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Recommended Citation

Curry, Jacqueline C. () "COVID-19 and 9/11: The Effect of Emotion on Reflection and Partisanship During Crises," *International Social Science Review*. Vol. 97 : Iss. 3 , Article 1.

Available at: <https://digitalcommons.northgeorgia.edu/issr/vol97/iss3/1>

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Cover Page Footnote

A special thank you to professor of Government, David Ciuk, for his class, Political Psychology, which instigated this paper, and for his guidance during the research, analysis, and editing process. An additional thank you to Margaret McGill and Andrea Yu for their peer review and assistance in the editing and reformatting of this paper. Jacqueline Curry graduated from Franklin and Marshall College in 2020 with a B.A. in Political Science and Government.

COVID-19 and 9/11: The Effect of Emotion on Reflection and Partisanship During Crises

The study of political psychology, through its incorporation of established principles of the field of psychology into politics, has transformed the standard political literature which supposes a moral foundation for constituent behavior and action.¹ Decisions about which party, ideology, or candidate to adopt have, for years, been thought to have been chosen to align with the inherent beliefs of an individual.² However, as the field of political psychology expands, questions are being raised about what truly lies beneath the decisions people make within the political realm and whether or not they can change or be influenced by outside factors.³

One of the most important contributions to this growing field is the idea of reflection. This mental process builds on the cognitive division established by psychologist such as Daniel Kahneman in his investigative book, *Thinking Fast and Slow*. In this understanding of cognition, an individual's thought process is broken down into System 1—automatic intuitive reaction, and System 2—deeper analytical thought.⁴ System 1 relies on socially and relationally ingrained intuitive opinions and preferences formed outside the confines of conscious thought, known as implicit biases.⁵ Reflection, on the other hand, is the process in which an individual surpasses System 1 intuition and, instead, engages in the slower System 2 cognitive process of deliberation and reasoning.⁶ How does this apply to the standard thought of morally driven political actions? Are constituents—when presented with new information—capable of reformulating their opinions based on this information? Is the public beholden to implicit bias, or can it overcome gut-reaction and socially ingrained thought through a cognitive process of understanding, analyzing, and incorporating data?

Kevin Arceneaux and Ryan J. Vander Wielen argue people can and make significant strides in the application of the concept of reflection to politics, as they show certain individual characteristics can enhance the likelihood of reflection during political decision-making.⁷ They not only make important distinctions in who engages in reflection, but the level to which it occurs. Within System 2, Arceneaux & Vander Wielen break cognition into two further levels: algorithmic and reflective processes.⁸ The former demonstrates intellectual capabilities akin to IQ, while the latter implies a desire to critically engage with information, regardless of natural intellect.⁹ While a select few will engage at the highest level—reflection—most will default to implicit bias or utilize and manipulate new information to confirm previous belief, known as confirmation bias—a process they deem to be within System 1.¹⁰ During this reflection, emotion functions as an underlying System 1— or subconscious—force which perpetuates reliance on implicit bias.¹¹ As such, in order to overcome implicit and confirmation bias, one must also look past reactionary emotions and engage with political situations in an unbiased manner.¹² This latter process of potential change of opinion due to reflection is of particular interest within the field of political psychology, as it proposes a way to break free from the steady increase in partisanship and extremism seen within American politics in recent years.¹³

However, what this approach fails to recognize is the intersectional role emotion plays in both System 1 and 2 processes, and the potential effect it can have on reflection.¹⁴ In fact, the separation of emotion from cognitive thought which permeates both political and psychological literature may not hold as much weight as previously thought considering recent studies. New research into the role of emotion in cognition demonstrates that the former transcends system boundaries. Instead of operating as an indicator (or not) for further, independent analysis, research shows emotion works in tandem with cognitive thought to produce a holistic and

intertwined assessment of situations. As such, emotion plays an integral role in subjective perception, not solely a reaction to an established fact.¹⁵ Furthermore, these studies argue that the division of brain functions into affective (emotional driven) and cognitive implies a flawed understanding of the interconnected operations of emotion and cognitive processing. They do not operate within two distinct systems, but instead work together to formulate behavior and thought.¹⁶

Glimpses of this interconnectivity of the systems can be seen in Kahneman's research on memory and mood. He shows how memory, while being an active part of the intuitive System 1, can be transformed into a slower, more deliberate System 2 process when indexing for information.¹⁷ In the same way one can rely on memory to make informed decisions, a person uses emotion as a means of deciding whether or not deeper analysis of a situation is necessary. Why, then, do we not apply the same transient premise to emotion, a similarly interwoven cognitive process? Studies have demonstrated how different moods affect how conclusions are drawn and what system is activated. When experiencing positive affect, a person more readily accepts intuition and, when faced with an objective question, is more likely to be correct in their intuitive answer. Conversely, negative affect causes a person to struggle to make accurate intuitive assumptions and necessitates the involvement of System 2.¹⁸ This intentional degree of thinking allows for deeper assessment instigated by negative feelings such as doubt and threat which cause hesitancy in decision-making.¹⁹ Accepting emotion as an equally complex and entangled factor in cognitive processing is a necessary step in understanding the psychology of decision-making.

Taking this new psychological understanding of the interaction between emotion and cognition and applying it to political situations is crucial for the development of a modern and

accurate study of constituent thought and participation in politics. Through experimental data, this paper argues that emotion is a significant factor in how people approach and reflect on political situations. It aims to demonstrate how emotions, instead of only operating on a subconscious System 1 level driving implicit bias, can instigate or function in tandem with reflection within both subsections of System 2 reasoning and cognitive thought. Furthermore, it aims to reposition Arceneaux & Vander Wielen's System 1 level confirmation bias within System 2, as—despite reaffirming previous beliefs—it shows engagement with new information that changes how one views political situations and decision-making. Particularly, by performing research on constituent emotional response, identity affiliation, and approval of political leaders during times of national crises, this is an investigation into the role emotion—particularly anxiety and threat—plays in not only reflection but also partisanship. The hypothesis is that when confronted with a national crisis, people will experience increased feelings of anxiety and threat, leading to a departure from personal partisan identification in favor of a broader national identity. Reflection during times of crises will correlate with emotional response to leadership and the effects the conditions have on an individual's life.

Through statistical analysis of the survey data collected, this paper demonstrates support for the hypothesis that emotions play a significant role in reflection—specifically confirmation bias. The results show that emotions, particularly feelings of calm and safety, correlate with lower levels of reflection while anxiety and threat are associated with higher levels of reflection. These results support previous findings of the distinctive roles of positive and negative affect in cognitive thought. Additionally, the tests indicate an intersection between the effect of emotion and partisanship on reflection among the public. This paper exposes the importance of the effect

emotions can have on constituency and elite behavior alike, shedding light on the importance of the underdeveloped area in political psychology and necessity for further research.

Research Design

The purpose of this research is to demonstrate the role of emotion in reflection and partisanship during times of national crisis. The research conducted focuses on two of the most emotionally, physically, and politically impactful crises the US has faced in the past two decades: COVID-19 and 9/11.²⁰ The decision to study times of crises in US history was based on the findings that reflection can be instigated in unprecedented scenarios, when the default System 1 provides no benefit and one must critically evaluate the situation, as he/she cannot rely on intuitive understanding and the resultant autonomous behavior.²¹ The goal of conducting research during the onset of the COVID-19 outbreak is to survey the population in the midst of a time of heightened emotion due to the uncertainty as to what exactly causes the virus, who it most affects, and how to stop it. Given the lack of scientific understanding during the first couple months of the pandemic, the hypothesis is that this uncertainty will, in turn, cause heightened anxiety and a sense of threat.²² Additionally, repeating the survey questions in reference to 9/11 serves to compare the event and emotions to another national crisis, but, instead, one that ignited fear and anxiety over a known threat and specific outlet and culprit for such emotions.²³ Moreover, the comparison and contrast of these two events has the potential to expose the role of memory in future emotionally-driven political evaluations.²⁴ Considering established evidence of memory's involvement in System 2 level analysis, this study investigates how associated emotions change or heighten that role.²⁵ Specifically of interest, is the phenomenon of "emotional enhancement of memory" where recall of emotionally-based memories is stronger

than that of non-emotional events and is defined by heightened subjectivity, rather than precision.²⁶

By cross-examining unfamiliar events and the emotional and political responses to them, this study investigates the important, yet understudied, role of emotions in constituents' political evaluations. This paper outlines the findings for the following hypotheses:

Hypothesis 1: The emotion one feels during COVID-19 and 9/11 will affect one's likelihood to engage in System 2 reflection.

