitivity power analyses indicated that our sample ($n = 108$) provided 80% power to detect small to medium-sized effects ($r = .27$).

We next tested whether individual differences in ideological extremity were associated with day-to-day changes in affect. Confirming our predictions, greater ideological extremity corresponds with larger day-to-day changes in affect (Fig 7), even when controlling for affect at T_1 , political affiliation (Democrat vs. Republican) and demographic covariates (age, gender, race, and education; Table 3). In contrast, ideological extremity was not associated with mood (i.e., mean valence or arousal). These results suggest that strong partisanship, like political engagement, is not associated with persistent negative moods but rather large affective swings characteristic of an emotionally unstable life. We observed the same pattern of results when using affective polarization as our measure of partisan strength: greater affective polarization predicted larger day-to-day affective shifts, but again was not related to mood. These effects were observed on both

sides of the political aisle, as political affiliation did not predict affect change ($b = 0.09$, 95% CI [-0.36, 0.54], $t(96) = 0.40$, $p = .693$), or interact with measures of partisan strength to predict changes in affect (both $P_s > .1$). Taken together, our findings suggest that amid deepening political divides, the emotional costs of politics are experienced not as persistent negative moods, but as larger day-to-day fluctuations in affect.

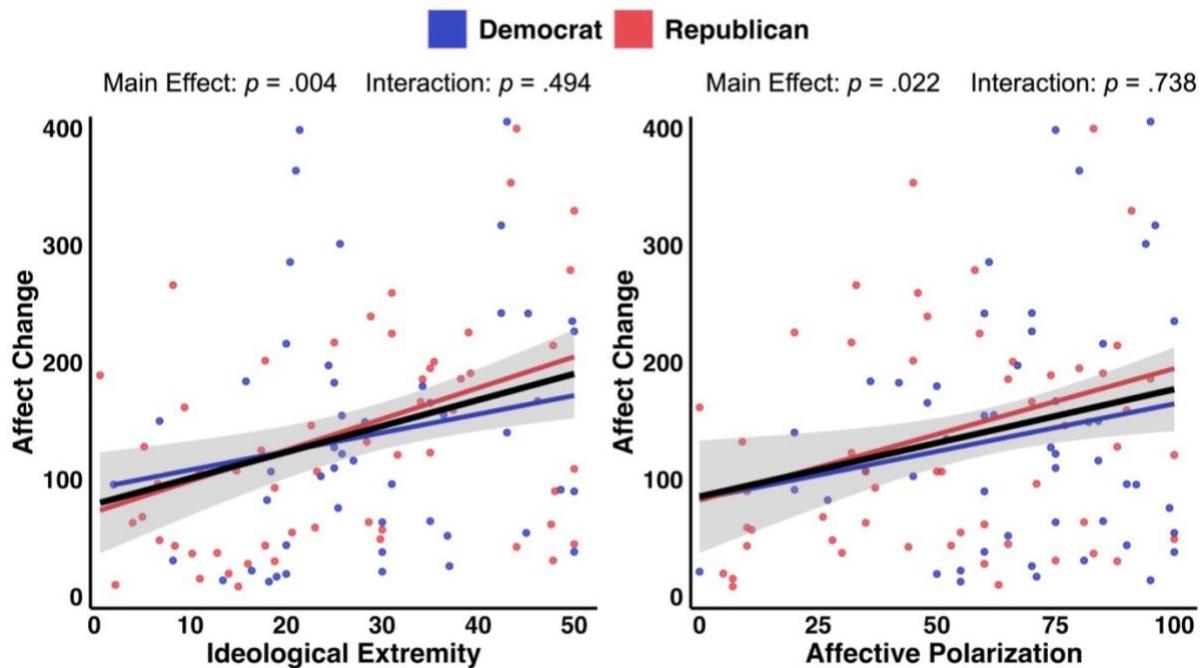


Figure 7 | Study 2: Politically Polarized Partisans Exhibit Larger Affective Shifts. Both ideological extremity (left) and affective polarization (right) were positively associated with affect change. Black lines represent the predicted values of affect change at each level of ideological extremity and affective polarization. Shaded regions reflect the 95% confidence intervals around these estimates. Colored lines display these associations for Democrats (Blue) and Republicans (Red) independently. Dots reflect data from individual participants.

