The Cook Undergraduate Research Journal

University of Idaho Department of Politics and Philosophy

University of Idaho

Volume 3

Spring 2026

The Cook Undergraduate Research Journal

University of Idaho

Department of Politics and Philosophy

Volume 3, Spring 2026

CONTENTS

COVER IMAGE:

Creator(s): Simeone, Derek, photographer. Date Created/Published: 2020-05-31. Reproduction Number: LC-DIG-ppbd-01597 (original digital file). Rights Advisory: Publication may be restricted. This photo has the Creative Commons license: CC BY. Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA https://hdl.loc.gov/loc.pnp/pp.print

INTRODUCTION

Welcome to the third volume of the Cook Undergraduate Research Journal (CURJ), a scholarly platform dedicated to the dispersion of cutting-edge research and innovative perspectives within the field of political science. CURJ strives to facilitate an open dialogue and knowledge exchange among scholars, policymakers, and practitioners to better understand the complexities of political systems and their impact on society.

MISSION AND SCOPE

The mission of CURJ is to provide a prestigious avenue for researchers, scholars, and experts to present their original research, theoretical frameworks, policy analyses, and critical reviews within the realm of political science. We aspire to advance the understanding of political dynamics, governance, public policy, and international relations through high-quality research contributions..

CURJ encompasses a wide range of political science topics, including but not limited to:

Political Theory and Philosophy:

Ideological analysis, political thought, and philosophical underpinnings of political systems.

Comparative Politics:

Comparative analysis of political systems, institutions, and practices across different regions and countries.

International Relations:

Study of international actors, diplomacy, conflict resolution, and global governance.

EDITORIAL EXCELLENCE

Our distinguished editorial team, composed of undergraduate political science students, ensures a thorough peer review process to maintain the highest standards of academic rigor and ethical publishing. We are committed to upholding academic integrity and ensuring that research published in CURJ is credible, insightful, and contributes to the advancement of political science.

ACKNOWLEDGMENTS

We would like to give a special thanks to every member of our editorial board for thoughtfully reviewing the submissions for our third publication. We could not have accomplished as much as we did in such a short period without you. We would also like to thank Drs. Markie McBrayer and Florian Justwan for the administrative assistance in getting this student-led publication up and running.

Sincerely,

Jacob Bindley, *Editor-in-Chief*

Bergen Kludt-Painter, *Reviewer*

Alexa Benitez, *Reviewer*

Katrina Beall, *Reviewer*

Mila Rice, *Reviewer*

Trumpism as a Catalyst for Conspiratorial Thinking

Brenna Hawkins

Abstract

This paper explores the relationship between Trumpism, defined as a blend of populist and nationalist ideology combined with strong support for Donald Trump, and general political conspiracy theory belief. Drawing on previous literature that links conservative ideology and Republican partisanship to political conspiracy thinking, this study seeks to determine whether Trumpism, as a distinct political orientation, has a statistically significant effect on political conspiratorial belief. Using original survey data (N = 198) and a multiple regression analysis, this study tests the hypothesis that Trumpism (independent variable) increases general political conspiracy theory belief (dependent variable), while controlling for partisanship, age, income, gender, and support for political violence. Results indicate a statistically significant positive relationship between Trumpism and conspiracy theory belief, suggesting that Trumpism may act as a unique form of catalyst for conspiratorial thinking beyond traditional partisan identification.

Introduction

After his loss in the 2020 election, Donald Trump released a series of tweets that would imply voter fraud at a large scale. He stated "I WON THE ELECTION BY A LANDSLIDE, but remember, I only think in terms of legal votes, not all of the fake voters and fraud that miraculously floated in from everywhere! What a disgrace!" (Trump, 2020). This is one of many of Trump's political conspiracy theories that he promotes to his supporters. When considering the rhetoric of his campaign and his subsequent presidencies, which has been described in literature as "government by conspiracy theory" (Peters, 2022, p. 1647), we begin to see an emerging pattern in both Donald Trump and his supporters alike. This connection is apparent through the culmination of previous literature on conspiracy theory belief, which shows that conservative ideology and Republicanism have been connected to an increase in political conspiracy theory belief (Smallpage & Enders, 2018; Van der Linden et al., 2021). Further literature states that Donald Trump relies on conspiratorial narratives in his campaign (Huff, 2024; Sawyer, 2022; Wilson, 2023). However, the concept of Trumpism, a blend of support for Donald Trump and the ideological ideals of his campaign (including populism and nationalism), has never been explicitly studied in relation to general political conspiracy theory belief (Wilson, 2023). Therefore, I question what effect Trumpism has on general political conspiracy theory belief in people, as Trump has had conspiracy involved in his campaigns since as early as 2015 (Butter, 2022).

As briefly touched on, the literature within this realm of political psychology is expansive and reflects a multitude of different factors as to why some people

may be more conspiratorial politically than others. This includes concepts such as the dark triad, narcissism, support for political violence, social trust, and partisanship, as previously mentioned (Smallpage & Enders, 2018; Farhart et al., 2015; Robertson et al., 2022; Uscinski et al., 2022). The gap explored by this paper is within the specific study of Trumpism as a political ideology. Whilst literature has linked Republicanism and support for political conspiracy theory, as previously discussed, Wilson's (2023) explanation of Trumpism has not explicitly been connected to this topic (Smallpage & Enders, 2018). Due to the connections between Trumpism and political conspiracy theory, as seen through Trump's political rhetoric, this study aims to explicitly bridge the gap in literature and reflect on how this concept may apply to citizens contemporarily. The causal relationship in this study suggests that a person's level of Trumpism affects their level of general conspiracy theory belief. This causal relationship is found through the study of Trump's political rhetoric, which frequently frames events through a conspiratorial viewpoint rather than evidence-based claims and factual information (Huff, 2024; Sawyer, 2022; Wilson, 2023). This study explicitly asks the question: *What effect does Trumpism have on general political conspiracy theory belief?* Based on previous literature and the unique nature of Trumpism, I hypothesize that *as a person's Trumpism score increases, their general political conspiracy theory belief score will increase as well.*

In order to test this hypothesis, a multivariate regression analysis (N=198) was used to test the dependent variable, or general political conspiracy theory belief, against the independent variable, or Trumpism. These concepts were found through utilizing questions that appropriately measured these variables. These answers were then averaged out to reveal "Trumpism scores" and "General political conspiracy theory belief scores." Control variables, including age, income, political affiliation, and propensity to approve of political violence, were included in the study as well. The study was found to be statistically significant, and when controlling for all other variables, Trumpism had an effect on general political conspiracy theory belief.

Literature Review

The definition for conspiracy theory, particularly in the political sphere, is somewhat convoluted in nature. A conspiracy theory (in the political sense) is defined as "an effort to explain some event or practice by reference to the machinations of powerful people, who attempt to conceal their role (at least until their aims are accomplished)," (Sunstein & Vermeule, 2009, p. 205). Conspiracy theory is also, in separate literature, defined more loosely as "the idea that particular groups of people meet together, secretly or in private to plan various courses of action, and that some of those plans actually exert a significant influence on particular historical developments…" by Bale (2007, p. 47). Similarly, the discussion on conspiracy thinking as political belief is murky. Scholars have studied not only individual psychology, but also ideological concepts, political extremism, inclination towards political violence, and partisanship, all as potential factors into the belief of political conspiracy theory (Greenhill & Oppenheim, 2017; Smallpage & Enders, 2018).

Conspiracy theory as political belief has been identified as partisan in nature by contemporary scholarship (Einstein & Glick, 2015). Further, both major political parties attribute conspiracy beliefs to opposing partisan groups, reinforcing the idea

that these beliefs carry distinct political identities and are used to discredit out-groups (Smallpage et al., 2017). Expanding on this, Smallpage and Enders (2018) find that Republicans, as a whole, are more susceptible to conspiratorial cues than Democrats, suggesting that certain predispositions may make individuals more receptive to conspiracy narratives. This pattern is further supported by research showing that conservatives in the United States are generally more likely to endorse conspiracy theories and adopt conspiratorial worldviews than liberals, with extreme conservatives displaying significantly higher levels of conspiratorial thinking than extreme liberals (Van der Linden et al., 2021). *These findings suggest that partisan orientation is not simply a minor factor in conspiracy belief, but rather a central determinant of whether individuals accept or reject conspiratorial theory.* The association between conspiracy theories and political affiliation becomes even more apparent when considering the broader landscape of politically driven conspiracies. Given that a high proportion of conspiracy theories revolve around political themes, focusing on partisanship is a logical approach to understanding their appeal (Sunstein & Vermeule, 2009). These patterns highlight how conspiracy beliefs are, in some manner, shaped and embedded into the broader partisan landscape: Political conspiracy theories are not just fringe or randomized beliefs, but rather deeply entrenched components of partisanship. However, this is not found to be true by every study academically published, as Oliver and Wood (2014) find that conspiracy theorizing is a widespread tendency across a spectrum. Partisanship was inconsistently related to conspiracy theory beliefs in 585 relationships examined, in one study (Uscinski et al., 2022).

To reconcile these differing perspectives, a growing body of work highlights the importance of individual-level traits, such as authoritarianism, social distrust, and need for control as potential reasoning for political conspiracy theory belief (Farhart et al., 2015; Robertson et al., 2022). These psychological tendencies could potentially help explain why belief in conspiracy theories often persist, despite conflicting political contexts and shifting targets (Uscinski & Parent, 2014). Additionally, conspiracy theories are also tied to an individual's social identity within an in-group, as they can fulfill psychological needs, such as a sense of belonging (Robertson et al., 2022). Research further suggests that greater exposure to political conspiracy increases the likelihood of belief in them, which suggests that an individual's level of exposure may alter their perception (Uscinski & Atkinson, 2013). These perspectives align with the larger school of thought that emphasizes individual-level factors in conspiracy belief, suggesting that personal traits and experiences, like increased exposure to conspiratorial belief or narcissistic traits, play a crucial role in shaping susceptibility (Uscinski et al., 2022; Uscinski & Atkinson, 2013). Furthermore, recognizing that conspiracy theorists do not believe in every theory highlights the complexity of these beliefs and reinforces the idea that individual-level differences, such as differences in support for violence, influence which theories gain traction (Uscinski et al., 2022). Together, these factors support that belief in political conspiracy theories is driven not just by external influences but by deeply rooted cognitive and social dynamics at the individual level. However, studies on the individual level may overemphasize individual psychological traits whilst also underestimating the broader structural and cultural factors that contribute to

belief in conspiracy theories. For example, crises and social instability can create environments where conspiracy theories thrive (Kużelewska & Tomaszuk, 2022).

These two schools of thought each emerge with their own respective strengths and weaknesses. The partisanship and ideological framework finds its strengths in the pre-existing literature on political conspiracy theory belief, stating that both conservatives and Republicans are more likely to endorse these beliefs (Van der Linden et al., 2021; Smallpage & Enders, 2018). However, works like those of Oliver and Wood (2014) and Uscinski et al. (2022) show us that conspiracy theory belief is not explained by partisanship alone. The individual-level framework works to bridge this gap through its investigations on traits that may influence beliefs in political conspiracy theories, like an individual's level of social trust or their propensity towards political violence (Uscinski et al., 2022). This literature aims to expand on both schools of thought through the study of Trumpism, a blend of explicit support for Donald Trump alongside ideological predispositions towards nationalism and populism (Wilson, 2023).

Theory and Hypothesis

The existing literature on conspiracy theory beliefs has previously addressed the role of partisan identity, individual psychology, and political ideology outside of partisan issues, such as support for political violence, in fostering conspiratorial thinking (Enders et al., 2015; Uscinski et al., 2022). However, the newly studied framework titled Trumpism, which is a unique blend of ideological factors including nationalism and populism, alongside support for President Donald Trump, has yet to be studied in relation to political conspiracy theory belief (Wilson, 2023). This research aims to fill that gap by investigating how Trumpism, as a distinct political orientation, aligns with higher levels of general conspiracy theory belief. By doing so, this study contributes to existing literature on political psychology by attempting to understand contemporary factors within political conspiracy theory belief.