The first hypothesis brings together the recent research in psychology, revealing that emotion operates outside the established systems and interacts with cognitive processes, and political research on selective constituent reflection.²⁷ By recognizing the cognitive role of emotion, this hypothesis aims to demonstrate how the two work together to formulate political opinions. More specifically, it suggests feelings of anxiety and threat will increase during crisis, and that those who feel these emotions will be more likely to reflect, as these emotions are more consistently tied to unfamiliar situations.²⁸ Further, due to a lack of instability and a comfortability with a current situation, it can be hypothesized that those who feel positive emotion/affect in the midst of the crisis will have less reason to reflect or change their opinion of political leaders.

Hypothesis 2: Partisanship will decrease when threat and anxiety increase during times of crisis.

Supposing support for Hypothesis 1, if threat and anxiety increase during times of crisis, partisanship will decrease. This hypothesis assumes a negative correlation between partisanship and feelings of threat and anxiety. When faced with a collective crisis where the biggest source of threat and anxiety is perceived to come from outside the confines of the nation, in-group/out-groups will be reformulated, in which people will be more likely to identify with their nationality over party affiliation.²⁹ As a result of this transition, they will look less to party cues and

partisanship will go down.³⁰ Specifically, one can expect to see a slight difference in results between COVID-19 and 9/11, as the threat/anxiety manifested itself in a clear out-group (foreign terrorists) during 9/11 than during the biological threat of COVID-19. The physical manifestation of threat/anxiety in a foreign body will have clarified the prioritized out-group, and result in increased nationalism and decreased party-based out-groups during 9/11. However, during COVID-19, due to multiple proposed sources of threat and anxiety, there will be an inability to pinpoint one as specifically as in 9/11, and the in-group/out-group will undergo a less dramatic shift.³¹ Party lines will be crossed less frequently and partisanship will decrease, but only slightly, leaving constituents to continue to rely on party cues which will affect reflection.

***Hypothesis 3:** Memory of 9/11 will affect one's emotional response to national crises.*

The ability to use memory recall during COVID-19 will affect one's likelihood to reflect. Specifically, those who experienced 9/11 will look to comparative memory to reflect on COVID-19, resulting in decreased feelings of threat and anxiety as compared to 9/11. This will be apparent more generally, in that older constituents will be less likely to feel threatened by COVID-19 when compared to 9/11.

Methods

To conduct this research, GoogleForms was utilized to create a 26-question anonymous survey dispersed on various social media sites and through virtual interaction during April and May of 2020 (survey questions found in Appendix I). The final data consisted of 288 respondents, spanning different genders (61.5 percent female; 36.8 percent male; 1.7 percent other), ages (49.7 percent between 20-29yo; 17 percent 30-39; 13.5 percent 40-49; 7.6 percent under 20; 7.6 percent 50-59; 6.3 percent 60 or older), education levels (35.8 percent with B.A.s; 28.5 percent completed some college; 19.1 percent with Ph.Ds; 9.7 percent with M.A.s; 3.1

percent high school diploma; 3.1 percent A.A.), political affiliations (56.3 percent Democrat; 19.4 percent Independent; 19.1 percent Republican; 5.2 percent other), and ideological affiliation (49.7 percent Liberal; 32.3 percent Moderate; 14.6 percent Conservative; and 3.5 percent other). The survey was split into three sections: baseline information, COVID-19, and 9/11. A full copy of the survey can be found in the Appendix.

General information was collected in the baseline section for personal, emotional, and political demographics of participants which consisted of gender, age, citizenship (US/dual/non-US), identity (student/working professional/other), education level, political party affiliation, ideological affiliation. The baseline section also included self-reports of political identity and approval during the past year, as well an emotional baseline for the past year. The purpose of this section was to collect a self-reported baseline to act as a control which could be compared to the responses regarding times of crisis.

The COVID-19 section asked participants to answer questions regarding the pandemic with the response that most applied. It gathered information on emotional state, the effect of COVID-19 on one's life, political approval, and identity during the crisis. The political approval for this section was split into two separate questions: how they believe President Trump is handling the situation, and how their opinion of Trump has changed, if at all. Identity asked what they most identified with during COVID-19: party, ideology, both party and ideology, or nationality. The question following this section asked respondents if they remember 9/11. If they answered that they did not remember 9/11, the survey stopped.

The final section consisted of questions regarding 9/11. It followed the same structure of the COVID-19 section in asking emotional, political, and identity questions. It asked participants the same questions of self-reports of their emotional state, the effect of the attacks on their life,

how they believed President Bush handled the crisis, how their opinion of Bush changed, and what they most identified with during 9/11. However, given the significant time difference, this section also included questions of political party and ideology affiliation during 9/11 and their role as a student, working professional, or other. Response options were kept the same across the two sections; however, the option of “N/A (too young)” was added for questions regarding 9/11. This option was added to limit false reporting, as those who responded that they did remember 9/11 might still have been too young to formulate political opinions.

While the survey provided a large amount of data, it was not without flaws. First, the reliance on self-reports cannot guarantee that the responses were not affected by the individual’s perception of self and the questions. Additionally, while the questions across sections remained consistent, the retrospective nature of the section for 9/11 changes the context in which respondents evaluate their answers. After nearly a decade of additional political experiences and distance from the events, it is possible that the data received is different from how participants would have responded during 9/11. Lastly, due to the timeframe difference, the baseline questions did not help in analysis of 9/11 changes, as they establish a future baseline, so it exists solely in a comparative function. Specifically, the survey did not include a baseline question in the 9/11 section for feelings toward Bush prior to the events, only how opinion changed, which hindered my ability to assess reflection versus confirmation bias.

Results

The results for this paper were found utilizing RStudio software to code and run multiple regression analysis. The data was imported and coded by question, each response becoming its own variable. However, additional variables were added to further investigate the degree of

reflection. The variables of interest are those regarding emotion, reflection, identity, and memory. (Detailed variable coding can be found in Appendix II).

Emotion was coded as the simple responses to how they felt, the effect of the crisis on the individual's life given in their response, and the change in emotion from the baseline. Emotion was coded on a numerical scale of threat (-2), anxiety (-1), neutral (0), calm (1), and safe (2). This established the difference in emotion between the baseline and during COVID-19 as a function of becoming either more negative (change to threat or anxiety), more positive (change to calm or safe), and consistent neutral. Other equivalents across the two were not coded (NA), as they do not denote change.

Variables relating to reflection were broken into different groups: general change in opinion, confirmation bias, and reflection with change of opinion. General change in opinion resulted from the lack of baseline for 9/11 political approval and applied mostly to regressions run for 9/11 data. Coding correlated directly with the response given to the question of how one's opinion of the president changed. Given the baseline emotion for COVID-19, more variables could be created for that reflection. The first was confirmation bias which denoted whether or not the change in opinion of Trump (change in opinion = 1, no change = -1, neutral opinion = 0) was simply a bolstering of the reported opinion from before COVID-19. If they reported a negative opinion of Trump in the baseline and more negative opinion during COVID, a positive opinion in the baseline and more positive during COVID, or neutral to the baseline, the cognitive process was classified as confirmation bias.

Reflection on the other hand was coded as a change in opinion which differed from the baseline report. This was differentiated on 4 levels: no change (-1), neutral opinion (0), confirmation bias (1), and reflection as a change to opposition (2). For example, if one reported a

positive view of Trump in the baseline, but indicated their view became more negative during COVID-19, this would demonstrate reflection, as it shows a reversal of opinion.