Table 3 | Political Attitudes as a Predictor of Day-to-Day Affect

Variable	Estimate	95% CI	t	df	p	R^2_{sp}
Ideological Extremity (IV)						
Affect Change	2.46	[0.93, 3.98]	3.20	95	.002	.090
Mean Valence	0.06	[-1.58, 1.70]	0.07	97	.941	<.001
Mean Arousal	0.09	[-1.37, 1.55]	0.13	97	.900	<.001
Affective Polarization (IV)						
Affect Change	0.94	[0.15, 1.74]	2.35	95	.021	.050
Mean Valence	-0.28	[-1.11, 0.55]	-0.67	97	.507	.004
Mean Arousal	0.40	[-0.33, 1.14]	1.09	97	.280	.010

Note. Results of linear regressions predicting affect change, mean valence, or mean arousal using either ideological extremity or affective polarization (separate models). All models included political affiliation (Democrat vs. Republican) and demographic covariates (age, gender, race, and education) as predictors. Models predicting affect change additionally controlled for valence and arousal at T_1 . R^2_{sp} = semi-partial R^2 .

General Discussion

There is growing concern that deepening political divides harm individual and collective well-being (American Psychological Association, 2024; Van Bavel et al., 2024). Current frameworks posit that political engagement evokes negative emotions, which act as chronic stressors that hinder well-being (Ford et al., 2023; Hoyt et al., 2018). Under this framework, an implicit assumption is that fluctuations in an individual's affective experiences reflect short-term reactivity to political engagement, which cumulatively compound with repeated exposure. Here, we find that the emotional consequences of political engagement extend beyond immediate emotional reactions to shape day-to-day affective dynamics.

Affective dynamics are a key component of mental and emotional health. Prior research shows that individuals with anxiety and depression experience higher levels of affective instability, variability, and inertia in daily life (Houben et al., 2015). These affective dynamic patterns are also known to precede declines in well-being (Sperry et al., 2020; van de Leemput et al., 2014; Yang

et al., 2025), with individuals reporting more inert and variable negative emotions prior to worsening depression (van de Leemput et al., 2014). Similarly, greater variability and instability in both positive and negative affect prospectively predict the emergence of new depressive symptoms in adolescents over time (Yang et al., 2025). Taking inspiration from this work, we identify a mechanistic pathway through which political engagement can undermine well-being: by giving rise to rapid and significant changes in affect, political engagement may trigger longer-term affective instability that worsens well-being.

Across two longitudinal studies, we characterize the affective consequences of political engagement and strong partisanship. By looking beyond short-term emotional reactions to capture longer-term affective dynamics, we find that periods of political engagement are *not* marked by decreases in mood, but rather by frequent and large affective fluctuations that are characteristic of high affective instability: 1) As the salience of politically-polarizing events increases, so too does affective instability; 2) When an individual engages with politically-polarizing events, their affect becomes more unstable, which predicts greater anxiety; 3) The stronger an individual's partisan attitudes, the more their day-to-day affect fluctuates. These large fluctuations in affect can have real costs. Corroborating existing work on the maladaptive consequences of affective instability (D'Aurizio et al., 2023; Houben et al., 2015; Yen et al., 2004), we find evidence in Study 1 that affective instability is a pathway by which political engagement increases anxiety. Therefore, as cross-party animosity rises, and divisive politics become more prevalent (Finkel et al., 2020; Gentzkow et al., 2019), our findings highlight the potential emotional costs of politics on individuals' mental and emotional health.

Political engagement is an essential part of any healthy democracy. Thus, understanding the psychological processes by which political engagement lowers well-being is critical for

mitigating its adverse effects and cultivating a healthier civic climate. Our findings provide key insights towards these goals. First, the impact of politics is not limited to immediate affective reactions or persistent negative moods. Political engagement also destabilizes affect, which in turn drives increased anxiety. This suggests that interventions targeting affective instability may be effective at reducing the psychological costs of political involvement. Second, we identify the affective profile of the individuals who we suspect are most vulnerable to the emotional costs of politics: people with strong partisan beliefs experience larger day-to-day changes in affect compared to their more moderate peers. This may prove valuable for identifying individuals who are most susceptible to the destabilizing effects of politically salient events and most likely to benefit from interventions aimed at attenuating the negative consequences of political engagement—those on the extreme ends of the political spectrum.