The causal relationship as proposed in this study suggests that a person's level of Trumpism affects their level of general conspiracy theory belief. This causal relationship is grounded in the nature of Trump's political rhetoric, which frequently relies on narrative politics, emotional appeals, and the framing of events through conspiracy rather than evidence-based fact (Huff, 2024; Sawyer, 2022; Wilson, 2023). Research shows that Trump's rhetoric employs anti-democratic language, including threats, attacks, conspiracy theories, evasion, and lies, all of which serve to subvert democratic norms and undermine trust in institutional authority (Wilson 2023). Trump is a nationalist and has run his campaign as such, which has been shown in other countries to propel in-group and out-group dynamics, making people more receptive to conspiracy theories that portray out-groups as threats (Mearsheimer, 2021; Mir and Siddiqui, 2024). The combination of anti-elitism from populism and nationalist in-group and out-group dynamics may cultivate a worldview that is more predisposed to accept conspiracy theories as plausible explanations for political phenomena. When studied for, these variables (Trumpism and general political conspiracy theory belief) will be quantified based on respondents' answers to questions relating to Donald Trump, nationalism, populism, and generalized political conspiracy belief. Thus, I posit that: *As a person's Trumpism score increases, their general political conspiracy theory belief score will increase as well.*

Research Design

Case Selection

In order to test the hypothesis that individuals who score highly on Trumpism beliefs will also exhibit higher levels of general political conspiracy theory, original survey data will be used, dated from March 2025. The survey will be conducted using Prolific Academic as the data source, ensuring a nationally representative online sample (N=200) that is balanced by sex, age, and political affiliation. This approach allows for more generalizable conclusions about the broader U.S. population. The survey will include a range of questions designed to measure political attitudes, ideological alignment, and general belief in conspiracy theories. The survey questions will all begin with "How much do you agree or disagree with the following statement?" Following this, the respondents are given the specific statement that aligns with one of the aforementioned factors that relate to Trumpism or general political conspiracy theory belief. Respondents may answer with any of these five responses: (1) Strongly agree, (2) Agree, (3) Neither agree nor disagree, (4) Disagree, or (5) Strongly Disagree. Given Donald Trump's victory in the 2024 election, studying Trumpism offers a timely opportunity to examine its influence on broader general conspiratorial belief. Further, Donald Trump's presidency has been proclaimed to be "government by conspiracy theory," as previously mentioned, making this study particularly relevant in understanding how his political movement shapes public perceptions and beliefs in political conspiracy (Peters 2022, p. 1647).

Measurement

The key variables in the study will be measured using carefully designed survey questions. Trumpism will be assessed through a series of questions capturing respondents' alignment with the core ideological components of Trumpism, including nationalism and populism, as well as explicit support for Donald Trump (Wilson 2023). The survey will include the question "How much do you agree or disagree with the following statement? Donald Trump is the only political leader who represents people like me," in order to further clarify the distinction between Trumpism and traditional Republican political belief. Further questions on nationalism and populism will help to explicate the relationship between respondents and their level of Trumpism: These include statements such as "The US should prioritize American interests over international cooperation," "For me, the United States is the best country in the world," "Ordinary people would do a better job in politics today than most elected officials," and "The political differences between the elite and the people are larger than the difference is among the people." All of these statements begin with "To what extent do you agree with the following statement?" These questions are then all answered via a Likert Scale, with (1) being Strongly Agree and (5) being Strongly Disagree. One further question is modeled off of a study on Patriotic Attitudes and Nationalism by Kosterman and Feshbach (1989), in which the question, slightly modified, states "To what extent do you agree or disagree with the following statement? The first duty of every American is to honor the national American history and heritage," which is an indicator of nationalist beliefs. In total, six questions will be asked to determine a respondents' level of Trumpism, and these six aforementioned questions will then become the "Trumpism score," after being averaged out to one five-point number that encompasses all questions relating to Trumpism.

General political conspiracy belief will be measured using the standard definition of

political conspiracy belief, which is defined as the belief that governmental elites are forming secretive, malevolent schemes that are possibly an explanation of important political events (Goertzel, 1994; Bale, 2007). From this definition, questions were created to determine the respondent's potential belief in this form of political conspiracy theory. One question in this category is "How much do you agree or disagree with the following statement? The government keeps many important secrets from the public." Some further questions included come from the Department of Psychology at Goldsmith University, wherein Brotherton et al. (2013) surveys for conspiracy theory. Such questions will include asking respondents how much they agree or disagree with statements such as "Certain significant world events have been the result of the activity of a small group who secretly manipulate world politics," and "The government has staged important social events in order to manipulate voters." These three, in total, culminate to the "general conspiracy theory belief" score, after being averaged out to one five-point number that reflects their average scores on these questions.

To ensure that the relationship between Trumpism and political conspiracy theory belief is not confounded by other explanations, I will include several control variables commonly associated with political conspiracy belief. This includes partisan identity, measured by asking if respondents are a Republican, a Democrat, an Independent, or Other. This distinction is important not only for conspiracy theory belief, but also for controlling for the differences between traditional Republican beliefs and Trumpism. I will also include coverage of support for political violence, which has been shown to align with political conspiracy belief (Uscinski et al., 2022). I will also control for standard predictors of difference in political belief, including age, gender, and income.

Methodology

To test this hypothesis, I will use multiple regression analysis to estimate the effect of Trumpism beliefs, my independent variable, on general conspiracy theory beliefs, my dependent variable, while controlling for other factors that may influence conspiracy theory belief. Prior to analysis, I will construct a composite "Trumpism Score" by averaging responses from several 5-point Likert scale questions measuring its core dimensions: nationalism, populism, and support for Donald Trump (Wilson 2023). I will do the same for general political conspiracy theory belief. A regression analysis is essential to isolate the effect of Trumpism on conspiracy theory belief while controlling for Republican identification and other confounding variables as it ensures that the observed relationship is not spurious.

Results

After running my multivariate regression analysis, the above results were found. The multivariate regression found that Trumpism is statistically significant, with the p-value being <0.001, specifically 0.000143. The coefficient is 0.38, meaning that for every 1 scale point that Trumpism increased, general conspiracy belief increased by 0.38 scale points. Further variables, including income and political violence, were statistically significant, with an Independent political affiliation having some marginal findings. For every scale point increase in income, there was 0.03 scale point increase in general political conspiracy theory belief, with the p-value being <0.05. This is statistically significant, yet with lesser influence than that of Trumpism. For every scale point increase in support for political

violence, there's a 0.12 scale point increase in general political conspiracy theory belief, with the p-value being <0.05. When someone identifies as an Independent, there's a 0.35 scale point decrease in general political conspiracy theory belief, with the p-value being <0.1. The findings on Independent political affiliation are only marginally significant and yield further research. My other independent variables, including age, gender (male), and party affiliation (Democrat, other party, and no preference) were not statistically significant, with the p-value being greater than 0.05.

Table 1: Variables That Explain Generalized Political Conspiracy Theory Belief

	Dependent Variable: General Political Conspiracy Theory Belief
Trumpism	0.38***
	(0.09)
Age	0.05
	(0.04)
Income	0.03*
	(0.02)
Support for Political Violence	0.12**
	(0.05)
Gender: Male	0.76
	(0.49)
Party Affiliation: Democrat	-0.16
	(0.18)
Party Affiliation: Independent	-0.35**
	(0.17)
Party Affiliation: No Preference	-0.002
	(0.61)
Party Affiliation: Other Party	-1.12
	(0.86)
Constant	0.72**
	(0.34)
Observations	198
R^2	0.17
Adjusted R^2	0.13
Residual Std. Error	0.83 (df = 188)
F Statistic	4.16*** (df = 9; 188)
Note:	*p**p***p<0.01

VIF Test:

DV	GVIF	Df	GVIF^(1/(2*Df))
Trumpism	1.473956	1	1.214066
Age	1.139711	1	1.067572
Income	1.031803	1	1.015777
Support for Political Violence	1.108365	1	1.052789
Gender (Male)	1.033577	1	1.016650
Political Affiliation	1.551757	4	1.056460

In broader terms, holding all other variables constant, for every one scale point that gender, age, or certain party affiliations increase, there is no statistically significant change in general political conspiracy theory belief. These findings show us that, when controlling for other potential indicators of political conspiracy theory belief, Trumpism remains statistically significant. This regression had an adjusted R^2 value of 0.13, signifying that the regression accounted for 13% of the variance in my dependent variable, or general political conspiracy theory belief. The constant is 0.72, which represents the general belief in political conspiracy theory when all other variables are held at zero. The VIF test shows us that all independent variables studied had a value under the maximum threshold of 5, which means that none of the independent

variables had a collinear relationship with my dependent variable, or general political conspiracy theory belief. When tested for outliers, this analysis had none.

Discussion and Conclusion

Ultimately, my regression results support my hypothesis that as the level of Trumpism increases, so does belief in political conspiracy theory. This aligns with previous literature that finds that political conspiracy theory belief is related to Republicanism and conservatism, respectively (Smallpage & Enders, 2018; Van der Linden et al., 2021). This is an interesting finding in and of itself, as my test controlled for Republicanism and specifically focused on Trumpism. The implications of these findings are widespread, due to Donald Trump's current position as President of the United States. These results could possibly suggest that political conspiracy theory belief is on the rise in the U.S. from 2020, as Donald Trump lost that election, yet has won this one. The implications of my other independent variables are intriguing as well. Political violence has already been tied to general conspiracy theory belief, so this one less so (Uscinski et al., 2022). But, an increase in income within the study also causes an increase in political conspiracy theory belief, which does not align with previous literature, which states that people with lower incomes are more likely to believe in political conspiracy (Enders et al., 2024). This should be studied further in future iterations of this study and is an intriguing finding of this research.

Some potential alternative explanations I wasn't able to account for include the concept that the questions for political conspiracy theory were not inclusive enough or did not fully capture the true concept behind my dependent variable. Since I was only able to allot for so many questions, this analysis could be challenged under the notion that I did not ask enough questions pertaining to general political conspiracy theory belief to justify utilizing this term for my results. Similarly, Trumpism could potentially be not fully founded within the questions. An expansion of this questionnaire could potentially lead to different results and a more precise measurement of these variables, as my independent and dependent variables are somewhat difficult to quantify based on only a few questions. For example, Trumpism is also noted to have some factors relating to neoliberalism (Wilson, 2023). Due to survey constraints, this could not be included: if it had been, the regression results could potentially change.

Further research in this topic should account for the questions that this study has created. This includes additional research into the relationship between income and general political conspiracy theory belief, as the results I have found do not have a robust literature behind them. Income and general conspiracy theory have a relationship that is not traditionally seen in other works of literature, which could prompt further study in this area (Enders et al., 2024). Since Donald Trump has just begun his second term, future iterations could yield different results, as Trump's political term could influence respondents' levels of general political conspiracy theory in either direction.

References

Bale, J. M. (2007). Political paranoia v. political realism: On distinguishing between bogus conspiracy theories and genuine conspiratorial politics. *Patterns of Prejudice, 41*(1), 45–60. https://doi.org/10.1080/00313220601118751

Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *Frontiers in Psychology, 4*, 279. https://doi.org/10.3389/fpsyg.2013.00279

Butter, M. (2022). Conspiracy theory after Trump. *Social Research: An International Quarterly, 89*(3), 787–809. https://doi.org/10.1353/sor.2022.0054

Enders, A., Klofstad, C., Diekman, A., Drochon, H., Rogers de Waal, J., Littrell, S., Premaratne, K., Verdear, D., Wuchty, S., & Uscinski, J. (2024). The sociodemographic correlates of conspiracism. *Scientific Reports, 14*(1), 14184. https://doi.org/10.1038/s41598-024-64098-1

Einstein, K. L., & Glick, D. M. (2015). Do I Think BLS Data are BS? The Consequences of Conspiracy Theories. *Political Behavior*, *37*(3), 679–701. https://doi.org/10.1007/s11109-014-9287-z

Enders, A. M., & Smallpage, S. M. (2019). Informational Cues, Partisan-Motivated Reasoning, and the Manipulation of Conspiracy Beliefs. *Political Communication*, *36*(1), 83–102. https://doi.org/10.1080/10584609.2018.1493006

Enders, A., Farhart, C., Miller, J., Uscinski, J., Saunders, K., & Drochon, H. (2023). Are Republicans and Conservatives More Likely to Believe Conspiracy Theories? *Political Behavior*, *45*(4), 2001–2024. https://doi.org/10.1007/s11109-022-09812-3

Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology, 15*(4), 731–742. https://www.jstor.org/stable/3791630

Greenhill, K. M., & Oppenheim, B. (2017). Rumor has it: The adoption of unverified information in conflict zones. *International Studies Quarterly, 61*(3), 660–674. https://doi.org/10.1093/isq/sqx018

Huff, A. (2024). On American fascism: The fascist rhetoric of Donald Trump and the right wing media [Master's thesis, Georgia State University]. https://doi.org/10.57709/36970572

Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology, 10*(2), 257–274. https://www.jstor.org/stable/3791647

Kużelewska, E., & Tomaszuk, M. (2022). Rise of conspiracy theories in the pandemic times. *International Journal for the Semiotics of Law, 35*, 2373–2389. https://doi.org/10.1007/s11196-022-09912-z

Mearsheimer, J. J. (2021). Liberalism and nationalism in contemporary America. *PS: Political Science & Politics, 54*(1), 1–8. https://doi.org/10.1017/S1049096520001808