To show the differentiation between System 1 and 2, numeric values were separated into negative, positive, and neutral. The negative value (-1) corresponds to those who indicate no change in opinion at all under new circumstances, indicating submission to implicit attitudes and beliefs. Taking into consideration the option for a neutral view of Trump in the baseline, a consistent neutral opinion is coded as 0. Reflection becomes notable in the positive numeric values of 1 and 2, indicating they did change their opinion from the baseline under the new circumstances of COVID-19. Anyone who changed their opinion to simply a more fortified version of their previous opinion was considered to have undergone confirmation bias, coded as (1). However, those who changed their opinion during COVID-19 to the opposite of their baseline were coded as (2) and considered to have undergone reflection of the highest degree.

Variables for identity covered a large portion of the data including party and ideological affiliation, what one identifies most with, and the convergence of party and ideological affiliations. Apart from the last one, all codes were directly in line with answers to the corresponding question on the survey. The code for convergence was based on the general affiliation numerical scale of, for ideology, liberal (1), moderate (0), conservative (-1), other (NA). If one's ideological affiliation matched their party affiliation (e.g. liberal/democrat, conservative/republican, independent/moderate), it was coded as 1. If they did not match, it was coded as 0. This process was repeated for data for 9/11.

This was investigated further by creating a variable that expressed whether or not they identified with this converged affiliation. If they responded they identified most with both their

ideology and party during the crisis, it was coded as 1. If not, it was coded as 0. This process was completed for COVID-19 and 9/11 data.

Lastly, memory of 9/11 was coded directly by response to the survey question as either did remember (1) or did not remember (0). Those who marked N/A (not born) were coded as NA.

Results for Hypothesis 1: The emotion one feels during COVID-19 and 9/11 will affect one's likelihood to engage in System 2 reflection.

To test the first hypothesis, this study ran linear regression models with dependent variables of confirmation bias and reflection for COVID-19 and change of opinion for 9/11. (All regression models can be found in Appendix III). The model shows a significant negative correlation between emotion and reflection ($p < .05$), where an increase in 1 unit of emotion (toward calm/safe) causes a decrease in reflection of 0.11 units, toward confirmation bias. Also significant at the $p < 0.1$ level, are identity and view of Trump's handling of COVID-19. Identity also has a negative relationship where an increase in 1 unit (toward converged party and ideology) correlates with a decrease in reflection (toward confirmation bias) by 0.08 units. Lastly, this test indicates a positive relationship between views of Trump's handling of COVID-19 and reflection. As an individual increases one unit toward positive views of Trump's handling, their likelihood of reflection increases by 0.15 units.

More specifically, a second regression was run with the dependent variable of confirmation bias to see, within reflection, what variables had the most effect on the decision to utilize new information to bolster previous beliefs. Included in this test were other independent variables of memory of 9/11, party and ideological affiliation, convergence of party and ideological affiliation, and one's identity. The results of this test demonstrate four different levels

of significance for the independent variables. At a significance of $p < .001$, the test shows that emotion does have a significant effect on confirmation bias. As emotion increased one unit (toward feelings of calm and safety), likelihood of confirmation bias increased by 0.13 units. Also at this level, as party affiliation moved one unit closer to Democrat, likelihood of confirmation bias decreased by 0.37 units. The last independent variable significant at the $p < .001$ level is ideology, showing that as ideology moved one unit toward Liberal, likelihood of confirmation bias decreased by 0.22 units. Other significant variables were memory of 9/11 ($p < .05$), showing as memory of 9/11 increased by 1 unit, likelihood of confirmation bias increased by 0.21 units. What one chose to identify most with during COVID-19 was not significant; however, as one's political identity converged (meaning their ideology and party lined up), confirmation bias increased by 0.31 units ($p < .1$).

The test run for reflection during 9/11, as noted previously, can only show the effect of independent variables on general change in opinion surrounding President Bush. The results in this section denote an effect on one's opinion becoming more negative (-1), not changing (0), more positive (1). A regression model was run with dependent variables of change in opinion on Bush and independent variables of emotion, effect of 9/11 on life, view of how Bush handled the crisis, what one identifies most with, and convergence of identity.

This test shows a significant ($p < .001$) effect of view of how Bush handled 9/11 on change of opinion. As one's opinion of President Bush increased by 1 unit, change of opinion increased by 0.49 units (more positive). That with which an individual identifies most also affected change of opinion during 9/11, as it increased 1 unit (toward both party and ideology), opinion change increased by 0.11 units, (more positive). Lastly, the perceived effect of 9/11 on

one's life had a significant ($p < 0.1$) effect on change of opinion, where an increase of 1 unit in effect (toward positive) caused an increase of 0.16 in change of opinion (more positive).

Results for Hypothesis 2: Partisanship will decrease when threat and anxiety increase during times of crisis.

Building off of the results related to partisanship from the tests for Hypothesis 1, the following models focus on identity and how emotion and other independent variables affect whether or not one identifies with political identities, namely party, or a less partisan identity, like nationality. Beginning with COVID-19, the regression model outlined the effect of emotion, party, ideology, COVID-19 effect, and opinion of Trump's handling of the crisis on identity affiliation.

This test shows no correlation between identity and emotion, nor other independent variables, except for party affiliation. As party affiliation increases 1 unit (toward Democrat), identity increases by 0.25 units (toward a converged identity of both party and ideology). This is significant at the $p < .05$ level. Also significant at the $p < .05$ level is reflection. As reflection increases 1 unit, identity decreases 0.19 units toward nationality.

An additional test regarding identity during COVID-19 was run to see what affects one's change in identity, specifically toward nationality. In this case, the variables included are: 9/11 memory, COVID emotion, whether the person changed their emotion from the baseline, and view of Trump's handling of the issue. This test showed a significant ($p < 0.1$) effect of 9/11 memory and emotion change. As memory increased (remembered 9/11) by 1 unit, changing their identity to nationality decreased by 0.19 units. For every 1 unit increase in emotion change (as emotions became more positive during COVID when compared to baseline), identifying with nationality decreased by 0.17 units. This test was run an additional time to replace the memory

variable with age and to include party. During this test, age had no statistical significance; however, the variable of party did. As the party variable increased 1 unit (toward Democrat), change in identity to nationality went down 0.13 units. In this second test, memory of 9/11 remained significant, but change in emotion did not.

The same identity regression model was run for the data for 9/11, finding significant effect for emotion ($p < .05$), change of opinion on Bush ($p < .05$), and view of Bush's handling of the events ($p < .01$). As emotion increased 1 unit (toward calm and safety), identity increased 0.20 units towards converged party/ideology identity. As opinion on Bush shifted 1 unit more positive, identity shifted .40 units toward converged identity. However, as opinion of Bush's handling of 9/11 increased by 1 unit, identity decreased by 0.43 units (toward nationality).

To investigate further the change in identity away from converged identity during 9/11, another regression was run to see what caused people to move to the lowest numerical value for identity—nationality. This test shows that in the decision to switch one's identity to nationality—as opposed to convergence, party, or ideology—emotion ($p < .05$) and view of Bush's handling of the events ($p < 0.1$) had significance. As emotion increased by 1 unit (toward calm/safety), the change to nationality identity decreased by 0.13 units (did not identify with Nationality). As opinion of Bush's handling increased by 1 unit, the change to nationality identity increased by 0.14 units.

The last two tests run for Hypothesis 2 focused on views of how the presidents handled each crisis, and how emotion and partisanship affect this. The first regression run details constituent opinions of Trump during COVID-19.

This test shows that ideology is significant at the $p < .001$ level. An increase in one unit of ideology (away from moderate, toward conservative and liberal) correlates with a decrease in

evaluations of Trump's handling of COVID-19. Additionally, party played a significant role in evaluation ($p < .001$), as an increase of 1 unit in party affiliation (away from independent toward Democrat and Republican) denotes a decrease in opinion on Trump's handling by 0.33 units, toward not well. Lastly, this test confirms a significant positive relationship between emotion and evaluation ($p < .001$), where an increase in emotion (toward calm and safe) by 1 unit correlates with an increase in evaluation by 0.12 units, toward well.