As political polarization intensifies, so do concerns about its psychological toll (American Psychological Association, 2024; Van Bavel et al., 2024). By capturing how affective dynamics are shaped by engagement with salient and polarizing political events, we demonstrate how affective instability plays a pivotal role in undermining well-being by increasing anxiety. Additionally, we show that more polarized political partisans tend to exhibit larger day-to-day affective shifts reflective of a less stable emotional life. Our results therefore provide new insights into the emotional costs of political engagement and partisanship, revealing a mechanistic pathway by which affective dynamics shape the relationship between politics and emotional health.

Constraints on Generality. Our findings were observed in a sample of American participants recruited through the online research platform Prolific. While generally more representative than a sample of American undergraduates, the exclusive recruitment of US residents potentially limits

the generalizability of our results. Political polarization has been observed across the globe (Reiljan, 2020; Wagner, 2021) with political events outside of the United States also being linked to lower well-being (Kavetsos et al., 2021; Li et al., 2021). Therefore, we anticipate that our findings will generalize to other sociopolitical contexts, particularly those exhibiting meaningful ideological divides. However, the generalizability of our findings—particularly to non-Western or non-WEIRD (Western, Educated, Industrialized, Rich, and Democratic) populations—remains an open question. Second, while we observe associations between distinct measures of partisan attitude strength and day-to-day affective shifts (Study 2), measures of event salience and political engagement in Study 1 focused on a single political event—the murder of George Floyd and ensuing civil unrest. Although we expect our findings to generalize to other politically-polarizing events (e.g., elections), this remains a question for future research. Finally, we measured affective dynamics and day-to-day affective change by assessing participants' feelings towards personally significant events every two days. However, we expect our findings to generalize to other time-scales suitable for measuring affective dynamics (Houben et al., 2015). We have no reason to believe that the results depend on other characteristics of the participants, materials, or context.

Statement of Limitations. While Study 1 included 113 participants who completed 1,543 affective assessments across 23 time points, analyses investigating affective dynamics necessarily relied on a subset of participants who completed a sufficient number of consecutive assessments. The reduced sample size used for these analyses represents a potential limitation. However, these analyses included multiple observations per participant, adding meaningful within-subject power, and post-hoc power analyses consistently indicated adequate sensitivity to detect effects in the small-to-medium range. Moreover, findings from analyses assessing affective dynamics closely

aligned with those investigating shorter-term affective change using the full sample, further supporting the robustness of these results. More broadly, the longitudinal experience sampling data used in our research is correlational. Thus, while our methodological approach allowed us to capture participants' unprompted engagement with a real-world political event over time, it did not permit a direct test of the causal influence of political engagement on everyday affect and well-being. It is possible, for example, that affective instability or diminished well-being prompted participants to engage with current political events. While the tight link between population-level interest in ongoing protests and participants' day-to-day affect supports the influence of politics on affect and well-being, the lack of direct evidence for this causal pathway reflects a limitation of the present work.

Future Directions. The present work links the cultural salience of a politically polarizing event and individuals' personal engagement with it to the dynamics of their day-to-day affect and well-being. Future research can build on these findings by examining the causal relationships between political engagement, affective instability, and well-being. For instance, experimental studies that manipulate individuals' exposure to polarizing political content could gauge how much political engagement is needed to increase affective instability. Longer-term longitudinal research could additionally assess whether changing political attitudes, including increases in ideological extremity, predict corresponding shifts in affective dynamics and well-being over time. Finally, future research may consider assessing individuals' moment-to-moment affective states during political engagement (e.g., while consuming political content) to identify specific affective patterns that make political engagement more likely to harm well-being.

References

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th, text rev. ed.). <https://doi/book/10.1176/appi.books.9780890425787>

American Psychological Association. (2024). *Stress in America 2024: A nation in political turmoil*. <https://www.apa.org/pubs/reports/stress-in-america/2024>

Ansolabehere, S., Rodden, J., & Snyder Jr, J. M. (2008). The strength of issues: Using multiple measures to gauge preference stability, ideological constraint, and issue voting. *American Political Science Review*, 102(2), 215-232.