Miller, J. M., Sanders, K. L., & Farhart, C. E. (2015). Conspiracy endorsement as motivated reasoning: The moderating roles of political knowledge and trust. *American Journal of Political Science, 60*(4), 824–844. https://doi.org/10.1111/ajps.12234

Mir, A., & Siddiqui, N. (2024). Nationalism, status, and conspiracy theories: Evidence from Pakistan. *British Journal of Political Science, 54*(4), 1–21. https://doi.org/10.1017/S0007123424000140

Mitchell, A., Simmons, K., Matsa, K. E., & Silver, L. (2018, May 14). Appendix C: How this study measures populism. *Pew Research Center*. https://www.pewresearch.org/journalism/2018/05/14/media-western-europe-how-this-study-measures-populism/

Oliver, E. J., & Wood, T. J. (2014). Conspiracy theories and the paranoid style(s) of mass opinion. *American Journal of Political Science, 58*(4), 952–966. https://doi.org/10.1111/ajps.12084

Peters, M. A. (2022). Science, truth and conspiracy in the age of Trump. *Educational Philosophy and Theory, 54*(13), 2104–2113. https://doi.org/10.10810/00131857.2022.2148242

Robertson, C. E., Pretus, C., Rathje, S., Harris, E., & Van Bavel, J. J. (2023). How social identity shapes conspiratorial belief. *Current Opinion in Psychology, 52*, 101734. https://doi.org/10.1016/j.copsyc.2023.101734

Sawyer, P., & Kalaycı, Y. (2022). Conspiracy theories as a component of populist rhetoric. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4121825

Smallpage, S. M., Enders, A. M., & Uscinski, J. E. (2017). The partisan contours of conspiracy theory beliefs. *American Politics Research, 45*(6), 1030–1051. https://doi.org/10.1177/1532673X17741838

Sunstein, C. R., & Vermeule, A. (2009). Conspiracy theories: Causes and cures. *The Journal of Political Philosophy, 17*(2), 202–227. http://www.ask-force.org/web/Discourse/Sunstein-Conspiracy-Theories-2009.pdf

Trump, D. [@realDonaldTrump]. (2020, December 12). *I WON THE ELECTION BY A LANDSLIDE, but remember, I only think in terms of legal votes, not all of the fake voters and fraud that miraculously floated in from everywhere! What a disgrace!* [Tweet]. Twitter. https://twitter.com/realDonaldTrump/status/1338194621011450113

Uscinski, J. E., & Parent, J. M. (2014). *American conspiracy theories*. Oxford University Press.

Uscinski, J. E., Klofstad, C. A., & Atkinson, M. D. (2016). What drives conspiratorial beliefs? The role of informational cues and predispositions. *Political Research Quarterly, 69*(1), 57–71. https://doi.org/10.1177/1065912915621621

Uscinski, J. E., Enders, A. M., Diekman, A. B., Funchion, J. R., Klofstad, C. A., Kuebler, S. C., Murthi, M. N., Premaratne, K. N., Seelig, M. I., Verdear, D. C., & Wuchty, S. (2022). The psychological and political correlates of conspiracy theory beliefs. *Scientific Reports, 12*, 21758. https://doi.org/10.1038/s41598-022-25617-0

Van der Linden, S., Panagopoulos, C., Azevedo, F., & Jost, J. T. (2020). The paranoid style in American politics revisited: An ideological asymmetry in conspiratorial thinking. *Political Psychology, 41*(1), 147–166. https://doi.org/10.1111/pops.12681

Wilson, C. (2023). Trumpism: Race, class, populism, and public policy. *Political Science Quarterly, 138*(1), 87–120. https://doi.org/10.1093/psquar/qqac014

Belief in Disenfranchisement as a Driver of Political Violence

Katrina Beall

Abstract

In recent years, the United States has witnessed a widespread rise in political violence, exemplified by high-profile events such as the January 6th Capitol riot, the attempted kidnapping of Governor Gretchen Whitmer, and the assault on Paul Pelosi. While existing scholarship has attributed this trend to factors like partisan polarization, elite rhetoric, and individual psychological traits, one potential driver has received little attention: the belief in systemic voter disenfranchisement. This study examines whether belief in disenfranchisement predicts increased support for political violence. I hypothesize that individuals who believe disenfranchisement occurs at a high rate are more likely to think that violence is an acceptable way to express their disagreement with elected officials. Drawing on a nationally representative survey of 200 U.S. adults recruited through Prolific Academic, I conducted a multivariate regression analysis, controlling for demographic and political variables. The results indicate that belief in disenfranchisement is a statistically significant predictor of support for political violence, even after accounting for age, education, and political ideology. These findings suggest that perceptions of exclusion from democratic participation may contribute to political radicalization and willingness to endorse violent action against elected officials. This study highlights the importance of addressing disenfranchisement narratives in order to mitigate threats to democratic stability.

Introduction

Political violence has become a hot topic in the past few years, both across the world and in the U.S. In the U.S. alone, citizens have seen a sizeable increase in political violence since 2016 (Norris, 2019). This has been seen through the attempted assassination of Donald Trump, the attempted kidnapping of Gretchen Witmer, the events of January 6th, 2021, and the attack on Paul Pelosi. This uptick in political violence has to be the result of some change in society that has recently come to light. Many authors have stated that the recent uptick in politically violent behaviors has been caused by growing party polarization (Piazza, 2023b; Norris, 2019; Pasek, 2022). This can be seen in the increasing levels of affective polarization that Americans hold for members of the perceived out-party (Albertson and Guiler, 2020). Other scholars suggest that the recent increase in support for political violence is due to elite rhetoric (Piazza, 2024a; Armaly et al., 2022; Kingzette et al., 2021). Extremist elites such as Donald Trump have increasingly created campaigns and targeted messaging that instill support for political violence in their supporters (Piazza, 2024a). One other body of literature shows that individuals who show signs of aggressive traits are more likely to support political violence (Piazza, 2024b; Kalmoe, 2014). The last body of

literature that I found suggested that there is no one factor that thoroughly explains variation in support for political violence (Armaly and Enders, 2024; Piazza, 2023a).

While these factors do give a very thorough overview of potential causes for support for political violence, I found that there was one factor that was not discussed. This was the effect that belief in disenfranchisement has on individuals' support for political violence. I hypothesize that individuals who believe disenfranchisement occurs at a high rate are more likely to think that violence is an acceptable way to express their disagreement with elected officials.

Disenfranchisement is defined as "the action of taking away the right to vote from a person or group" (Cambridge Dictionary, n.d.). Disenfranchisement can manifest in a series of forms, both substantive and non-substantive. The most common form of disenfranchisement that comes to mind is the legal measures that are put in place to restrict certain groups of people from voting. These can take the form of mail-in voting restrictions, limitations on election-day registration, and voter ID laws. Using these definitions, I posit that individuals who believe disenfranchisement tactics are in place across the United States in high quantities will develop higher levels of support for political violence due to building resentment and lowered trust in the national government, governmental institutions, and the opposing party officials. This will result in a perceived need to rectify government institutions and replace politicians of the out-party, which they believe cannot be achieved using established democratic systems. Therefore, these individuals will be more likely to engage in or support politically violent behavior to achieve their goals and express their resentment.

To test my hypothesis, I conducted a multiple regression analysis to examine whether belief in disenfranchisement had a statistically significant effect on support for political violence. Through my analysis, I reaffirmed my theory and saw support for my hypothesis. I found that belief in disenfranchisement had a positive effect on support for political violence, leading me to believe that my theory was supported.

Literature Review

Support for political violence is a highly studied area, as I will demonstrate through the following literature. In recent years, political violence has increased, especially following the events of January 6, 2021. This can be seen in a variety of different ways, including violence against out-groups, violence toward political elites, and general discontent towards the American system (Armaly et al., 2022; Kalmoe, 2014; Norris, 2019). The effects of political violence can be seen throughout numerous functions and institutions. Authors have found many different factors that can explain this increase in support of political violence.

Some researchers suggest that the main cause of political violence is partisan divides. This can be seen through the increasingly affectively polarized nation wherein biases play a large role in creating divisions within society (Piazza, 2023b). One article suggests that political polarization allows for the dehumanization of the opposing party, facilitating group mobilization (Norris, 2019). Authors also argue that political polarization generates moral disengagement which creates the belief that members of the opposing party are "not entitled to the same level of consideration, trust, empathy, protection, and fair and humane treatment" (Piazza, 2023b, p. 11). Parties also lend themselves to create significant dislike or even hate towards the out-group,

creating ideological differences that can lead to political violence (Pasek, 2022). One study found that when partisans were shown stimuli suggesting election fraud from international actors such as Russia and China, they were more likely to support political violence and in turn subvert democratic norms due to their perceived view of the opposing party (Albertson & Guiler, 2020). They also believe that political violence can be caused by the American system's intrinsically turbulent nature, leading to increased affective polarization (Norris, 2019; Pasek, 2022; Piazza, 2023b).

A second body of research finds that the root of the political violence stems from elites, categorized as those holding positions of power. They find that Republican elite rhetoric is negative toward the Democratic party at a higher rate than Democratic elite rhetoric is toward the Republican Party. This showed that elites within the Republican Party are more affectively polarized than elites from the Democratic Party, which then trickles down into the Republican electorate (Piazza, 2024a). Others found that elite cues tend to urge people to become more extreme, making them more willing to attack the opposing party (Armaly et al., 2022). Scholars also find a connection between the violation of democratic norms by elites in electoral rhetoric directed at voters and voters' increased support for political violence (Kingzette et al., 2021). This is linked with polarization as elites themselves are heavily polarized and through their messaging, both subliminal and explicit, they influence partisans by drafting a message that "the others" wish to destabilize their reign (Kingzette et al., 2021). Through this tactic, elites create a sense of us vs. them that becomes increasingly dangerous as political violence becomes more institutionalized after the events of January 6th (Piazza, 2024a).

Others have found that certain traits lend themselves more to political violence. The first of these is trait aggression in adults. Authors find that trait aggression can be used as a predictor of political violence (Piazza, 2024b). In one study, Kalmoe finds that when adults were shown violent metaphors, support for political violence increased among trait-aggressive individuals (2014). Academics also found that one's level of populist thinking leads to an increased support for political violence (Piazza, 2024b). This can be seen in how likely one is to endorse illiberal rule, exhibit economic grievances, fear social change, and express distrust in political institutions (Piazza, 2024b). This body of thought arises as a way to connect psychology and political science by bridging the gap between political ideology and psychological traits.

In opposition to the other schools of thought, one group finds that there is no one determinant for predicting support for political violence, rather it arises from a mix of several factors. Scholars theorize that these factors are far too embedded in American politics and cannot be separated from one another (Piazza, 2023a). They also find that the factors driving support for political violence are intrinsically linked with one another and therefore cannot be accurately picked apart to study the effects (Armaly & Enders, 2024). While some experts do find that certain factors are more influential in predicting support for political violence, they find that there is no one factor that thoroughly explains variation in support for political violence (Armaly & Enders, 2024).

While existing scholarship addresses several factors that contribute to support for political violence, there is a notable gap in research on how belief in disenfranchisement from both the Democratic and Republican parties

influences support for political violence. This belief, which reflects a perception of systemic exclusion from political representation, has gained traction in recent years. Elites such as Donald Trump have intensified these perceptions by framing electoral outcomes as illegitimate and reinforcing the idea that certain groups of citizens are being deliberately silenced. As previously mentioned, belief in disenfranchisement is an issue that has often been overlooked as a driver for political violence. Unlike broader mistrust in the government, belief in disenfranchisement speaks directly to a perceived lack of political agency, an emotional and moral grievance that may uniquely motivate individuals to endorse or engage in political violence against elected officials. I will look into the effect that belief in governmental disenfranchisement has on support for political violence in both parties to see whether or not there is a causal relationship between the two.

Theory and Hypothesis

Some scholars found that support for political violence is handed down from elites and that messages or cues from elites create an increase in support for political violence (Armaly et al., 2022). Others found that certain traits, such as populist thinking and levels of aggression, lead to more violent tendencies that can be transposed into political protests. The literature also shows that affective polarization creates increasingly negative feelings towards the opposing party, which can lead to physical violence. Another sect of the existing literature shows that a collection of factors influences support for political violence, some being stronger than others, but none fully explaining the variation in support for political violence. While these all examine the cause for support for political violence, none of the literature touches on belief in voter suppression as an explanation for support for political violence. In the next section, I will explain the phenomenon of voter suppression and how it can be linked to support for political violence.

Voter suppression can occur in many ways, the most prevalent being disenfranchisement, meaning laws that prevent certain groups from voting (Piazza, 2024b). I will specifically focus on individuals who believe that disenfranchisement occurs at a high rate. I posit that individuals who believe disenfranchisement tactics are in place across the United States in high quantities will develop higher levels of support for political violence due to building resentment and lowered trust in the national government, governmental institutions, and the opposing party officials. Individuals will develop possibly false, negative beliefs towards politicians of the out-party. This will result in a perceived need to rectify government institutions and replace politicians of the out-party, which they believe cannot be achieved using established democratic systems. Therefore, these individuals will be more likely to engage in or support politically violent behavior to achieve their goals and express their resentment. Ultimately, this leads to the following hypothesis:

Individuals who believe disenfranchisement occurs at a high rate are more likely to think that violence is an acceptable way to express their disagreement with elected officials.