The same regression was repeated for 9/11 and views of Bush handling that crisis. The regression and results show an effect of ideology ($p < .001$), and identification with a converged identity ($p < .01$). When run again to assess data on 9/11, the test shows a significant relationship between ideology and evaluations of Bush's handling of the events of 9/11. Significant at the $p < .001$ level, as ideology increases by 1 unit (away from moderate, toward conservative and liberal), evaluations of Bush decreased by 0.71 units. Also significant ($p < .05$), is whether or not people identified with a converged identity (both their party and ideology). As one's identity converged (increased by 1 unit), evaluations of Bush increased by 0.30 units. During 9/11, emotion did not have a significant effect on President Bush evaluations.

Results for Hypothesis 3: Memory of 9/11 will affect one's emotional response to national crises.

To test the effect of memory of 9/11 on the emotional response to COVID-19, yet another regression was run. This test confirmed the hypothesis that memory of 9/11 does have a significant effect on COVID-19 emotion ($p < .01$), but also confirms significant effect of the effect of COVID-19 on one's life ($p < .001$) and one's original opinion of Trump ($p < .01$). The regression shows that as memory increases 1 unit (they do remember 9/11), emotion regarding COVID-19 decreases (toward anxiety/threat) by 0.23 units. The most significant effect shows

that as the perceived effect increases 1 unit (toward positive effect), emotion increases by 0.39 units (toward calm/safe). Lastly, the original view of Trump (within the past year) has an effect of a 1-unit increase (toward positive view) and correlates with an increase of 0.26 units in emotion (toward calm/safe). When run to specifically test for a correlation between COVID-19 emotion and a feeling of threat during 9/11, the results showed no significant relationship. Looking back at tests run for earlier hypotheses, memory of 9/11 was also significant in confirmation bias, reflection and identity change to nationality during COVID-19. Again, a second test was run where age was substituted for memory to ensure the significance was not simply correlation. Age was insignificant, validating the effect of memory of 9/11 on COVID-19 emotion.

Discussion and Conclusions

This paper demonstrates a varying degree of support for the hypotheses and the effect of emotion on reflection and partisanship during crises. The research shows that emotion has a significant effect on reflection—namely, confirmation bias—during COVID-19, identity and identity change across COVID-19 and 9/11, and evaluations of political leaders during both crises. Emotion has no significant effect on general identity affiliation during COVID-19, nor changes in opinion on Bush during 9/11. The tests offer additional perspective into the effect of ideological and party affiliations, converged party-ideology identities, issue-based political evaluations, and memory.

The first test run for Hypothesis 1 shows a clear effect of emotion on the process of reflection, confirming the hypothesis. When people feel anxious or threatened, as opposed to calm or safe, they are more likely to reflect on information regarding political situations, using it to come to new conclusions. Given that the process of reflection was based on changes to the

overall opinion of Trump, this correlation indicates that emotions play a significant role in how individuals evaluate their president. While the purpose of this paper is to provide analysis of data pertaining to national crises, this effect of emotion on reflection calls for more research into the effect different emotions can have on the ways in which constituents evaluate political leaders. Specifically, it would be beneficial for further investigations to study a wider range of emotions, and the effect each can have on political decision-making.

Moreover, this test shows a correlation between both identity and opinion of Trump with reflection. These both have significant implications on political research and the evaluations made by constituents under certain circumstances and pressures. The first, identity, shows that increased partisanship—when party and ideology converge—leads to lower levels of reflection in the general public. This is particularly relevant to the growing literature on partisanship and polarization, as it pertains to their effect on evaluation and accountability of political elites. Lastly, despite the effect of polarization, the conclusions of this research do leave some hope for the ability of the public to thoroughly review and change opinions, as evaluations of Trump were significant for reflection. While emotion and partisanship play into evaluations of the president during COVID-19, the perception of how Trump is handling the crisis has a significant effect as well. Those who had a positive view of how Trump is handling COVID-19 were more likely to reflect (change their opinion), meaning, despite partisanship, the public is still able to evaluate political leaders based on policy and performance.

The second test run for Hypothesis 1 establishes that emotion has a significant effect on confirmation bias. Higher levels of calm and safety increased the likelihood of confirmation bias in constituents. These results, in contrast with the first test, show how different emotions can instigate different cognitive engagement and decision-making in politics. Additionally, both

party and ideology were significant, demonstrating that Democrats and Liberals were less likely to engage in confirmation bias. This can possibly be attributed to the majority Republican and Conservative positions of power, and—given the polarization during COVID-19—the possibility that mainstream information regarding political situations would be biased towards Republican or Conservative viewpoints. As such, Democrats would be less likely to utilize this information to support previously held beliefs. However, as identity converged—as one identified as Democrat/Liberal or Republican/Conservative—confirmation bias increased, demonstrating the danger of polarization for political judgement. This test develops the concepts of confirmation bias and the specific variables that influence it; however, it exposes a necessity for further research on how confirmation bias relates to reflection. Specifically, this research lacks the capability to validate which parts of the brain, and consequently which Systems, are active during each process, leaving ample room for future investigations.

The third test for Hypothesis 1 offered what perspective is available, given the data, for reflection during 9/11. While the questions shed light on perception of President Bush's handling of the crisis and how opinion changed, as a retrospective section of the survey, there is no baseline for comparison. As such, the results cannot be split into the same categories as reflection for COVID-19 and only demonstrate overall change in opinion. The results show that how one viewed Bush, that with which an individual identifies, and the effect of 9/11 on one's life have a significant effect on change in opinion during 9/11. While emotion did not have a significant effect, there was an increase in the number of people who felt threatened while a simultaneous mediation of opinions on the way Bush handled the crisis in comparison to Trump's handling of COVID. This could possibly be attributed to the direction and ownership of the emotion. If during 9/11 the threat and anxiety were directed toward non-American political

actors (terrorists), this would reformulate the in-group/out-group to the “other” being outside the US, as opposed to the opposing party or president. Therefore, the emotion would not be directed toward the president nor interfere with one’s ability to evaluate a political leader. The theory of directional emotion requires more research, but it could have an impact on how political psychology approaches in/out-groups and reflection during times of heightened emotion.

Results from tests regarding Hypothesis 2 are particularly relevant in discussions of partisanship, not only during each crisis, but how it has changed. The tests show that what one identifies with most during COVID-19 is influenced by party affiliation and reflection. As one becomes more affiliated with the Democratic Party, the likelihood that they identified with both their ideology and party increased. Given the current divides within the Republican party and the transformations it has undergone over the past four years, it is understandable that identity with the party would decrease. Further, with a Republican president in office at the time that this survey was given, it is possible that Democrats might not believe that they can find support from the nation, and so would look more toward their party and ideology than their nationality. Additionally, as reflection increased, identity shifted away from partisan, converged identity and toward nationality, supporting the theory that higher levels of reflection and cognitive thought in politics provide a means of combating polarization. However, while reflection was possible and had a significant effect on identity change during COVID-19, the number of people engaging in this process (13) were few, necessitating further research to lend credibility to these findings.

The comparison between this test and identity during 9/11 is very telling of the changes in the political atmosphere over the past twenty years. During 9/11, identity was affected by emotion, views on how Bush handled it, and one’s change in opinion about Bush. During 9/11, party and ideology affiliations had no significant effect on identity. These results show that

issue-based evaluations carried more weight than political affiliations under the Bush administration. While the reasons for this change are beyond the scope of this paper, they are crucial for characterizing the current political climate and necessitate further research.