Bakker, B. N., Schumacher, G., & Rooduijn, M. (2021). Hot Politics? Affective Responses to Political Rhetoric. *American Political Science Review*, 115(1), 150-164. <https://doi.org/10.1017/S0003055420000519>

Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software*, 67(1), 1 - 48. <https://doi.org/10.18637/jss.v067.i01>

Buchanan, L., Bui, Q., & Patel, J. K. (2020). Black Lives Matter may be the largest movement in U.S. history. <https://www.nytimes.com/interactive/2020/07/03/us/george-floyd-protests-crowd-size.html>

Chykina, V., & Crabtree, C. (2018). Using Google Trends to Measure Issue Salience for Hard-to-Survey Populations. *Socius*, 4, 2378023118760414. <https://doi.org/10.1177/2378023118760414>

Combs, D. J. Y., Powell, C. A. J., Schurtz, D. R., & Smith, R. H. (2009). Politics, schadenfreude, and ingroup identification: The sometimes happy thing about a poor economy and death. *Journal of Experimental Social Psychology*, 45(4), 635-646. <https://doi.org/https://doi.org/10.1016/j.jesp.2009.02.009>

D'Aurizio, G., Di Stefano, R., Socci, V., Rossi, A., Barlattani, T., Pacitti, F., & Rossi, R. (2023). The role of emotional instability in borderline personality disorder: a systematic review. *Annals of General Psychiatry*, 22(1), 9. <https://doi.org/10.1186/s12991-023-00439-0>

FeldmanHall, O., & Heffner, J. (2022). A generalizable framework for assessing the role of emotion during choice. *American Psychologist*, 77(9), 1017-1029. <https://doi.org/10.1037/amp0001108>

Finkel, E. J., Bail, C. A., Cikara, M., Ditto, P. H., Iyengar, S., Klar, S., Mason, L., McGrath, M. C., Nyhan, B., Rand, D. G., Skitka, L. J., Tucker, J. A., Van Bavel, J. J., Wang, C. S., & Druckman, J. N. (2020). Political sectarianism in America. *Science*, 370(6516), 533-536. <https://doi.org/doi:10.1126/science.abe1715>

Ford, B. Q., Feinberg, M., Lassetter, B., Thai, S., & Gatchpazian, A. (2023). The political is personal: The costs of daily politics. *J Pers Soc Psychol*, 125(1), 1-28. <https://doi.org/10.1037/pspa0000335>

Frijda, N. H. (2007). *The Laws of Emotion*. Psychology Press. <https://doi.org/https://doi.org/10.4324/9781315086071>

Gentzkow, M., Shapiro, J. M., & Taddy, M. (2019). Measuring Group Differences in High-Dimensional Choices: Method and Application to Congressional Speech. *Econometrica*, 87(4), 1307-1340. <https://doi.org/https://doi.org/10.3982/ECTA16566>

Goicoechea, C., Dakos, V., Sanabria, D., Heshmati, S., Westhoff, M., Banos, O., Pomares, H., Hofmann, S. G., & Perakakis, P. (2025). Bistability and affect shift dynamics in the

prediction of psychological well-being. *Emotion*, 25(4), 982-996. <https://doi.org/10.1037/emo0001454>

Groenendyk, E. W., & Banks, A. J. (2014). Emotional Rescue: How Affect Helps Partisans Overcome Collective Action Problems. *Political Psychology*, 35(3), 359-378. <https://doi.org/https://doi.org/10.1111/pops.12045>

Heller, A. S., Fox, A. S., & Davidson, R. J. (2019). Parsing affective dynamics to identify risk for mood and anxiety disorders. *Emotion*, 19(2), 283-291. <https://doi.org/10.1037/emo0000440>

Horowitz, J. M. (2021). Support for Black Lives Matter declined after George Floyd protests, but has remained unchanged since. <https://www.pewresearch.org/short-reads/2021/09/27/support-for-black-lives-matter-declined-after-george-floyd-protests-but-has-remained-unchanged-since/>