Research Design

In this section of my paper, I will outline my research design. The survey I will be using will include 200 respondents, as determined and recruited by Prolific Academic. The sample will be stratified and balanced based on key demographic variables, including sex, age, ethnicity, and political affiliation,

to ensure alignment with U.S. population benchmarks. The survey will be nationally representative as it will pull from all sections of the U.S. population. As previously mentioned, the respondents in this survey will be recruited by Prolific Academic, a survey platform that recruits respondents based on the criteria determined by the researcher. Respondents fill out an "about you" section, which matches them to certain surveys based on their personal data (Prolific Academic, n.d.).

My independent variable is the level at which people believe disenfranchisement occurs in the United States. This variable will be measured using the following question: "How strongly do you agree or disagree with the following statement: 'The United States is actively taking actions to disenfranchise select portions of the voting-age population.'" Responses to this question will be measured using a 5-point Likert scale (strongly agree to strongly disagree). My dependent variable is the likelihood that an individual will endorse political violence against politicians when they believe there is no other avenue to express their discontent against U.S. institutions. This will be measured using the following question: "Some of the problems citizens have with politicians could be fixed with a few well-aimed bullets" (Piazza, 2024). Responses to this question will be measured using a 5-point Likert scale (strongly agree to strongly disagree).

The question that I previously outlined for my independent variable will examine respondents' feelings toward disenfranchisement, specifically, if they believe that it occurs at a high rate at the state level. The question I have outlined for my dependent variable will examine respondents' feelings towards political violence in situations wherein people may feel that politicians are "failing" at their jobs. To test my hypothesis, I will be using a multivariate regression analysis to estimate the effect that a high belief in state-wide disenfranchisement has on support for political violence in individuals. I will use a multivariate regression analysis to account for the inclusion of control variables. In this regression analysis, I will control for other alternative explanations for support of political violence, including: gender, race, level of education, political view (very conservative to very liberal), age, and income. I will be sourcing these questions from several previous authors listed in the literature review (Armaly et al., 2022; Piazza, 2024).

Analysis and Results

Table 1: Variables That Explain Variation in Support for Political Violence

	Dependent variable: Support for political violence
Belief in disenfranchisement	0.14**
	(0.07)
Gender	-0.03
	(0.04)
Race	0.21
	(0.19)
Level of education	-0.34
	(0.23)
Political views	-0.02
	(0.06)
Age	-0.30**
	(0.15)
Constant	4.09***
	(0.43)
Observations	198
R2	0.08
Adjusted R2	0.05
Residual Std. Error	1.06 (df = 191)
F Statistic	2.64** (df = 6; 191)
Note:	N=198 *p<0.10 **p<0.05 ***p<0.01

After running my multivariate regression, the above results were found. My dependent variable was support for political violence; the question I used for this variable was: "To what extent do you agree or disagree with the statement: Some of the problems citizens have with politicians could be fixed with a few well-aimed bullets." As seen above in the regression table, my independent variables: belief in governmental disenfranchisement in the U.S. (belief in disenfranchisement) and age, were all statistically significant. Belief in disenfranchisement had a p-value of 0.03 and a coefficient of 0.14, which means that a one-unit increase in disagreement in belief in disenfranchisement leads to a 0.14 increase in opposition to political violence. Age had a p-value of 0.04 and a coefficient of -0.30, meaning that for every one-unit increase in age (10 years), opposition to political violence decreased by 0.30 points.

After running my regression, I ran an outlier test and found that there were no outliers that changed the outcomes of my data. I also ran a VIF analysis for collinearity and found that all of my variables were under the maximum threshold of 5. This means that none of my independent variables had a collinear relationship with my dependent variable, belief in disenfranchisement.

This multivariate regression had an R^2 of 0.05, meaning that about 5% of the variation in support for political violence can be explained by the independent variables in the model. Although this indicates a relatively weak model fit, it still suggests that the included variables have a statistically meaningful, if limited, role in shaping attitudes toward political violence.

The constant refers to the level of support for political violence if all independent variables in the model were 0. This means that a person who was rated 0 on all the independent variables in the model would have answered the question: "Some of the problems citizens have with politicians could be fixed with a few well-aimed bullets" somewhere between strongly disagree and disagree, towards the lower end of the scale.

The results of this regression support my hypothesis that individuals who believe that governmental disenfranchisement occurs at a high rate are more likely to think that violence is an acceptable way to express their disagreement with elected officials. Belief in disenfranchisement is statistically significant with the dependent variable, support for political violence. Age was also found to be a statistically significant, meaning that as a person gets older, they show higher support for political violence. Political violence has been carefully studied over the years (Armaly et al., 2022; Armaly & Enders, 2024; Piazza, 2024; Albertson, 2020). Due to this, there are many different explanations as to why certain individuals are more likely to support political violence than others. There may be other explanations for the dependent variable that the model did not account for. These could include religiosity, support for democratic norms, conspiracism, and racist ideology.

Discussion and Conclusion

As detailed above, I found support for my hypothesis. As I expected, belief in disenfranchisement had a statistically significant positive effect on support for political violence. My hypothesis was supported in that individuals who believed that state-wide disenfranchisement occurs at a high rate were proven to be more likely to show support for political violence against elected officials. This also supported my theory that such individuals would develop resentment towards office-holders and seek a way outside of established democratic institutions to rectify this perceived wrongdoing.

My findings also matched what the existing literature outlines as potential causes for support in political violence. Researchers found that support for political violence against elected officials was usually linked with deep resentment for the existing system and populist thinking (Piazza, 2024b). This prior research matched what I expected to find and the results that I gathered through regression analysis. I hypothesized that support for political violence would be associated with distrust in government institutions, reflected in higher levels of belief in disenfranchisement. I did so based on the existing literature and its findings that detailed the correlation between distrust in governmental institutions and support for political violence.

Limitations in my research may exist in the lack of pertinent control variables, particularly the exclusion of party identification (Republican or not) as an independent variable. In my original analysis, I controlled for political views (highly conservative to highly liberal) and did not include party identification as a control variable. After presenting my findings, I reran my regression analysis with party identification and found that it was not statistically significant and did not greatly change any of the other coefficients. While I did not find that party identification changed the results of my analysis, I would like to include other control variables such as Christian nationalism, religiosity, conspiracism, and populism.

In future research, I would like to investigate the impact that party identification has on conspiracism and belief in disenfranchisement. While I did not find that party identification had an effect on support for political violence, I would like to see if it has any effect on belief in disenfranchisement or levels of conspiracism. I would also like to see what kind of impact trait aggression has on support for political violence and belief in disenfranchisement.

My findings indicate that citizens of the United States believe that their government may be taking deliberate action to prevent certain populations from casting their votes. This alludes to the fact that populist sentiments may be increasing among the voting-age population (Piazza, 2024b). This also implies that extremist candidates such as Donald Trump have had a substantive impact on the citizens of the United States. These findings suggest that as the public becomes more susceptible to populist rhetoric and extremist ideals, there will be an uptick in politically violent acts across the nation. We have already seen a substantial increase in political violence in the past few years, and this may not be the last that we see of extremist groups seeking justice from perceived threats and wrongdoings against elected officials on both sides of the aisle.

References

Albertson, B., & Guiler, K. (2020). Conspiracy theories, election rigging, and support for democratic norms. *Research & Politics*, *7*(3), 2053168020959859. https://doi.org/10.1177/2053168020959859

Armaly, M. T., Buckley, D. T., & Enders, A. M. (2022). Christian nationalism and political violence: Victimhood, racial identity, conspiracy, and support for the capitol attacks. *Political Behavior*, *44*(2), 937–960. https://doi.org/10.1007/s11109-021-09758-y

Armaly, M. T., & Enders, A. M. (2024). Who supports political violence? *Perspectives on Politics*, *22*(2), 427–444. https://doi.org/10.1017/S1537592722001086

Disenfranchisement. (n.d.). Cambridge Dictionary. Retrieved May 2, 2025, from https://dictionary.cambridge.org/us/dictionary/english/disenfranchisement

Kalmoe, N. P. (2014). Fueling the fire: Violent metaphors, trait aggression, and support for political violence. *Political Communication*, *31*(4), 545–563. https://doi.org/10.1080/10584609.2013.852642

Kingzette, J., Druckman, J. N., Klar, S., Krupnikov, Y., Levendusky, M., & Ryan, J. B. (2021). How affective polarization undermines support for democratic norms. *Public Opinion Quarterly*, *85*(2), 663–677. https://doi.org/10.1093/poq/nfab029

Norris, P. (2019). Do perceptions of electoral malpractice undermine democratic satisfaction? The US in comparative perspective. *International Political Science Review*, *40*(1), 5–22. https://doi.org/10.1177/0192512118806783

Pasek, M. H., Ankori-Karlinsky, L.-O., Levy-Vene, A., & Moore-Berg, S. L. (2022). Misperceptions about out-partisans' democratic values may erode democracy. *Scientific Reports*, *12*(1), 16284. https://doi.org/10.1038/s41598-022-19616-4

Piazza, J. A. (2023a). Drivers of political violence in the United States. *Journal of Public Policy & Marketing*, *42*(1), 11–14. https://doi.org/10.1177/07439156221133763

Piazza, J. A. (2023b). Political polarization and political violence. *Security Studies*, *32*(3), 476–504. https://doi.org/10.1080/09636412.2023.2225780

Piazza, J. A. (2024a). Allegations of Democratic election fraud and support for political violence among Republicans. *American Politics Research*, *52*(6), 624–638. https://doi.org/10.1177/1532673X241263083

Piazza, J. A. (2024b). Populism and support for political violence in the United States: assessing the role of grievances, distrust of political institutions, social change threat, and political illiberalism. *Political Research Quarterly*, *77*(1), 152–166. https://doi.org/10.1177/10659129231198248

Political-Environmental Violence Nexus in Russia's Informational Autocracy

Steve Lemeshko

Abstract

In the 21st century, the global rise of authoritarianism coincided with an ecological and climate crisis. This paper examines the nexus between political and environmental violence through a case study of Russia, an informational autocracy where power is sustained less through overt repression and more through manipulation. Using longitudinal data from 2000 to 2022, the autoregressive distributed lag models test the hypothesis that higher levels of political violence are associated with increased environmental violence over time. Results show that information manipulation within mass manipulation and civic repression within mass repression both contribute to long-term environmental decline. These mechanisms produce statistically significant deferred effects on ecological performance indicators, consistent with Nixon's theory of slow violence, while results for pollution remain mixed. The temporal dynamics of authoritarian rule also appear to follow election-cycle horizons, where short-term signals of stability around electoral cycles then become delayed environmental harm. Taken together, this study implies that longitudinal frameworks should become the new standard for capturing the effects of authoritarian governance on the environment and that meaningful long-term environmental protection may ultimately depend on democratization.

Introduction

Over the past few decades, the interrelation between governance and environmental performance has become a growing interdisciplinary field in political science (Kojola & Pellow, 2020). Research suggests that democratic countries tend to exhibit greater environmental commitment and higher sustainability levels (Neumayer, 2002). However, some have been more skeptical that democracy is necessary, as authoritarian regimes can implement decisions fast, bypassing popular opinion (Beeson, 2017). Despite a growing body of literature on environmental performance in relation to political regimes, much of it relies on cross-sectional or comparative analyses to support its conclusions, and few, if any, studies have adopted a longitudinal approach to analyze how shifts in political violence correlate with environmental conditions over time.

This study addresses that gap by analyzing the long-term effects of political violence on the environment within a new type of autocracy — informational autocracy, taking Russia as a case from 2000 to 2022. Russia is a particularly compelling case for studying these interactions: since Vladimir Putin assumed the presidency in 2000, aspirations for a transition to democracy have gradually ceased to exist (Hale, 2005).

Over the past two decades, Russia has clearly shifted toward the consolidation of super-presidential powers, a process that, coupled with various external factors, has reinforced conditions facilitating the erosion of democratic norms (McFaul, 2018). At the same time, Russia has faced significant environmental challenges exacerbated by political factors, from illegal logging (Shytov & Shytov, 2022) to climate change inaction (Javeline et al., 2023).

The research question guiding this paper is "What is the political–environmental violence nexus in modern-day Russia?" The central hypothesis is that political violence in an informational autocracy produces cumulative ecological harm, often with delayed effects. Building on the theory of informational autocracy (Guriev & Treisman, 2020), I distinguish between two mechanisms: mass manipulation and mass repression. The analysis uses autoregressive distributed-lag models to capture both short- and long-run dynamics. In brief, the findings suggest that mass manipulation (information manipulation in particular) as well as mass repression are long-term drivers of environmental decline.