The results of these tests do, however, reveal important factors in an individual's decision to change his/her identity to nationality. Here, emotion does have an effect on partisanship, in that those whose emotional state changed between the baseline and COVID-19 toward calm and safety were less likely to identify with nationality. Meaning, as threat and anxiety increase, so too did nationality as a main identifying feature. The same emotional divide is found during 9/11, indicating a trend of positive correlation between feelings of threat/anxiety and identifying with nationality during crises. That said, evaluation of Bush and his performance is significant for 9/11 identity, while evaluation of Trump is not during COVID-19. This could be attributed to the increase in partisanship and polarization that decreased reflection and change of opinion during COVID-19. This is illuminated by the inclusion of the significance of party on identity change to nationality under Trump. In this test, Republicans were more likely to change their identity under COVID-19 to their nationality. Change in identity along party lines, specifically the party in power, maintains the argument of increasing partisanship. It also raises questions about the influence of rhetoric from the party in power and how increased polarization affects who that reaches. Lastly, identifying with nationality was affected by memory of 9/11, which supports the hypothesis that reflective and comparative memory play an influential role in political decision-making. While this is not conclusive evidence, it starts a preliminary conversation that people may be more likely, during crisis and possibly beyond, to compare previous political experiences when deciding whether or not to identify with their party/ideology.

More evidence of the potential effect of increased polarization/partisanship can be seen in the evaluations of the presidents at the time of crises. During COVID-19, opinions on how Trump is handling the situation are influenced significantly by emotion, party, and ideology. This shows a similar relationship between emotion and political leaders to the one mentioned above, where party cues and political affiliation are strong indicators of how we will evaluate political elites. However, there may be room to change that and transcend those boundaries through positive emotion associations. The biggest discrepancy between the two tests run for presidential evaluation is the directional difference of the effect of emotion during the crises. During COVID-19, emotion has a significant positive correlation with positive views of Trump's handling of the crisis. As people's feelings of calm and safety increase, they are more likely to hold positive views of the president. However, during 9/11, emotion had no significant impact on evaluations of Bush.

It is possible that this could be a result of the increase in effect of party affiliation during COVID-19, as opposed to 9/11. Ideology remains significant across the two crises; however, party only becomes significant during COVID-19. The simultaneous increase in the effect of party and emotion could suggest a significant correlation between the increase in partisanship and positive emotion. This seems to be a newer possibility, as during 9/11 evaluations of Bush were not affected at all by emotion nor party and relied solely on ideological affiliation. What does this say about the political landscape? The implication of such a correlation could have a great impact on how presidents manipulate constituent emotion during times of heightened partisanship. If political leaders can utilize or aggravate polarization or emotion of the public, they have the potential to also manipulate their evaluations of issue-based efforts and actions. Additionally, the significance of identifying with a converged affiliation (both party and

ideology) during 9/11 shows that, even under times of lower polarization or party affiliation, the lack of cross-cutting affiliations subjects constituents to the same possible manipulation. These tests show that the political landscape is changing and the increase in partisanship and polarization may have also brought an increase in the potential for emotional affect in politics.

While this paper makes strides in the effort to expand the literature on reflection and uncover the role of emotion and partisanship in this process within political psychology, there is still research to be done. This analysis utilizes data from a survey with a limited scope, focusing solely on self-reports during COVID-19 and retrospective data concerning 9/11. Without a baseline for 9/11 emotion and opinion, the ability to perform a comprehensive comparison between the crises is hindered. The potential to look at existing data from research done on emotion during 9/11 could have been useful when looking at changes in opinion during 9/11 and remains a possibility for future investigations. Additionally, reliance on self-reports leaves room for the possibility of projection and manipulation of answers to meet personal goals of respondents. In order to combat this, repeating the research utilizing technologically measured emotional states and implicit bias would provide more accurate results. As noted earlier, the survey consists of higher female participation, so, as to assure this did not skew results, a wider range of participants is also crucial for further research. To better understand the intersection of emotion and reflection in politics, research into other heightened and non-heightened emotional time frames in politics is necessary. This paper provides a small steppingstone in the investigation into emotions in politics and opens up an avenue for further research.

Appendix I - Survey

GOV450 Final Research Project

The goal of this survey is to provide data for my final research project in GOV450: Political Psychology. All responses are anonymous.

- 1) By selecting yes below, you consent to the anonymous replication of the results of this survey for written and verbal presentation.
- a) Yes

Demographics:

For each of the following questions, please select the answer that most applies.

- 1) Gender
 - a) Male
 - b) Female
 - c) Other
- 2) Age
 - a) Under 20
 - b) 20-29
 - c) 30-39
 - d) 40-49
 - e) 50-59
 - f) 60 or older
- 3) I am a US citizen
 - a) Yes (only US)
 - b) Yes (dual-citizenship)
 - c) No
- 4) I identify most as
 - a) Student
 - b) Working Professional
 - c) Other
- 5) Education level
 - a) High School Diploma
 - b) Some college
 - c) Associate's Degree
 - d) Bachelor's Degree
 - e) Master's Degree
 - f) Professional Degree
 - g) Doctoral Degree
- 6) Political Party Affiliation
 - a) Democrat
 - b) Republican
 - c) Independent
 - d) Other
- 7) Ideological Affiliation
 - a) Liberal
 - b) Conservative
 - c) Moderate
 - d) Other
- 8) Within the past year, my overall view of President Trump has been mostly:
 - a) Positive
 - b) Negative
 - c) Neutral
- 9) Within the past year, I identified most with
 - a) My political party (Democrat/Republican/Independent/Other)
 - b) My ideology (Liberal/Conservative/Moderate/Other)
 - c) Both ideology and party
 - d) My nationality (American)
 - e) My nationality (non-American)

- 10) Within the past year, I felt mostly:

- a) Calm
- b) Safe
- c) Neutral
- d) Threatened
- e) Anxious

COVID-19:

For each of the following questions, please select the answer that most applies.

- 1) During COVID-19, I feel:
 - a) Calm
 - b) Safe
 - c) Neutral
 - d) Threatened
 - e) Anxious
- 2) I feel that COVID-19 has affected my life
 - a) Positively
 - b) Neutrally
 - c) Negatively
 - d) Not at all
- 3) During COVID-19, I identify most with
 - a) My party (Democrat/Republican/Independent/Other)
 - b) My ideology (Liberal/Conservative/Moderate/Other)
 - c) Both my party and ideology
 - d) My nationality (American)
 - e) My nationality (non-American)
- 4) I think President Trump has handled/is handling COVID-19
 - a) Well
 - b) Not well
 - c) Neutrally
 - d) I don't have an opinion
- 5) In the wake of COVID-19, my opinion of President Trump has become
 - a) More positive
 - b) More negative
 - c) My opinion has not changed
 - d) I don't have an opinion

9/11:

For each of the following questions, please select the answer that most applies.

- 1) I remember 9/11*
 - a) Yes
 - b) No
 - c) N/A (not born)

*survey ends for those who responded No or N/A (not born)

9/11 continued:

For each of the following questions, please select the answer that most applies.

- 1) During 9/11, I was
 - a) Student (N-8th grade)
 - b) Student (9-12th grade)
 - c) Student (post 12th grade)
 - d) Working professional
 - e) Other
- 2) During 9/11, I felt
 - a) Calm
 - b) Safe
 - c) Neutral
 - d) Threatened
 - e) Anxious
- 3) I feel that 9/11 affected my life
 - a) Positively
 - b) Neutrally
 - c) Negatively
 - d) Not at all
- 4) During 9/11, my political party affiliation was
 - a) Democrat
 - b) Republican
 - c) Independent
 - d) Other
 - e) N/A (I was too young)
- 5) During 9/11, my ideological affiliation was
 - a) Liberal
 - b) Conservative
 - c) Moderate
 - d) Other
 - e) N/A (I was too young)
- 6) During 9/11, I identified most with
 - a) My party (Democrat/Republican/Independent/Other)
 - b) My ideology (Liberal/Conservative/Moderate/Other)
 - c) Both my party and ideology
 - d) My nationality (American)
 - e) My nationality (non-American)
 - f) N/A (I was too young)
- 7) I think President Bush handled 9/11
 - a) Well
 - b) Not well
 - c) Neutrally
 - d) I didn't have an opinion
- 8) In the wake of 9/11, my opinion of President Bush became
 - a) More positive
 - b) More negative
 - c) My opinion did not change
 - d) I didn't have an opinion