Houben, M., Van Den Noortgate, W., & Kuppens, P. (2015). The relation between short-term emotion dynamics and psychological well-being: A meta-analysis. *Psychol Bull*, 141(4), 901-930. <https://doi.org/10.1037/a0038822>

Hoyt, L. T., Zeiders, K. H., Chaku, N., Toomey, R. B., & Nair, R. L. (2018). Young adults' psychological and physiological reactions to the 2016 U.S. presidential election. *Psychoneuroendocrinology*, 92, 162-169. <https://doi.org/https://doi.org/10.1016/j.psyneuen.2018.03.011>

Huddy, L., Mason, L., & AarØE, L. (2015). Expressive Partisanship: Campaign Involvement, Political Emotion, and Partisan Identity. *American Political Science Review*, 109(1), 1-17. <https://doi.org/10.1017/S0003055414000604>

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The Origins and Consequences of Affective Polarization in the United States. *Annual Review of Political Science*, 22(Volume 22, 2019), 129-146. <https://doi.org/https://doi.org/10.1146/annurev-polisci-051117-073034>

Jackson, C., & Newall, M. (2020). Americans overwhelmingly view Floyd killing as part of larger problem. <https://www.ipsos.com/en-us/new-polls/abc-coronavirus-poll-wave-11>

Jahng, S., Wood, P. K., & Trull, T. J. (2008). Analysis of affective instability in ecological momentary assessment: Indices using successive difference and group comparison via multilevel modeling. *Psychol Methods*, 13(4), 354-375. <https://doi.org/10.1037/a0014173>

Kavetsos, G., Kawachi, I., Kyriopoulos, I., & Vandoros, S. (2021). The effect of the Brexit Referendum Result on Subjective Well-being*. *Journal of the Royal Statistical Society Series A: Statistics in Society*, 184(2), 707-731. <https://doi.org/10.1111/rssa.12676>

Kuppens, P., Allen, N. B., & Sheeber, L. B. (2010). Emotional Inertia and Psychological Maladjustment. *Psychological Science*, 21(7), 984-991. <https://doi.org/10.1177/0956797610372634>

Kuppens, P., Sheeber, L. B., Yap, M. B., Whittle, S., Simmons, J. G., & Allen, N. B. (2012). Emotional inertia prospectively predicts the onset of depressive disorder in adolescence. *Emotion*, 12(2), 283-289. <https://doi.org/10.1037/a0025046>

Kuppens, P., Van Mechelen, I., Nezlek, J. B., Dossche, D., & Timmermans, T. (2007). Individual differences in core affect variability and their relationship to personality and psychological adjustment. *Emotion*, 7(2), 262-274. <https://doi.org/10.1037/1528-3542.7.2.262>

Kuppens, P., & Verduyn, P. (2015). Looking at Emotion Regulation Through the Window of Emotion Dynamics. *Psychological Inquiry*, 26(1), 72-79. <https://doi.org/10.1080/1047840X.2015.960505>

Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2017). lmerTest Package: Tests in Linear Mixed Effects Models. *Journal of Statistical Software*, 82(13), 1 - 26. <https://doi.org/10.18637/jss.v082.i13>

Larsen, R. J. (2000). Toward a Science of Mood Regulation. *Psychological Inquiry*, 11(3), 129-141. https://doi.org/10.1207/S15327965PLI1103_01

Larsen, R. J., Augustine, A. A., & Prizmic, Z. (2009). A process approach to emotion and personality: Using time as a facet of data. *Cognition and Emotion*, 23(7), 1407-1426. <https://doi.org/10.1080/02699930902851302>

Lenneis, A., Das-Friebel, A., Tang, N. K. Y., Sanborn, A. N., Lemola, S., Singmann, H., Wolke, D., von Muhlenen, A., & Realo, A. (2024). The influence of sleep on subjective well-being: An experience sampling study. *Emotion*, 24(2), 451-464. <https://doi.org/10.1037/emo0001268>

Levendusky, M. S. (2013). Why Do Partisan Media Polarize Viewers? *American Journal of Political Science*, 57(3), 611-623. <https://doi.org/https://doi.org/10.1111/ajps.12008>