Given the global rise of autocratic governance (Lührmann & Lindberg, 2019) and escalating ecological and climate crises (Cowie et al., 2022; Calvin et al., 2023), a dynamic understanding of how environmental decline and authoritarian consolidation may be intertwined over time seems to be more important than ever. The paper is organized as follows: first, I review key concepts and literature; second an introduction to hypotheses; then I outline the research design; finally, I present the results, findings, and the study's limitations and future research directions.

Literature Review

Defining Political Violence

Political violence has traditionally been defined as the deliberate use or threat of physical force by political actors to influence political outcomes (Kalyvas, 2019). Yet, this definition may be too narrow to capture the full spectrum of political violence in today's changing political landscape. In modern informational autocracies, overt repression is increasingly supplemented, or even replaced, by strategic manipulation (Guriev & Treisman, 2018). Schedler (2002) finds that manipulation within electoral systems (arguably the pillar of democratic regimes) distorts the "free supply" of alternatives and the "free demand" of citizen preferences. When these conditions are replaced by state engineering, the result cannot be democratic. However, not just the electoral systems are affected by manipulation but rather all spheres of political life. Information manipulation in particular (e.g., censorship, the internet, and social media) is actively used to shape belief formation, knowingly or unknowingly narrowing citizens' demand and constraining their capacity for informed belief (Roberts, 2020; Zhuravskaya et al., 2020). In effect, these practices narrow the range of meaningful options available, thereby expanding the gap between potential and actual outcomes — what Galtung (1969) calls structural violence. To not classify these manipulative practices as violence, albeit slower and "quieter" than overt repression, would obscure the coercive nature of informational control that defines contemporary authoritarianism. Therefore, I refine the definition of political violence to include both mass repression, already recognized as political violence (Kalyvas, 2019), as well as the political violence of manipulation. In this study, political violence includes both the deliberate use or threat of overt physical

force and structural coercion by political actors to influence political outcomes.

Defining Environmental Violence

Environmental violence should likewise extend beyond direct ecological destruction to include systemic harm that unfolds over time (Kojola & Pellow, 2020). Rather than relying on a definition focused on harm caused by pollutants (Marcantonio & Fuentes, 2023), I adopt an aspect of Lee's broader framing of environmental violence as human-inflicted damage to the environment that ultimately jeopardizes human survival (Lee, 2016). To further develop this concept, I incorporate the notion of slow environmental violence, building on Robert Nixon's idea of slow violence — harm that is incremental, long-term, and often obscured from public view (Nixon, 2011). In this study, environmental violence is understood as the cumulative and often concealed harm inflicted on ecological systems by human activity that undermines the long-term conditions necessary for human and nonhuman life.

Political Violence within Informational Autocracy

Guriev and Treisman (2020) identify two dimensions of the informational autocracy: mass manipulation, including the elements of information manipulation, corruption, and legal-institutional manipulation, and mass repression. Both mass manipulation and mass repression have the potential to significantly influence environmental outcomes through either direct or indirect means and, thus, are relevant to the analysis of environmental outcomes.

Mass Manipulation

Mass manipulation operates through multiple, often overlapping mechanisms that shape public perception in ways favorable to the autocrat (Guriev & Treisman, 2020), and in the process, diminishes the likelihood that environmental concerns, even if they exist, can have a meaningful influence on policy. In the Russian context, this study focuses on three central components: (1) the manipulation of information flows, (2) systemic corruption as a tool of elite co-optation, and (3) the weakening of legal and institutional checks.

Freedom to gather, share, and access reliable information is a precondition for public awareness and mobilization around environmental issues (Payne, 1995). In informational autocracies, where autocrats lack democratic input (Kneuer, 2012), their authority depends heavily on the illusion of effective public goods provision, including in the environmental domain, as a substitute for electoral legitimacy (Deacon, 2009; Morrow et al., 2008). To protect this illusion, autocrats impose censorship and content control, discredit independent voices, and amplify regime-aligned narratives through state propaganda (Roberts, 2020; Zhuravskaya et al., 2020). Such strategies divert attention and limit what citizens can credibly know, not only preventing environmental concerns from surfacing publicly but also constructing narratives that reinforce regime legitimacy. As such, environmental degradation can persist behind manufactured success. Such constraints limit the establishment of critical feedback in a way that would benefit the decision-making process and environmental governance (Shahar, 2015), making autocracies worse at generating environmental policy outputs (Lindvall & Karlsson, 2023).

Corruption functions as a mechanism of co-optation that allows the regime to maintain loyalty among elites and key stakeholders, including polluting industries. Even in cases where ambitious environmental policies are

passed, corruption undermines enforcement and implementation (Povitkina & Jagers, 2022). Corruption, through both economic and non-economic factors, is consistently associated with worse environmental performance, as it enables polluters to circumvent regulations (Hu et al., 2020). This form of co-optation also helps the regime maintain a façade of social consensus by distributing rents and patronage (Guriev & Treisman, 2020). In this sense, corruption becomes a tool of mass manipulation, pacifying potential critics while intensifying extractive practices.

Legal-institutional manipulation refers to the instrumental use of the system of elections and of checks and balances to entrench authoritarian control while maintaining an appearance of procedural legitimacy (Varol, 2015). Electoral accountability is often seen as a driver of better public goods provision, including environmental protection (Downs, 1957; Lake & Baum, 2001). In informational autocracies, the institutions responsible for such accountability are deliberately weakened or manipulated to insulate the regime from public demands. The political constraints of checks and balances can either support or hinder environmental policy depending on their orientation: if existing policies are environmentally sound, institutional constraints benefit environmental protection; if policies are extractive or damaging, those same constraints obstruct reform (Von Stein, 2020). Informational autocracies tend to erode constraints altogether, allowing for abrupt policy shifts aligned with regime interests.

Mass Repression

Mass repression involves the use of overt physical force and intimidation to suppress political opposition and civil society (Kalyvas, 2019). Historically, this dimension of autocratic governance has been more visible and has received greater attention in the literature. In democracies, freedom of association and assembly protect the environmental activism of civil society and media outlets that play the role of watchdogs in early identification of environmental problems and pressuring the government to act (Böhmelt et al., 2013). In contrast, authoritarian regimes often suppress dissent and disrupt the institutional capacity of civil society to engage with environmental governance, thus creating conditions that allow environmental harms to go unchecked. Considering this, higher state capacity in such regimes does not necessarily translate into better environmental performance, as it can be directed toward pursuing regime interests rather than building meaningful environmental governance (Ward et al., 2013).

Theory and Hypotheses

Political violence systematically distorts the supply and demand of political choice, producing less-than-perfect outcomes and increasing the gap between potential and actual environmental conditions, often with cumulative and delayed effects, consistent with Galtung's (1969) concept of structural violence and Nixon's (2011) concept of slow violence. I hypothesize that political violence operates either through direct means (repression) or less direct means (manipulation), where in the former I identify two major elements — overt violence and civic repression — and in the latter I identify three major elements — information manipulation, elite co-optation, and legal-institutional manipulation — largely consistent with the theory of informational autocracy (Guriev & Treisman, 2020).

H1 (System-Wide): Higher levels of political violence are associated with greater environmental violence over time.

Manipulation weakens environmental outcomes by restructuring the rules and narratives that govern policy. Control over information flows prevents the public from recognizing ecological decline, while the distribution of rents through corruption and the weakening of legal-institutional constraints insulate actors from accountability, and thus their effects tend to accumulate gradually under the illusion of stability.

H2 (Manipulation): Higher levels of mass manipulation are associated with greater environmental violence, including delayed effects.

Repression relies on civic repression and overt violence to raise the costs for detection and deterrence of environmental harm. Through arrests and intimidation of assembly, repression silences environmental watchdogs, allowing harmful practices to persist and intensify. Due to the nature of mass repression, its effects may appear more immediate than those of mass manipulation.

H3 (Repression): Higher levels of mass repression are associated with greater environmental violence, including delayed effects.

Research Design

Data overview

To investigate how political strategies associated with authoritarian governance affect environmental conditions, the analysis covers the period 2000–2022 using the Varieties of Democracy (V-Dem) dataset for political indicators and the Environmental Performance Index (EPI) for ecological indicators (Coppedge et al., 2025; Block et al., 2024) To ensure consistency and temporal coverage, only V-DEM and EPI indices with values across most of the study period, clear variation, and conceptual alignment within relevant categories were retained, while static or redundant indicators were excluded. Control variables include population size in millions and GDP per capita in current US dollars from the World Bank Open Data Portal (World Bank, 2025).

Composite indices were developed for dependent and independent variables by normalizing V-DEM and EPI source variables, assigning equal weights, and rescaling the resulting composite, with higher values denoting better outcomes (e.g., stronger rule of law, lower pollution) (Table 1; Table A1). For political variables, grouping followed the informational autocracy framework discussed in the literature review and hypotheses. Environmental groupings were derived from EPI policy objectives and issue categories (Block et al., 2025), with slight adaptations to improve analytic clarity.

Table 1: List of Independent (Political Violence), Dependent (Environmental Violence), and Control Variables Used in the Model

Independent Variables (Political Violence)		Dependent Variables (Environmental Violence)		Control Variables
Mass Manipulation	Information manipulation Elite co-optation Legal-institutional manipulation	Ecological Performance	Biodiversity Forestry Fisheries	GDP per capita Population
Mass Repression	Civic repression Overt political violence	Pollution and Exposure	Air pollution Agriculture Air quality Climate change	

Model Setup

To test H1-3, I first estimate how each political violence index relates to each environmental violence index over time in a single-country time series. Substantively, the idea is simple: shocks to political violence today can have effects on the environment with delays. In other words, the effects of political decisions are not instantaneous and may take at least several years to appear in environmental indicators. Methodologically, I use an autoregressive distributed-lag (ARDL) model in R software that lets the data choose how many past periods (lags) of a political variable matter for a given environmental outcome (Statsmodels Developers, 2025; R Core Team, 2025). ARDL models are standard tools for capturing short-and longer-run relationships in time series (Shrestha & Bhatta, 2018).

For each environmental outcome Y_t, and each political index X_t, I estimate:

$$\underbrace{Y_t}_{\text{environment}} = \alpha + \underbrace{\phi Y_{t-1}}_{\text{state dependence}} + \underbrace{\sum_{k=1}^{L^*} \beta_k X_{t-k}}_{\text{distributed effects of politics}} + \underbrace{\gamma_1 \log(\text{GDPpc})_{t-1} + \gamma_2 \log(\text{Pop})_{t-1}}_{\text{macro controls}} + \varepsilon_t$$

Here, Y_{t-1} denotes state dependence, implying that current environmental conditions partly depend on previous ones. The summation term represents the cumulative distributed effects of political violence on the environment. Lastly, GDP per capita and population control for economic growth and demographic change that are known to influence environmental variables (Grossman & Krueger, 1995; Saraswati et al., 2024). Although the original Kuznets curve has a nonlinear relationship between economic wealth and environmental quality, Russia and many of its heterogeneous regions are still mainly in the rising portion of the curve (Sohag et al., 2021), and, thus, I use log $(GDPpc)_{t-1}$ as a sufficient control.

To avoid spurious correlations driven by external shocks, all control variables are entered at lag 1, while the political variables are restricted to enter with a minimum lag of 1 and a maximum of 9. For each pair, I also allow for political variables to vary and for the model to pick the value that minimizes Bayesian Information Criterion (BIC) (Schwarz, 1978), which balances model fit against overfitting. This adaptive-lag approach also has theoretical value: if manipulation operates primarily through indirect means, we should expect longer optimal lags on average for manipulation than for repression.

To check whether political variables have a coherent impact on the environment, not just a couple of significant but isolated lags, I test whether the combined influence of all lagged effects differs from zero: $H_0: \beta_1 = \cdots = \beta_{L^*} = 0$. In matrix form, with selecting for those coefficients, the Wald statistic is

$$F = \frac{\left(R\hat{\beta}\right)' \left[R \widehat{V} R'\right]^{-1} \left(R\hat{\beta}\right)}{q}$$

where $q = L^*$ and $\widehat{V}$ is Newey-West HAC (Fox et al., 2024; Gregory & Veall, 1985).

A useful summary from the ARDL models is the long-run multiplier (LRM), the net effect of a lasting change in the political variable on environmental conditions:

$$\mathrm{LRM} = \frac{\sum_{k=1}^{L^*} \beta_k}{1 - \phi}, \text{when } |\phi| < 1.$$

This term can be interpreted as the total long-term association implied by the dynamic process, or the extent to which the environment shifts after accounting for all lagged and feedback effects.