Appendix II- Coded Variables

GOV450data1 – data set

Emotion:

COVIDemo1 = emotion one felt during COVID

nine11emo1 = emotion one felt during 9/11

COVIDeffect1 = the effect of COVID on one's life

nine11effect1 = the effect of 9/11 on one's life

COVIDemochng2 = the change in one's reported emotion during COVID from baseline

Change from baseline:

GOV450data1\$*COVIDemochng2* <- NA

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* < 0 & *GOV450data1*\$*COVIDemo1* > 0] <- 1

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* < 0 & *GOV450data1*\$*COVIDemo1* == 0] <- 1

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* == 0 & *GOV450data1*\$*COVIDemo1* > 0] <- 1

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* == 0 & *GOV450data1*\$*COVIDemo1* < 0] <- -1

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* > 0 & *GOV450data1*\$*COVIDemo1* < 0] <- -1

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* > 0 & *GOV450data1*\$*COVIDemo1* == 0] <- -1

GOV450data1\$*COVIDemochng2*[*GOV450data1*\$*EmoBase1* == 0 & *GOV450data1*\$*COVIDemo1* == 0] <- 0

Reflection:

COVIDtrumpchng = how one's opinion of Trump changed during COVID (+, -, NA)

nine11bushchng = how one's opinion of Bush changed during 9/11 (+, -, NA)

COVIDtrumpconbias = confirmation bias (no change in opinion of Trump during COVID)

GOV450data1\$*COVIDtrumpconbias* <- NA

GOV450data1\$*COVIDtrumpconbias*[*GOV450data1*\$*Trumpbase1* == 1 & *GOV450data1*\$*COVIDtrumpchng* == 1] <- 1

GOV450data1\$*COVIDtrumpconbias*[*GOV450data1*\$*Trumpbase1* == -1 & *GOV450data1*\$*COVIDtrumpchng* == -1] <- -1

GOV450data1\$*COVIDtrumpconbias*[*GOV450data1*\$*Trumpbase1* == 0] <- 0

COVIDreflect2 = reflection with change of opinion

GOV450data1\$*COVIDreflect2* <- NA

GOV450data1\$*COVIDreflect2*[*GOV450data1*\$*Trumpbase1* == -1 & *GOV450data1*\$*COVIDtrumpchng* == 1] <- 2

GOV450data1\$*COVIDreflect2*[*GOV450data1*\$*Trumpbase1* == 0 & *GOV450data1*\$*COVIDtrumpchng* == 1] <- 2

GOV450data1\$*COVIDreflect2*[*GOV450data1*\$*Trumpbase1* == 0 & *GOV450data1*\$*COVIDtrumpchng* == -1] <- -1

GOV450data1\$*COVIDreflect2*[*GOV450data1*\$*Trumpbase1* == 1 & *GOV450data1*\$*COVIDtrumpchng* == -1] <- -1

GOV450data1\$*COVIDreflect2*[*GOV450data1*\$*Trumpbase1* == *GOV450data1*\$*COVIDtrumpchng*] <- -1

GOV450data1\$*COVIDreflect2*[*GOV450data1*\$*COVIDtrumpchng* == 0] <- 0

Identity:

Party = Party affiliation baseline (over the past year)
 nine1|party1 = Party affiliation during 9/11
 Ideo1 = Ideological affiliation baseline (over the past year)
 nine1|ideo1 = Ideological affiliation during 9/11
 Polidentity1 = with what one identifies most baseline (over the past year)
 COVIDidentity1 = with what one identifies most during COVID
 Nine1|polidentity1 = with what one identified most during 9/11
 ideo.party.c.cnvrg = onvergence of party and ideological affiliation during COVID
 GOV450data1\$ideo.party.c.cnvrg <- NA
 GOV450data1\$ideo.party.c.cnvrg[GOV450data1\$Ideo1 == GOV450data1\$Party1] <- 1
 GOV450data1\$ideo.party.c.cnvrg[GOV450data1\$Ideo1 != GOV450data1\$Party1] <- 0
 ideo.party.n.cnvrg = convergence of party and ideological affiliation during 9/11
 ideo.party.c.id = whether or not one identified with their converged party/ideology most during COVID
 ideo.party.n.id = whether or not one identified with their converged party/ideology most during 9/11
 GOV450data1\$ideo.party.n.id <- NA
 GOV450data1\$ideo.party.n.id[GOV450data1\$nine1|identity1 == 3] <- 1
 GOV450data1\$ideo.party.n.id[GOV450data1\$nine1|identity1 != 3] <- 0

Appendix III- Regression Models

Hypothesis 1:

Reflection (COVID):

olsH4.4 <- lm(GOV450data1\$COVIDreflect2~ GOV450data1\$COVIDemo1 + GOV450data1\$COVIDidentity1 + GOV450data1\$Party1 + GOV450data1\$Ideo1 + GOV450data1\$COVIDtrump1 + GOV450data1\$nine1|mem1, data = GOV450data1)

```
Residuals:
    Min       1Q   Median       3Q      Max
-0.8904 -0.4481 -0.2519  0.4876  2.6282

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.336338   0.087991  -3.822 0.000166 ***
GOV450data1$COVIDemo1 -0.112135   0.043597  -2.572 0.010674 *
GOV450data1$COVIDidentity1 -0.076325   0.040843  -1.869 0.062802 .
GOV450data1$Party1    -0.068391   0.076245  -0.897 0.370566
GOV450data1$Ideo1      0.007763   0.086323   0.090 0.928417
GOV450data1$COVIDtrump1  0.152748   0.078165   1.954 0.051771 .
GOV450data1$nine1|mem1 -0.114280   0.084476  -1.353 0.177309
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.639 on 256 degrees of freedom
(25 observations deleted due to missingness)
Multiple R-squared:  0.07635, Adjusted R-squared:  0.0547
F-statistic: 3.527 on 6 and 256 DF, p-value: 0.002265
```

Confirmation bias (COVID):

olsH4.c5 <- lm(GOV450data1\$COVIDtrumpconbias ~ GOV450data1\$nine1|mem1 + GOV450data1\$COVIDemo1 + GOV450data1\$COVIDidentity1 + GOV450data1\$Party1 + GOV450data1\$ideo.party.c.id + GOV450data1\$Ideo1, data = GOV450data1)

```

Residuals:
    Min       1Q   Median       3Q      Max
-1.55644 -0.25610  0.03803  0.20378  1.19227

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.29388   0.08139   -3.611 0.000399 ***
GOV450data1$nine11mem1  0.14488   0.07317   1.980 0.049263 *
GOV450data1$COVIDemo1  0.10512   0.03595   2.925 0.003906 **
GOV450data1$COVIDidentity1 -0.07847   0.05808  -1.351 0.178440
GOV450data1$Party1    -0.38365   0.06207  -6.181 4.35e-09 ***
GOV450data1$ideo.party.c.id 0.25856   0.15495   1.669 0.096968 .
GOV450data1$Ideo1     -0.32179   0.07054  -4.562 9.50e-06 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.4551 on 175 degrees of freedom
(105 observations deleted due to missingness)
Multiple R-squared:  0.6213,    Adjusted R-squared:  0.6083
F-statistic: 47.84 on 6 and 175 DF,  p-value: < 2.2e-16

```

Reflection (9/11):

```

olsH4.3 <- lm(GOV450data1$nine11bushchnge~ GOV450data1$nine11emo1 + GOV450data1$nine11effect1 +
GOV450data1$bush1 + GOV450data1$nine11polidentity1 + GOV450data1$ideo.party.n.converg, data =
GOV450data1)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-1.4342 -0.4503  0.1642  0.3840  1.3408

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.03324   0.13181   0.252 0.8015
GOV450data1$nine11emo1 -0.06418   0.05857  -1.096 0.2760
GOV450data1$nine11effect1  0.16066   0.08338   1.927 0.0570 .
GOV450data1$bush1      0.49744   0.07099   7.007 3.78e-10 ***
GOV450data1$nine11polidentity1 0.11247   0.05101   2.205 0.0299 *
GOV450data1$ideo.party.n.converg -0.05322   0.12422  -0.428 0.6693
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.5674 on 93 degrees of freedom
(188 observations deleted due to missingness)
Multiple R-squared:  0.442,    Adjusted R-squared:  0.412
F-statistic: 14.73 on 5 and 93 DF,  p-value: 1.258e-10