Li, A. W. Y., Chak, W. H., & Yuen, K. S. L. (2021). Snapshot of a social movement: Mental health and protest classes in Hong Kong. *Journal of Affective Disorders*, 295, 883-892. <https://doi.org/https://doi.org/10.1016/j.jad.2021.08.111>

Ludecke, D. (2018). ggeffects: Tidy Data Frames of Marginal Effects from Regression Models. *Journal of Open Source Software*, 3(26), 772-777. <https://doi.org/10.21105/joss.00772>

Mannerström, R., Lönnqvist, J.-E., & Leikas, S. (2017). Links Between Identity Formation and Political Engagement in Young Adulthood. *Identity*, 17(4), 253-266. <https://doi.org/10.1080/15283488.2017.1379906>

Marwaha, S., He, Z., Broome, M., Singh, S. P., Scott, J., Eyden, J., & Wolke, D. (2014). How is affective instability defined and measured? A systematic review. *Psychological Medicine*, 44(9), 1793-1808. <https://doi.org/10.1017/S0033291713002407>

Mesquita, B., & Boiger, M. (2014). Emotions in Context: A Sociodynamic Model of Emotions. *Emotion Review*, 6(4), 298-302. <https://doi.org/10.1177/1754073914534480>

Nayak, S. S., Fraser, T., Panagopoulos, C., Aldrich, D. P., & Kim, D. (2021). Is divisive politics making Americans sick? Associations of perceived partisan polarization with physical and mental health outcomes among adults in the United States. *Social Science & Medicine*, 284, 113976. <https://doi.org/https://doi.org/10.1016/j.socscimed.2021.113976>

Nelson, J., Klumparendt, A., Doebler, P., & Ehring, T. (2020). Everyday emotional dynamics in major depression. *Emotion*, 20(2), 179-191. <https://doi.org/10.1037/emo0000541>

Nelson, M. H. (2022). Resentment Is Like Drinking Poison? The Heterogeneous Health Effects of Affective Polarization. *Journal of Health and Social Behavior*, 63(4), 508-524. <https://doi.org/10.1177/00221465221075311>

Pew Research Center. (2020). *U.S. Media Polarization and the 2020 Election: A Nation Divided*. Pew Research. <https://www.pewresearch.org/journalism/2020/01/24/u-s-media-polarization-and-the-2020-election-a-nation-divided/>

Pierce, L., Rogers, T., & Snyder, J. A. (2016). Losing hurts: The happiness impact of partisan electoral loss. *Journal of Experimental Political Science*, 3(1), 44-59.

Posit Team. (2024). *RStudio: Integrated Development Environment for R*. In Posit Software. <http://www.posit.co/>

R Core Team. (2024). *R: A language and environment for statistical computing*. In R Foundation for Statistical Computing. <http://www.R-project.org>

Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, 1(3), 385-401. <https://doi.org/10.1177/014662167700100306>

Reiljan, A. (2020). 'Fear and loathing across party lines' (also) in Europe: Affective polarisation in European party systems. *European Journal of Political Research*, 59(2), 376-396. <https://doi.org/https://doi.org/10.1111/1475-6765.12351>

Roche, M. J., & Jacobson, N. C. (2019). Elections Have Consequences for Student Mental Health: An Accidental Daily Diary Study. *Psychological Reports*, 122(2), 451-464. <https://doi.org/10.1177/0033294118767365>

Russell, J. A., Weiss, A., & Mendelsohn, G. A. (1989). Affect Grid - a Single-Item Scale of Pleasure and Arousal. *Journal of Personality and Social Psychology*, 57(3), 493-502. <https://doi.org/10.1037/0022-3514.57.3.493>

Scherer, K. R. (2009). The dynamic architecture of emotion: Evidence for the component process model. *Cognition and Emotion*, 23(7), 1307-1351. <https://doi.org/10.1080/0269930902928969>

Sears, D. O., & Funk, C. L. (1999). Evidence of the Long-Term Persistence of Adults' Political Predispositions. *The Journal of Politics*, 61(1), 1-28. <https://doi.org/10.2307/264773>