Because environmental time series often show serial correlation, standard OLS errors would underestimate uncertainty and overstate significance (Baillie et al., 2022). I therefore compute heteroskedasticity- and autocorrelation-consistent (HAC) standard errors using the Newey–West estimator for all three models (Newey & West, 1987; Zeileis, 2004). Finally, since I estimate many pairs and multiple lags, I control the false discovery rate (FDR) across families of tests using the Benjamini–Hochberg procedure (BH), thereby reducing the likelihood that findings are artifacts of multiplicity (Benjamini & Hochberg, 1995). Together, all the steps outlined in this section should improve the results' ability to reflect the genuine patterns of the political-environmental violence nexus.

Results

System-Wide Trends

The regression results are reported in Table 2. While there are at least several significant results between political and environmental violence, those must be interpreted with caution, as the sample size is relatively small, the number of predictors is large, and environmental outcomes are known to be influenced by many factors. For each variable, there is also a strong correlation with GDP per capita and/or population in at least some of the models. The results, therefore, must be interpreted with the understanding that the relationships under study are inherently unstable.

Table 2: Long-Run Effects of Political and Environmental Violence

		Mass Manipulation			Mass Repression	
		Information manipulation	Elite co-optation	Legal-institutional manipulation	Civic repression	Overt violence
Ecological Performance	Biodiversity	**1.0*† (0.0) GDP, Pop**	1.3* (1.2)	**1.1*† (0.0)**	**1.5*† (0.0) Pop**	**1.3*† (0.0) GDP, Pop**
	Forestry	**0.6*† (0.2) GDP, Pop**	-0.7* (0.5) GDP	1.0* (1.9) Pop	**1.6*† (0.3) Pop**	0.6 (0.3) GDP, Pop
	Fisheries	**0.7† (0.3) GDP, Pop**	-2* (2.9)	1.7* (0.8) Pop	1.8 (2.2)	-0.4* (0.6)
Pollution and Exposure	Air pollution	0.6* (0.6)	0* (0.8)	8.3* (201.5) Pop	5.5* (3.9) GDP, Pop	2.2* (2.2) Pop
	Agriculture	0.3* (0.4)	**1.8*† (0.3) GDP, Pop**	-0.3* (1)	-0.2* (0.5)	0.2 (0.5)
	Air quality	**-0.6*† (0.1) GDP, Pop**	-0.2* (0.2)	**-1.0*† (0.2) GDP**	**-0.8*† (0.1) GDP, Pop**	**-0.5*† (0.2) GDP, Pop**
	Climate change	**-0.6*† (0.2)**	0.5* (0.3) Pop	**-1.1*† (0.2)**	-0.8 (1.4)	-1.0 (0.5)

Note. **Entries are long-run coefficients; Newey–West SEs in parentheses. * = BH-adjusted joint/Wald p < 0.05 (lags of X jointly matter). † = BH-adjusted long-run p < 0.05 (net effect ≠ 0). "GDP/Pop" lines list lag-1 controls that are significant (control p-values not FDR-adjusted). Interpret signs by coding: higher values = greater effect on environmental violence.**

Across outcomes, several political indicators exhibit jointly significant lag structures, indicating that the chosen lags of a political variable are not jointly equal to zero, as well as significant long-run effects, meaning that when the lagged effects are combined, they do not average around zero. For the purpose of this study, the primary interest is in the long-run associations between political and environmental variables, since these capture the cumulative and enduring impact.

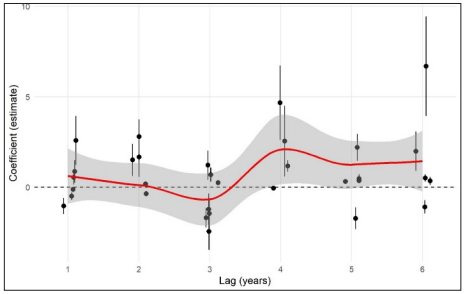
Looking first at the political side, the optimal lag length selected by the adaptive procedure was generally longer for manipulation (*L=6.6*) than for repression (*L=6.1*), and, thus, the effects of manipulation tend to operate on a somewhat longer temporal scale. The manipulation variables also return a greater number of significant results than repression variables, with information manipulation being the most frequent significant predictor for mass manipulation and civic repression for mass repression (Table 2). Nonetheless, each of the political indicators, whether from the manipulation or repression category, produces at least one significant entry (Table 2), which shows that all dimensions of political violence play at least some role in influencing environmental indicators.

With environmental variables, the choice of variable appears to have a disproportionate effect on the results, with variables within the ecological performance group performing better than in pollution and exposure. Fisheries, forestry, biodiversity,

and agriculture generally return results consistent with the theoretical expectations of H1-3, with positive long-run associations between political and environmental violence (Table 2). However, air pollution does not yield any robust long-run effects, while climate change mitigation and air quality produce negative results (Table 2), which appear to contradict the hypotheses and suggest that, in these cases, worsening politics is associated with environmental improvement. These indicators, however, fall under the pollution and exposure category, which is more closely tied to economic development and population growth, making their interpretation more problematic and raising the possibility that they are capturing unrelated dynamics outside of political governance.

Temporal Trends

Figure 1: Temporal Profile of Political Violence Effects on the Environment



Note. **Black dots are all significant (BH-adjusted p < 0.05) per-lag coefficients (lags 1–6) with 95% CIs (Newey–West SEs). Red line is LOESS smoother (equal weights across variables) with CI band. Higher values = greater effect.**

Figure 2 shows the significant per-lag results of all political–environmental variable pairs of the regression model described in Section 4.2. Because the adaptive lag procedure allowed different lag lengths (with) the actual varied between one and seven across specifications. However, only are displayed, as these have enough datapoints to provide a meaningful comparison. The average temporal pattern shows a wave-like structure across lags: the average coefficients begin modestly at lags 1 (0.6 ± 1.5) and 2 (0.1 ± 1.5), then dip into negatives at lag 3 (–0.7 ± 1.4), before rebounding strongly at lag 4 (2.1 ± 1.8), with the average remaining positive through lags 5 (1.2 ± 1.2) and 6 (1.4 ± 1.6). Taken together, this pattern suggests that in the first few years following the intensification of political violence, there is no strong or consistent relationship with environmental violence. However, over time, the environmental costs appear to accumulate and eventually generate significant long-term associations.

Discussion

System-Wide Trends

Regime type is often used as a proxy for environmental outcomes, even though it does not necessarily clarify causal relationships, as autocracies have been shown to be highly heterogeneous in environmental performance (Eichhorn & Linhart, 2022). While scholars often associate stronger environmental outcomes with democratic responsiveness and transparent institutions (Wurster, 2011), these mechanisms rely on the assumption that citizens place a high priority on environmental protection and that civil society has the institutional space to articulate such concerns. In practice, the relationship between democratic responsiveness and environmental outcomes is better defined by which actors hold power in society and whether these actors prioritize environmental issues (Von Stein, 2020). Unlike more technocratic autocracies such as Singapore, Russia's regime is deeply intertwined with the fossil fuel and extractive industries and is dependent on them for political survival and economic

gain. Because resource extraction is central to the regime's durability, the state mobilizes the political machinery it knows best to protect these interests: in an informational autocracy, this primarily means the manipulation of information. For this reason, it is important not to treat "autocracy" as a monolithic category but to disaggregate the mechanisms through which it operates into, in our case, mass manipulation and mass repression.

The results in Table 2 suggest that mass manipulation has a strong long-term effect on environmental costs in Russia, consistent with H2. Components of mass manipulation in this study — information manipulation, elite co-optation, and legal-institutional manipulation — directly erode environmental enforcement and capacity, a pattern that aligns with prior studies (Dasgupta & De Cian, 2018; Hu et al., 2020; Çoban, 2022) showing similar dynamics. Among these, informational manipulation seems to be the most influential, which is consistent with the defining character of informational autocracies, where information manipulation is the predominant mode of political violence (Guriev & Treisman, 2018). Because environmental performance ultimately depends on who holds power and whether they prioritize environmental protection (Von Stein, 2020), Russia's tight grip on information and institutions effectively stifles public awareness and concern about environmental problems: free media and public transparency, critical for environmental improvement elsewhere (Çoban, 2022), are thus systematically undermined. At the same time, systemic corruption allows polluters to bypass regulations with impunity, while poor institutional checks exacerbate the issue (Dasgupta & De Cian, 2018; Hu et al., 2020).

By contrast, mass repression yielded fewer significant results, although the direction remained consistent with H3. A plausible explanation is in the regime's tactical shifts: periods of lower repression (2000s) and selective surges of high repression (post-2012), leading to a non-monotonic trend. Interestingly, repression of civil society exhibited the strongest association within the repression category, stronger than the overt political violence index. Civil society actors often function as watchdogs for environmental accountability (Peeters, 2018; Li & Reuveny, 2006) but are systematically targeted under authoritarian regimes, where they are viewed as political threats and suppressed accordingly.

Repression and manipulation operate on somewhat different temporal scales, with the latter being longer, which suggests that its effects accumulate more gradually, consistent with the concept of slow violence, where harm is delayed across time and institutional processes (Nixon, 2011). Additionally, while mass manipulation produced a greater number of significant results, its effects were generally weaker in magnitude than those of repression. Taken together, however, the evidence suggests that from 2000 to 2022, Russia's reliance on mass manipulation through information control and mass repression through civic repression steadily eroded its environmental capacity, largely in accordance with H1–3 (Table 2, Figure 1).

Environmental indicator–wise, ecological performance indicators (biodiversity, forestry, and fisheries) show stronger and more robust associations with political indicators than do pollution and exposure indicators (air pollution, agriculture, air quality, and climate change) (Table 2). This difference can be at least partly attributed to the nature of pollution indicators, which frequently co-move with economic development and demographic trends, thus making them poor stand-alone measures

of policy performance (Ward et al., 2013; Eichhorn & Linhart, 2022). By contrast, ecological performance indicators are more directly shaped by protection dynamics; however, even here, the literature shows mixed findings, with some studies reporting improvements under democracy and others finding null or context-dependent effects (Dasgupta & De Cian, 2018). On this basis, I conclude that the hypotheses H1–H3 are supported for the ecological performance indicators, while the results for the pollution and exposure indicators remain inconclusive.

Temporal Trends

The longitudinal results (Figure 2) show a long-term positive inflection in the political–environmental nexus, consistent with H1. The immediate aftermath of political violence doesn't produce strong results for the environment; rather, it is a temporary by-product of social and economic dislocation, not an improvement in environmental conditions. Similar short-term "improvements" have been observed elsewhere: for example, the sharp decline in nitrogen dioxide emissions following the political instability of the Arab Spring (Lelieveld et al., 2015). However, this trend is short-lived: coefficients turn strongly positive at lag 4 and stay positive at lags 5 and 6. Environmental violence, in line with Nixon's concept of "slow violence," disperses over time, delayed in appearance but not in consequence (Nixon, 2011). The delayed effects can also be explained by the state's illusion that all is under control (Guriev & Treisman, 2018), while the hidden environmental effects steadily accumulate beneath this surface stability. Additionally, the environment itself possesses an adaptive capacity, but once that threshold is reached, harm rebounds, often dramatically (Gunderson & Holling, 2002).

The pattern of the political-environmental violence nexus displays a wave-like structure: an initial dip at lag 3, followed by a sharp surge at lag 4. Even when differences between manipulation and repression and the influence of small-sample noise are considered, I hypothesize that this pattern is not random but rather reflects a period of Busenberg's (2004) punctuated equilibria, an initial policy change, followed by cycles of path dependency that reinforce long-term environmental deterioration. One plausible explanation for this wave ties it to the first presidential term of Vladimir Putin and the subsequent election cycles. This argument aligns with Eichhorn and Linhart's (2022) time-horizon theory, which posits that autocrats shape policies in accordance with their expected tenure. In the 2000s and early 2010s Russia, time-horizon theory likely meant governing toward the next 3- to 4-year election horizon, where short-term stability and visible improvements were prioritized over sustained environmental performance. The dataset itself is dominated by this structure, with three four-year presidential terms (2000–2012) before the constitutional amendment extended the term length to six years. It is therefore reasonable to expect such a cyclical pattern: initial weak results and eventual dip may reflect the incentive to demonstrate environmental improvements in the run-up to elections, while the subsequent surge at lag 4 captures the period after elections.

Within the lag structure, information manipulation and civic repression, which produced the strongest results in the regression analysis, appear to play an important role. Schulze and Zakharov (2025) found that media repression in Russia, an element of primarily mass manipulation but also of mass repression, follows a cyclical pattern that is closely tied to election timing. The core informational component of

informational autocracy is therefore bound with its most stressful periods of survival, namely elections (Bernhard et al., 2019), when the regime must balance the need to project stability (including environmental performance) with the incentives to suppress dissent. It is precisely in these windows that we observe an increase in political violence, accompanied by the delayed but accumulating environmental costs that are externalized by the regime's short-term stability logic.