```

Hypothesis 2:

Identity affiliation (COVID):

```

olsH2.c <- lm(GOV450data1$COVIDidentity1~ GOV450data1$COVIDreflect2+ GOV450data1$COVIDemo1 +
GOV450data1$Party1 + GOV450data1$Ideo1 + GOV450data1$COVIDeffect1 + GOV450data1$COVIDtrump1,
data = GOV450data1)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-1.5214 -0.6388 -0.2203  0.5875  2.3628

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.89347   0.12897   6.928 3.5e-11 ***
GOV450data1$COVIDreflect2 -0.19227   0.09513  -2.021 0.0443 *
GOV450data1$COVIDemo1    -0.04412   0.06968  -0.633 0.5272
GOV450data1$Party1      0.24123   0.11613   2.077 0.0388 *
GOV450data1$Ideo1      0.05911   0.13532   0.437 0.6626
GOV450data1$COVIDeffect1 -0.07213   0.12790  -0.564 0.5733
GOV450data1$COVIDtrump1  0.08980   0.12393   0.725 0.4694
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.973 on 254 degrees of freedom
(27 observations deleted due to missingness)
Multiple R-squared:  0.06769,    Adjusted R-squared:  0.04567
F-statistic: 3.074 on 6 and 254 DF,  p-value: 0.006378

```

Change in identity towards nationality (COVID):

olsH2.3 <- lm(GOV450data1\$COVIDidchn2nat ~ GOV450data1\$nine11mem1 + GOV450data1\$COVIDemochng2 + GOV450data1\$COVIDemo1 + GOV450data1\$COVIDtrump1, data = GOV450data1)

```
Residuals:
    Min       1Q   Median       3Q      Max
-1.2235 -0.3175 -0.1263  0.3926  1.0844

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      0.37304    0.09450   3.947 0.000151 ***
GOV450data1$nine11mem1 -0.19122    0.10189  -1.877 0.063621 .
GOV450data1$COVIDemochng2 -0.16902    0.10088  -1.676 0.097116 .
GOV450data1$COVIDemo1  0.12733    0.08876   1.435 0.154675
GOV450data1$COVIDtrump1  0.09720    0.06482   1.500 0.137018
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.4785 on 95 degrees of freedom
(187 observations deleted due to missingness)
Multiple R-squared:  0.08277, Adjusted R-squared:  0.04415
F-statistic: 2.143 on 4 and 95 DF, p-value: 0.08141
```

Identity affiliation (9/11):

olsH2.7 <- lm(GOV450data1\$nine11polidentity1 ~ GOV450data1\$nine11emo1 + GOV450data1\$nine11reflect1 + GOV450data1\$bush1, data = GOV450data1)

```
Residuals:
    Min       1Q   Median       3Q      Max
-1.4832 -0.7175 -0.2828  0.3187  2.7172

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      1.11843    0.16125   6.936 2.52e-10 ***
GOV450data1$nine11emo1  0.20048    0.09957   2.014 0.04640 *
GOV450data1$nine11reflect1 0.39851    0.17029   2.340 0.02100 *
GOV450data1$bush1     -0.43467    0.14751  -2.947 0.00389 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.067 on 115 degrees of freedom
(168 observations deleted due to missingness)
Multiple R-squared:  0.107, Adjusted R-squared:  0.08372
F-statistic: 4.594 on 3 and 115 DF, p-value: 0.004482
```

Change in identity towards nationality (9/11):

olsH2.6 <- lm(GOV450data1\$nine11idchn2nat ~ GOV450data1\$nine11party1 + GOV450data1\$nine11emo1 + GOV450data1\$nine11reflect1 + GOV450data1\$bush1, data = GOV450data1)

```
Residuals:
    Min       1Q   Median       3Q      Max
-0.8972 -0.4013 -0.1975  0.4838  0.9770

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      0.26392    0.11016   2.396 0.0189 *
GOV450data1$nine11party1 -0.05735    0.05829  -0.984 0.3280
GOV450data1$nine11emo1  -0.12624    0.04995  -2.527 0.0134 *
GOV450data1$nine11reflect1 -0.13574    0.08855  -1.533 0.1292
GOV450data1$bush1      0.13532    0.07304   1.853 0.0675 .
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.4819 on 82 degrees of freedom
(200 observations deleted due to missingness)
Multiple R-squared:  0.1205, Adjusted R-squared:  0.07758
F-statistic: 2.808 on 4 and 82 DF, p-value: 0.03074
```

Opinion of Trump (COVID):

```
olsH6.2 <- lm(GOV450data1$COVIDtrump1 ~ GOV450data1$Ideo1 + GOV450data1$Party1 +
GOV450data1$COVIDemo1 + GOV450data1$Ideo.party.c.cnvrg + GOV450data1$Ideo.party.c.id, data =
GOV450data1)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-1.4858 -0.3544  0.0892  0.2086  1.6429

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      -0.19305   0.06279   -3.075 0.002331 **
GOV450data1$Ideo1 -0.39466   0.06579  -5.998 6.65e-09 ***
GOV450data1$Party1 -0.33311   0.05683  -5.861 1.39e-08 ***
GOV450data1$COVIDemo1  0.11941   0.03373   3.540 0.000474 ***
GOV450data1$Ideo.party.c.cnvrg -0.04896   0.07186  -0.681 0.496288
GOV450data1$Ideo.party.c.id  0.12207   0.08670   1.408 0.160349
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.5077 on 260 degrees of freedom
(22 observations deleted due to missingness)
Multiple R-squared:  0.5611,    Adjusted R-squared:  0.5527
F-statistic: 66.49 on 5 and 260 DF,  p-value: < 2.2e-16
```

Opinion of Bush (9/11):

```
olsH6.5 <- lm(GOV450data1$bush1 ~ GOV450data1$nine11party1 + GOV450data1$nine11ideo1 +
GOV450data1$Ideo.party.n.converg + GOV450data1$nine11emo1 + GOV450data1$Ideo.party.n.id, data =
GOV450data1)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-1.89145 -0.40924  0.02202  0.38228  1.70522

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      -0.20348   0.26536   -0.767  0.4450
GOV450data1$nine11party1  0.02360   0.11302   0.209  0.8350
GOV450data1$nine11ideo1  -0.71108   0.11999  -5.926 4.63e-08 ***
GOV450data1$Ideo.party.n.converg  0.18574   0.22619   0.821  0.4135
GOV450data1$nine11emo1  -0.06292   0.07049  -0.893  0.3743
GOV450data1$Ideo.party.n.id  0.29733   0.14706   2.022  0.0459 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7256 on 98 degrees of freedom
(184 observations deleted due to missingness)
Multiple R-squared:  0.3988,    Adjusted R-squared:  0.3682
F-statistic:  13 on 5 and 98 DF,  p-value: 1.045e-09
```

Hypothesis 3:

Effect of memory of 9/11 on emotion during COVID:

```
olsH5 <- lm(GOV450data1$COVIDemo1 ~ GOV450data1$nine11mem1 + GOV450data1$COVIDeffect1 +
GOV450data1$Party1 + GOV450data1$Ideo1 + GOV450data1$Trumpbase1, data = GOV450data1)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-2.03401 -0.38858 -0.12014  0.04891  2.81533

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      0.05531   0.14301   0.387 0.699249
GOV450data1$nine11mem1 -0.23359   0.11663  -2.003 0.046215 *
GOV450data1$COVIDeffect1  0.39006   0.11267   3.462 0.000625 ***
GOV450data1$Party1  -0.04962   0.10265  -0.483 0.629247
GOV450data1$Ideo1  -0.11944   0.11958  -0.999 0.318812
GOV450data1$Trumpbase1  0.26191   0.11237   2.331 0.020522 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.8857 on 264 degrees of freedom
(17 observations deleted due to missingness)
Multiple R-squared:  0.1476,    Adjusted R-squared:  0.1315
F-statistic: 9.144 on 5 and 264 DF,  p-value: 4.884e-08
```