Smith, K. B. (2022). Politics is making us sick: The negative impact of political engagement on public health during the Trump administration. *PLOS ONE*, 17(1), e0262022. <https://doi.org/10.1371/journal.pone.0262022>

Sperry, S. H., Walsh, M. A., & Kwapis, T. R. (2020). Emotion dynamics concurrently and prospectively predict mood psychopathology. *Journal of Affective Disorders*, 261, 67-75. <https://doi.org/https://doi.org/10.1016/j.jad.2019.09.076>

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092-1097. <https://doi.org/10.1001/archinte.166.10.1092>

Stanton, S. J., LaBar, K. S., Saini, E. K., Kuhn, C. M., & Beehner, J. C. (2010). Stressful politics: Voters' cortisol responses to the outcome of the 2008 United States Presidential election. *Psychoneuroendocrinology*, 35(5), 768-774. <https://doi.org/https://doi.org/10.1016/j.psyneuen.2009.10.018>

StataCorp. (2023). *Stata Statistical Software: Release 18*. In (Version 18) StataCorp LLC.

Taber, C. S., & Lodge, M. (2006). Motivated Skepticism in the Evaluation of Political Beliefs. *American Journal of Political Science*, 50(3), 755-769. <https://doi.org/https://doi.org/10.1111/j.1540-5907.2006.00214.x>

Van Bavel, J. J., Gadarian, S. K., Knowles, E., & Ruggeri, K. (2024). Political polarization and health. *Nature Medicine*. <https://doi.org/10.1038/s41591-024-03307-w>

van de Leemput, I. A., Wichers, M., Cramer, A. O. J., Borsboom, D., Tuerlinckx, F., Kuppens, P., van Nes, E. H., Viechtbauer, W., Giltay, E. J., Aggen, S. H., Derom, C., Jacobs, N., Kendler, K. S., van der Maas, H. L. J., Neale, M. C., Peeters, F., Thiery, E., Zachar, P., & Scheffer, M. (2014). Critical slowing down as early warning for the onset and termination of depression. *Proceedings of the National Academy of Sciences*, 111(1), 87-92. <https://doi.org/doi:10.1073/pnas.1312114110>

van Prooijen, J.-W., Krouwel, A. P. M., Boiten, M., & Eendebak, L. (2015). Fear Among the Extremes: How Political Ideology Predicts Negative Emotions and Outgroup Derogation.

Personality and Social Psychology Bulletin, 41(4), 485-497.
<https://doi.org/10.1177/0146167215569706>

Verba, S., Burns, N., & Schlozman, K. L. (1997). Knowing and Caring about Politics: Gender and Political Engagement. *The Journal of Politics, 59*(4), 1051-1072.
<https://doi.org/10.2307/2998592>

Walker, A. C., Son, J., Teoh, Y., & FeldmanHall, O. (2025, December 11). The Emotional Cost of Political Engagement. Retrieved from osf.io/3dyr7

Wagner, M. (2021). Affective polarization in multiparty systems. *Electoral Studies, 69*, 102199.
<https://doi.org/https://doi.org/10.1016/j.electstud.2020.102199>

Wickham, H. (2016). *ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York.
<https://ggplot2.tidyverse.org>

Wrzus, C., & Neubauer, A. B. (2023). Ecological Momentary Assessment: A Meta-Analysis on Designs, Samples, and Compliance Across Research Fields. *Assessment, 30*(3), 825-846.
<https://doi.org/10.1177/10731911211067538>

Yang, Y., Wang, J., Lin, H., Chen, X., Chen, Y., Kuang, J., Yao, Y., Wang, T., & Fu, C. (2025). Emotion dynamics prospectively predict depressive symptoms in adolescents: findings from intensive longitudinal data. *BMC Psychology, 13*(1), 386.
<https://doi.org/10.1186/s40359-025-02699-9>

Yen, S., Shea, M. T., Sanislow, C. A., Grilo, C. M., Skodol, A. E., Gunderson, J. G., McGlashan, T. H., Zanarini, M. C., & Morey, L. C. (2004). Borderline Personality Disorder Criteria Associated With Prospectively Observed Suicidal Behavior. *American Journal of Psychiatry, 161*(7), 1296-1298. <https://doi.org/10.1176/appi.ajp.161.7.1296>