The observed surge at lag 4 does not imply that each episode of political violence has a fixed four-year duration or that the system operates strictly in four-year cycles. Rather, it reflects the prominence of election-tied violence, which tends to appear around each presidential cycle and is often planned or justified within a four-year time horizon. Some episodes have shorter or longer horizons; however, when aggregated in the ARDL framework, the four-year horizon is the most visible signal. In this sense, the lag-4 effect captures the recurrent electoral logic that structures much of Russia's political violence and the delayed, accumulating environmental costs that surface after each cycle.

The most important finding of this study is that "quiet" mass manipulation can rival mass repression in driving long-term environmental violence, particularly in ecological performance indicators such as biodiversity, forests, and fisheries. Informational autocracies, such as Russia, sustain power through sophisticated public manipulation and tactical repression, designed to imitate competence (Guriev & Treisman, 2019), thereby stabilizing the regime in the short term but simultaneously removing the institutional pressure and public mobilization necessary for environmental protection.

From a theoretical perspective, adopting a temporal lens when assessing the slow environmental impacts of political violence should become standard in modeling, as the effects of political oppression may only manifest environmentally near the end of the time horizon. In informational autocracies, these delays translate into precisely the kind of "long emergencies" of environmental degradation described by Nixon (2011). From a policy perspective, because manipulation and repression are embedded in the regime's survival strategy and distort both the supply and demand of political choice, environmental cooperation with informational autocracies like Russia faces structural limits. Addressing environmental decline in informational autocracies is inseparable from addressing the political mechanisms that produce it. Democratization — understood as restoring the balance of free supply and demand, with a particular emphasis on the free flow of information and civic participation — thus becomes a precondition for sustained environmental protection.

Limitations and Further Research

Future research could benefit from incorporating additional country-specific control variables (e.g., international oil prices, sanctions) that can plausibly influence environmental outcomes in autocratic states. Extending the temporal scope of the analysis could further strengthen causal inference, although the limited availability of consistent and reliable data has been a constraint for this study. Furthermore, applying a similar empirical framework to a cross-national panel would allow for a more precise assessment of the extent to which the observed associations in Russia generalize across different regime types, particularly among countries situated at various points along the democratic-

authoritarian spectrum or undergoing processes of political liberalization or autocratization.

Conclusion

The present case study on modern-day Russia shows a delayed but intensifying nexus between political violence shaped by the dynamics of informational autocracy. While the short-term aftermath of political disruption may create the illusion of environmental improvement, over time, environmental harm resurfaces more strongly, producing the wave-like pattern linked to election cycles. Another notable finding is that while mass manipulation, primarily through information manipulation, returned the greatest number of significant results, civic repression of mass repression is also an important driver of long-term environmental decline, at least in Russia's case. These impacts are clearest in ecological performance indicators, while results for the pollution and exposure category are largely inconclusive. Together, these findings challenge the assumption that visible political violence is the sole source of harm and emphasize the long-term, dispersed ecological costs of informational autocracies, as well as the necessity of considering a regime's political mechanisms when analyzing environmental outcomes under authoritarian rule.

Appendix A.

Table A1: Source Indicators and Weighting Factors for Variables Used in Regression Models

Type of Variable	Composite Index	Weighting Factor	Source Indices
Independent Variables (Political Violence)	Information manipulation	0.11 (x3)	Government censorship effort — Media Internet censorship effort Print/broadcast media critical
		0.17 (x2)	Government dissemination of false information domestically Government dissemination of false information abroad
		0.33	Academic Freedom Index
	Elite co-optation	1	Regime Corruption Index
	Legal-institutional manipulation	0.33	Accountability Index
		0.17 (x2)	Election government intimidation EMB autonomy
		0.11 (x3)	High court independence Lower court independence Transparent laws with predictable enforcement
	Civic repression	0.5	Core Civil Society Index
		0.17 (x3)	CSO anti-system movements Freedom of peaceful assembly Political group equality in respect for civil liberties
	Overt violence	0.5 (x2)	Arrests for anti-system movements Political killings
Dependent Variables (Environmental Violence)	Biodiversity	0.5 (x2)	Red List Index Species Habitat Index
	Forestry	0.5 (x2)	Intact Forest Landscape Loss Tree cover loss weighted by permanency
	Fisheries	1	Fish Stock Status
	Air pollution	0.5 (x2)	Adjusted emissions growth rate for nitrous oxides Adjusted emissions growth rate for sulfur dioxide
	Agriculture	1	Sustainable Nitrogen Management Index
	Air quality	0.5 (x2)	Anthropogenic PM2.5 exposure Household solid fuels
	Climate change	1	Adjusted emissions growth rate for carbon dioxide
Control Variables	GDP	1	GDP per capita (current US$)
	Population	1	Population, total

References

Baillie, R. T., Diebold, F. X., Kapetanios, G., & Kim, K. H. (2022). On robust inference in time series regression. *arXiv (Cornell University)*. https://doi.org/10.48550/arxiv.2203.04080

Beeson, M. (2017). Coming to terms with the authoritarian alternative: The implications and motivations of China's environmental policies. *Asia & the Pacific Policy Studies*, *5*(1), 34–46. https://doi.org/10.1002/app5.217

Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: a practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B (Methodological)*, *57*(1), 289–300. http://www.jstor.org/stable/2346101

Bernhard, M., Edgell, A. B., & Lindberg, S. I. (2019). Institutionalising electoral uncertainty and authoritarian regime survival. *European Journal of Political Research*, *59*(2), 465–487. https://doi.org/10.1111/1475-6765.12355

Block, S., Emerson, J. W., Esty, D. C., de Sherbinin, A., Wendling, Z. A., *et al.* (2024). *2024 Environmental Performance Index*. Yale Center for Environmental Law & Policy. https://epi.yale.edu

Böhmelt, T., Koubi, V., & Bernauer, T. (2013). Civil society participation in global governance: Insights from climate politics. *European Journal of Political Research*, *53*(1), 18–36. https://doi.org/10.1111/1475-6765.12016

Busenberg, G. (2004). Wildfire management in the United States: the evolution of a policy failure. *Review of Policy Research*, *21*(2), 145–156. https://doi.org/10.1111/j.1541-1338.2004.00066.x

Calvin, K., Dasgupta, D., Krinner, G., Mukherji, A., Thorne, P. W., Trisos, C., Romero, J., Aldunce, P., Barrett, K., Blanco, G., Cheung, W. W., Connors, S., Denton, F., Diongue-Niang, A., Dodman, D., Garschagen, M., Geden, O., Hayward, B., Jones, C., . . . Ha, M. (2023). *IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland*. https://doi.org/10.59327/ipcc/ar6-9789291691647

Çoban, M. N. (2022). *The impact of press freedom on environmental degradation: an econometric analysis for the Nordic-Baltic eight (NB-8)*. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, *27*(3), 357-368. https://dergipark.org.tr/tr/pub/sduiibfd/issue/71476/1073021

Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Altman, D., Angiolillo, F., Bernhard, M., Cornell, A., Fish, M. S., Fox, L., Gastaldi, L., Gjerløw, H., Glynn, A., Good God, A., Grahn, S., Hicken, A., Kinzelbach, K., Marquardt, K. L., McMann, K., . . . Ziblatt, D. (2025). *V-Dem [Russia-2000/2022] dataset v15*. Varieties of Democracy (V-Dem) Project. https://doi.org/10.23696/vdemds25

Cowie, R. H., Bouchet, P., & Fontaine, B. (2022). The Sixth Mass Extinction: fact, fiction or speculation? *Biological Reviews/Biological Reviews of the Cambridge Philosophical Society*, *97*(2), 640–663. https://doi.org/10.1111/brv.12816

Dasgupta, S., & De Cian, E. (2018). The influence of institutions, governance, and public opinion on the environment: Synthesized findings from applied econometrics studies. *Energy Research & Social Science*, *43*, 77–95. https://doi.org/10.1016/j.erss.2018.05.023

Deacon, R. T. (2009). Public good provision under dictatorship and democracy. *Public Choice*, *139*(1–2), 241–262. https://doi.org/10.1007/s11127-008-9391-x

Downs, A. (1957). An economic theory of political action in a democracy. *Journal of Political Economy*, *65*(2), 135–150. https://doi.org/10.1086/257897

Eichhorn, K., & Linhart, E. (2022). Autocratic heterogeneity in the provision of environmental protection. *Zeitschrift Für Vergleichende Politikwissenschaft*, *16*(1), 5–30. https://doi.org/10.1007/s12286-022-00519-7

Fox, J., Weisberg, S., & Price, B. (2024). *car: Companion to applied regression* (Version 3.1-3) [R package]. Comprehensive R Archive Network (CRAN). https://doi.org/10.32614/CRAN.package.car

Galtung, J. (1969). Violence, Peace, and Peace Research. *Journal of Peace Research*, *6*(3), 167–191. https://doi.org/10.1177/002234336900600301

Gregory, A. W., & Veall, M. R. (1985). Formulating Wald tests of nonlinear restrictions. *Econometrica*, *53*(6), 1465–1468. https://doi.org/10.2307/1913221

Grossman, G. M., & Krueger, A. B. (1995). Economic growth and the environment. *The Quarterly Journal of Economics*, *110*(2), 353–377. https://doi.org/10.2307/2118443

Gunderson, L. H., & Holling, C. S. (2002). *Panarchy: Understanding transformations in human and natural systems*. Island Press. https://ci.nii.ac.jp/ncid/BA55772345

Guriev, S., & Treisman, D. (2018). Informational autocracy: Theory and empirics of modern authoritarianism. *Available at SSRN 2571905*.

Guriev, S., & Treisman, D. (2020). A theory of informational autocracy. *Journal of Public Economics*, *186*, 104158. https://doi.org/10.1016/j.jpubeco.2020.104158

Hale, H. E. (2005). Regime cycles: Democracy, autocracy, and revolution in post-Soviet Eurasia. *World Politics*, *58*(1), 133–165. https://doi.org/10.1353/wp.2006.0019

Hu, H., Chen, D., Chang, C., & Chu, Y. (2020). The political economy of environmental consequences: A review of the emprical literature. *Journal of Economic Surveys*, *35*(1), 250–306. https://doi.org/10.1111/joes.12396

Javeline, D., Orttung, R., Robertson, G., Arnold, R., Barnes, A., Henry, L., Holland, E., Omelicheva, M., Rutland, P., Schatz, E., Schenk, C., Semenov, A., Sperling, V., Sundstrom, L. M., Troitskiy, M., Twigg, J., & Wengle, S. (2023). Russia in a changing climate. *Wiley Interdisciplinary Reviews Climate Change*, *15*(2). https://doi.org/10.1002/wcc.872

Kalyvas, S. N. (2019). The landscape of political violence. *Oxford University Press eBooks*, 10–33. https://doi.org/10.1093/oxfordhb/9780198732914.013.1

Kneuer, M. (2012). Who is greener? Climate action and political regimes: trade-offs for national and international actors. *Democratization*, *19*(5), 865–888. https://doi.org/10.1080/13510347.2012.709686

Kojola, E., & Pellow, D. N. (2020). New directions in environmental justice studies: examining the state and violence. *Environmental Politics*, *30*(1–2), 100–118. https://doi.org/10.1080/09644016.2020.1836898

Lake, D. A., & Baum, M. A. (2001). The invisible hand of democracy: political control and the provision of public services. *Comparative political studies*, *34*(6), 587-621.