ENDNOTES

- ¹ David J. Ciuk, "Assessing the Contextual Stability of Moral Foundations: Evidence from a Survey Experiment," *Sage Journal* 5, no. 2 (June 20, 2018): 1-9,1.
- ² Ciuk, 1-2. & Xiaoli Nan, "Emotional Responses to Televised PSAs and Their Influence on Persuasion: An Investigation of the Moderating Role of Faith in Intuition," *Communications Studies* 60, no. 5 (October 27, 2009): 426-442, 430.
- ³ Anthony G. Greenwald and Calvin K. Lai, "Implicit Social Cognition," *Annual Review of Psychology* 71 (October 22, 2019): 419-445, 428; Huntsinger, Jeffery R. "Mood and Trust in Intuition Interactively Orchestrate Correspondence between Implicit and Explicit Attitudes." *Personality and Social Psychology Bulletin* 37, no. 9 (September 1, 2011): 1245-58. & Nan, 427.
- ⁴ Adam L. Alter et al., "Intuition: Overcoming Metacognitive Difficulty Activates Analytic Reasoning," *Journal of Experimental Psychology: General* 136, no. 4 (2007): 567-76, 569. & Kahneman, Daniel. *Thinking Fast and Slow*. Unabridged ed. Read by Patrick Egan. Penguin Random House Audio Publishing Group, 2011. Audiobook.
- ⁵ Shawn C. Marsh, "Lens of Implicit Bias," editorial, National Council of Juvenile and Family Court Judges, last modified 2009, accessed January 28, 2021: 16-19, 17.
- ⁶ Kevin Arceneaux and Ryan J. Vander Wielen, *Taming Intuition: How Reflection Minimizes Partisan Reasoning and Promotes Democratic Accountability* (Cambridge, United Kingdom: Cambridge University Press, 2017), digital file, 13. & Kristen D. Deppe et al., "Reflective Liberals and Intuitive Conservatives: A Look at the Cognitive Reflection Test and Ideology.," *Judgment and Decision Making*, 10, no. 4 (July 2015): 314-31, 314-315.
- ⁷ Arceneaux, K., & Vander Wielen, R. J., 21-22.
- ⁸ *Ibid.*, 25-26.
- ⁹ *Ibid.*
- ¹⁰ Arceneaux & Vander Wielen, 37 & Philip E. Converse, "The Nature of Belief Systems in Mass Publics (1964)," *Critical Review: A Journal of Politics and Society* 18, nos. 1-3 (2006): 206-61, 18;23;54.
- ¹¹ Arceneaux, K., & Vander Wielen, R. J., 30-31; 44.
- ¹² *Ibid.*, 44.
- ¹³ James E. Campbell, *Polarized: Making Sense of a Divided America* (Princeton, NJ: Princeton University Press, 2018), 1-3. & Marc A. Sennewald, Kenneth L. Manning, and Robert A. Carp, "The Polarization of the Judiciary," *Party Politics* 23, no. 6 (November 2017): 657-65, 664.
- ¹⁴ Loenie Huddy, Lilliana Mason, and Lene Aarøe, "Expressive Partisanship: Campaign Involvement, Political Emotion, and Partisan Identity," *American Political Science Review* 109, no. 1 (March 3, 2015): 1-17, 3-4; George E. Marcus, W. Russell Neuman, and Michael MacKuen, *Affective Intelligence and Political Judgment* (Chicago: University of Chicago Press, 2000), 27-28; 58 & Luiz Pessoa, "On the Relationship between Emotion and Cognition," *Nature Reviews Neuroscience* 9 (February 2008): 148-158; 148-150.
- ¹⁵ Todd, Rebecca M., Vladimir Miskovic, Junichi Chikazoe, and Adam K. Anderson. "Emotional Objectivity: Neural Representations of Emotions and Their Interaction with Cognition." *Annual Review of Psychology* 71:25-48, 27; 34-36; 42-43. & Pessoa, L., 148-150; 152-154
- ¹⁶ Marcus, G. E., Neuman, W. R., & MacKuen, M., 47-49; 69; Todd, R. M., Miskovic, V., Chikazoe, J., & Anderson, A. K., 26-28. & Pessoa, L., 154-156.

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- ¹⁷ Kahneman, Daniel. *Thinking Fast and Slow*. Unabridged ed. Read by Patrick Egan. Penguin Random House Audio Publishing Group, 2011. Audiobook, 2 hr., 6 min.
- ¹⁸ Kahneman, Daniel. *Thinking Fast and Slow*. Unabridged ed. Read by Patrick Egan. Penguin Random House Audio Publishing Group, 2011. Audiobook, 3 hr., 16 min.
- ¹⁹ Kahneman, Daniel. *Thinking Fast and Slow*. Unabridged ed. Read by Patrick Egan. Penguin Random House Audio Publishing Group, 2011. Audiobook, 3 hr., 50 min.
- ²⁰ Fauci, Anthony S., H. Clifford Lane, and Robert R. Redfield. "Covid-19 — Navigating the Uncharted." *The New England Journal of Medicine*, March 26, 2020, 1268-69.; Mainiero, Lisa A., and Donald E. Gibson. "Managing Employee Trauma: Dealing with the Emotional Fallout from 9-11." *Academy of Management Executive* 17, no. 3 (2003): 130-43, 130-131. PDF.
- & Hsu, H. Y., Vásquez, B. E., & McDowall, D. (2019). A deadlier post-9/11 terrorism landscape for the USA abroad: a quasi-experimental study of backlash effects of terrorism prevention. *Journal of Experimental Criminology*, 607-23, 619-621.
- ²¹ Arceneaux, K., & Vander Wielen, R. J., 22; 44-45. & Marcus, G. E., Neuman, W. R., & MacKuen, M., 53; 62; 69.
- ²² Fauci, A. S., 1268-69.
- ²³ Mainiero, L. & Gibson, D. E., 131-133.
- ²⁴ Todd, R. M., Miskovic, V., Chikazoe, J., & Anderson, A. K., 34-39.
- ²⁵ Kahneman, Daniel. *Thinking Fast and Slow*. Unabridged ed. Read by Patrick Egan. Penguin Random House Audio Publishing Group, 2011. Audiobook, 2 hr., 6 min.
- ²⁶ *Ibid.*, 39.
- ²⁷ Arceneaux, K., & Vander Wielen, R. J., 21-22; Todd, R. M., Miskovic, V., Chikazoe, J., & Anderson, A. K., 26-28 & Pessoa, L., 148–150; 152–154
- ²⁸ Marcus, G. E., Neuman, W. R., & MacKuen, M., 53;62;69.
- ²⁹ Weeks, Brian E. "Emotions, Partisanship, and Misperceptions: How Anger and Anxiety Moderate the Effect of Partisan Bias on Susceptibility to Political Misinformation." *Journal of Communications* 65, no. 4 (June 19, 2015): 699–719, 701–704. & Huddy, Leonie, and Lilliana Mason. "Heated Campaign Politics: An Intergroup Conflict Model of Partisan Emotions." Paper presented at American Political Science Association, Boston, MA, August 28-31, 2008:1–49, 5–8.
- ³⁰ Weeks, B. E., 704.
- ³¹ Ho, Cyrus SH, Cornelia YI Chee, and Roger CM Ho. "Mental Health Strategies to Combat the Psychological Impact of COVID-19 beyond Paranoia and Panic." *Academy of Medicine Singapore* 49, no. 1 (2020): 1–6, 2–4. PDF.