Lee, B. X. (2016). Causes and cures VIII: Environmental violence. *Aggression and Violent Behavior*, *30*, 105–109. https://doi.org/10.1016/j.avb.2016.07.004

Lelieveld, J., Beirle, S., Hörmann, C., Stenchikov, G., & Wagner, T. (2015). Abrupt recent trend changes in atmospheric nitrogen dioxide over the Middle East. *Science Advances*, *1*(7). https://doi.org/10.1126/sciadv.1500498

Li, Q., & Reuveny, R. (2006). Democracy and environmental degradation. *International Studies Quarterly*, *50*(4), 935–956. https://doi.org/10.1111/j.1468-2478.2006.00432.x

Lindvall, D., & Karlsson, M. (2023). Exploring the democracy-climate nexus: a review of correlations between democracy and climate policy performance. *Climate Policy*, *24*(1), 87–103. https://doi.org/10.1080/14693062.2023.2256697

Lührmann, A., & Lindberg, S. I. (2019). A third wave of autocratization is here: what is new about it? *Democratization*, *26*(7), 1095–1113. https://doi.org/10.1080/13510347.2019.1582029

Marcantonio, R., & Fuentes, A. (2023). Environmental violence: a tool for planetary health research. *The Lancet Planetary Health*, *7*(10), e859–e867. https://doi.org/10.1016/s2542-5196(23)00190-0

McFaul, M. (2018). Choosing autocracy: actors, institutions, and revolution in the erosion of Russian democracy. *Comparative Politics*, *50*(3), 305–325. https://doi.org/10.5129/001041518822704971

Morrow, J. D., De Mesquita, B. B., Siverson, R. M., & Smith, A. (2008). Retesting selectorate theory: Separating the effects of W from other elements of democracy. *American Political Science Review*, *102*(3), 393–400. https://doi.org/10.1017/s0003055408080295

Newey, W. K., & West, K. D. (1987). A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica*, *55*(3), 703–708. https://doi.org/10.2307/1913610

Neumayer, E. (2002). Do democracies exhibit stronger international environmental commitment? A cross-country analysis. *Journal of Peace Research*, *39*(2), 139–164. https://doi.org/10.1177/0022343302039002001

Nixon, R. (2011). *Slow violence and the environmentalism of the poor*. Harvard University Press. https://doi.org/10.4159/harvard.9780674061194

Payne, R. A. (1995). Freedom and the environment. *Journal of Democracy*, *6*(3), 41–55. https://doi.org/10.1353/jod.1995.0053

Peeters, M. (2018). About silent objects and barking watchdogs: the role and accountability of environmental NGOs. *European Public Law*, *24*(Issue 3), 449–472. https://doi.org/10.54648/euro2018026

Povitkina, M., & Jagers, S. C. (2022). Environmental commitments in different types of democracies: The role of liberal, social-liberal, and deliberative politics. *Global Environmental Change*, *74*, 102523. https://doi.org/10.1016/j.gloenvcha.2022.102523

R Core Team. (2025). *R: A language and environment for statistical computing* (Version 4.4.1) [Computer software]. R Foundation for Statistical Computing. https://www.R-project.org/

Roberts, M. E. (2020). Resilience to online censorship. *Annual Review of Political Science*, *23*(1), 401–419. https://doi.org/10.1146/annurev-polisci-050718-032837

Saraswati, C. M., Judge, M. A., Weeda, L. J. Z., Bassat, Q., Prata, N., Souëf, P. N. L., & Bradshaw, C. J. A. (2024). Net benefit of smaller human populations to environmental integrity and individual health and wellbeing. *Frontiers in Public Health*, *12*. https://doi.org/10.3389/fpubh.2024.1339933

Schedler, A. (2002). Elections Without Democracy: The menu of manipulation. *Journal of Democracy*, *13*(2), 36–50. https://doi.org/10.1353/jod.2002.0031

Schulze, G. G., & Zakharov, N. (2025). *Political cycles of media repression* (CESifo Working Paper No. 11701). SSRN. https://doi.org/10.2139/ssrn.5166523

Schwarz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics, 6*(2), 461–464. https://www.jstor.org/stable/2958889

Shahar, D. C. (2015). Rejecting eco-authoritarianism, again. *Environmental Values*, *24*(3), 345–366. https://doi.org/10.3197/096327114x13947900181996

Shrestha, M. B., & Bhatta, G. R. (2018). Selecting appropriate methodological framework for time series data analysis. *The Journal of Finance and Data Science*, *4*(2), 71–89. https://doi.org/10.1016/j.jfds.2017.11.001

Shytov, A., & Shytov, A. (2022). 'The Calf Fighting the Oak': A fight against illegal logging in Russia. *Journal of International Wildlife Law & Policy*, *25*(4), 329–344. https://doi.org/10.1080/13880292.2022.2151140

Sohag, K., Mariev, O., & Davidson, N. (2021). Revising environmental Kuznets curve in Russian regions: Role of environmental policy stringency. *Environmental Science and Pollution Research*, *28*(38), 52873–52886. https://doi.org/10.1007/s11356-021-14515-z

Statsmodels Developers. (2025). *Autoregressive distributed lag (ARDL) models*. In *Statsmodels documentation* (Version 0.15.0). Statsmodels. https://www.statsmodels.org/dev/examples/notebooks/generated/autoregressive_distributed_lag.html

Varol, O. O. (2015). Stealth authoritarianism. *Iowa Law Review, 100*(4), 1673–1742. https://ilr.law.uiowa.edu/print/volume-100-issue-4/stealth-authoritarianis

Von Stein, J. (2020). Democracy, autocracy, and everything in between: How domestic institutions affect environmental protection. *British Journal of Political Science*, *52*(1), 339–357. https://doi.org/10.1017/s000712342000054x

Ward, H., Cao, X., & Mukherjee, B. (2013). State capacity and the environmental investment gap in authoritarian states. *Comparative Political Studies*, *47*(3), 309–343. https://doi.org/10.1177/0010414013509569

World Bank. (2025). *Population and GDP data for Russia, 2000–2022*. World Bank Open Data Portal. https://data.worldbank.org/country/russia

Wurster, S. (2011). Sustainability and regime type: Do democracies perform better in promoting sustainable development than autocracies? *Zeitschrift Für Staats-Und Europawissenschaften*, *9*(4), 538–559. https://doi.org/10.5771/1610-7780-2011-4-538

Zeileis, A. (2004). Econometric computing with HC and HAC covariance matrix estimators. *Journal of Statistical Software, 11*(10), 1–17. https://doi.org/10.18637/jss.v011.i10

Zhuravskaya, E., Petrova, M., & Enikolopov, R. (2020). Political effects of the internet and social media. *Annual Review of Economics*, *12*(1), 415–438. https://doi.org/10.1146/annurev-economics-081919-050239

Social Trust and Political Violence: The Effect of Group Influence on Political Behavior

Alexandra Stith

Abstract

Political violence has undergone substantial growth in the last decade, and this has become increasingly visible through events such as the January 6th Capitol riots, the attempted assassination of Donald Trump during his 2024 campaign trail, and the assassination of Democratic lawmaker Melissa Hortman and her husband (Boyette, 2025; Sarnhoff, 2024). The research goal of this paper is to investigate the rising trend of political violence in the United States over the past decade, focusing on how violations of democratic norms are connected to levels of trust within society. I expect that individuals' low social trust leads to an inclination toward political violence, particularly in their acceptance and justification of violent acts committed by others. To test this, I used a stratified online survey that was conducted with a nationally representative sample of 194 respondents. A multivariate regression analysis was then used to examine the relationship between levels of social trust and responses to three dependent variables measuring attitudes toward political violence. Contrary to my expectations, the results showed that the variables associated with social trust did not have a statistically significant impact on inclinations toward political violence. These findings suggest that while social trust may align with theories of a lack of democratic norms, other factors such as political polarization, and extremist ideologies, may play a more direct role. While prior studies have explored the impact of political distrust, partisanship, and institutional accountability on support for political violence, this research is crucial to understanding the motivations behind political violence at a time when it is on the rise.

Introduction

Within the last ten years, political violence, a sub-category of violations of democratic norms, has become increasingly more prominent within the United States. Political violence is defined as the deliberate use of power and force to achieve political goals (WHO, 2002). These actions can include movements by both state and non-state actors, ranging from mass protests and riots to terrorism, coups, and rebellions. In the United States, however, these politically violent acts generally fall under the category of mass protests, riots, and what some may argue is terrorism. Some recent events in the United States led to my interest in the topic of political violence, such as the Capitol Riots on January 6th, 2021, and the attempted assassination of Donald Trump during his 2024 campaign trail. This paper examines the potential violations of democratic norms and if there are strong connections between perceptions of trust and the likelihood of either upholding or undermining these principles through committing violent acts.

There are several studies that find a connection between factors such as accountability of officials, preferred parties, aggression and violence as a response, and general distrust in the government, which can lead to norm violations (Armaly & Enders, 2024; Kingzette et al., 2021; Marien & Hooghe, 2011). However, this research notably overlooks the role of perceived trust of individuals within their immediate communities, better phrased as social trust. Furthermore, studies fail to establish an explicit connection between social trust and the emergence or escalation of political violence in any form. In this paper, I theorize that individuals who have limited social trust within their respective communities are more inclined toward political violence. This is due to the lack of faith individuals hold in the actions and intentions of those around them, including leaders within the political sphere and fellow citizens (Marien & Hooghe, 2011). Given the diminished sense of trust, individuals are led to perceive existing political and social systems as unresponsive, unjust, or corrupt. Additionally, these individuals may not fully consider or empathize with the consequences of violence on others, viewing such actions to address grievances or to bring about change in an environment they perceive as otherwise unreceptive to their concerns. I theorize that individuals' lack of social trust leads to an inclination toward political violence.

To test the theory that an individual's limited social trust will cause them to be more inclined toward political violence, I utilize a stratified online sample and multivariate regression analysis to test my hypothesis on a nationally representative level and determine the impact of various independent variables. This survey gave me a total of 194 respondents who answered three separate dependent variables with various independent variables. However, this survey found that the independent variables I utilized to focus on social trust did not have a statistically significant impact on inclinations towards political violence.

Literature Review

Previous research across different levels of analysis has explored the factors that influence support of violations of democratic norms and shed light on the different drivers behind these shifts (Armaly & Enders, 2024; Friedman, 2008; Kingzette et al., 2021; Marien & Hooghe, 2011). Studies suggest that there is a strong link between the perceptions of trust and the likelihood of either upholding or undermining democratic principles (Marien & Hooghe, 2011). This connection highlights the critical roles trust plays in the shaping of attitudes towards democratic government.

Political science research is strongly swayed towards violations of democratic norms taking place in an aggressive or violent manner (Friedman, 2008). The reaction leading to aggressive or violent behavior happens to be strongly associated with a variety of psychological, political, and social factors, leading to feeling justified in aggressive actions such as those of January 6th, 2021 (Armaly & Enders, 2024). Aggression can be a reaction caused by a change in the processes of a government or regime, which can lead to resentment towards the democratic system, whether explicit, and can also lead to the belief that aggression is justifiable (Friedman, 2008). In other studies, political violence may also have a basis in conspiratorial thinking and informational sources, such as focusing on aspects related to Christian nationalism instead of information coming from institutions (Armaly et al., 2022).

As the United States has become more polarized over time, a common basis behind

satisfaction in democracy, and a lack of violations often stems from whether one's preferred party holds power. Norms in the United States have, in some people's opinion, become politicized due to the greater biases due to affective polarization in American politics (Armaly et al., 2022; Kingzette et al., 2021; Klein, 2020). These biases can cause voters to believe that restrictions placed on others are driven by political ideologies or party affiliation, leading to a loss of trust in the opposing party (Kingzette et al., 2021). The competitive basis or views of one ideology or party being greater than the other has led to Americans feeling generally more satisfied with democracy if their preferred party is the one in power of the federal and the respective state governments (Klein, 2020). It is found that even if the out-party controls one level of government, the individual is still more satisfied with democracy than if the in-party controls no levels of government (VanDusky-Allen & Utych, 2021).

In addition, support for democratic norms and the lack thereof can be found in the accountability of officials within institutions (Goodhart, 2011). Certain dimensions of democratic accountability, such as that achieved through holding those in power accountable to human rights standards based on democratic principles, can potentially eliminate concerns about who is entitled to power, as these individuals are protecting their constituents (Goodhart, 2011). The punishment of violations can also aid in Americans' support for democratic norms due to the actions of actively holding those in power accountable, in some circumstances, that of officials own peers. This can signal to the public that accountability for wrongdoings is an acceptable action, therefore allowing individuals to see positive actions within the government and the institutions (Cagle & Davis, 2024).

Finally, general political distrust can be a push factor away from the democratic norms put into place. Citizens with low levels of trust in government and political institutions can be expected to find it more acceptable to break the law or democratic norms (Marien & Hooghe, 2011). Employing political trust implies that those who happen to have a lower level of trust towards those in power are more likely to support populist parties and, in turn, have stronger feelings about how the out-party or institutions may not be trustworthy to make decisions regarding the government (Geurkink et al., 2020). This lack of trust in the out-party, or the governmental institutions in place, can not only push people away from supporting sociological and standard norms but can also stimulate greater support for the removal of those systems and a direct democracy, especially among those who already support populist parties. (Van der Meer & Janssen, 2024).

The goal within this research is to identify the variables that lead to a lack of support for democratic norms, more specifically, political violence, based on the perceived trust of government institutions. It is found that factors such as accountability of officials, preferred parties, aggression and violence as a response, and general distrust in the government can lead to norm violations. However, the research leaves out the potential for perceived trust of individuals within local communities, better phrased as social trust, which is better defined as a belief in the honesty, integrity, and reliability of others (Pew Research, 2007).

Theory and Hypothesis

Based on previous literature, there is an association between trust in the government and support for political violence. Some scholars found that citizens with low levels of trust in government and political

institutions can be expected to find it more acceptable to break the law or norms (Cagle & Davis, 2024; Marien & Hooghe, 2011). This suggests that individuals with lower levels of trust in those in power are more inclined to support populist parties and, as a result, are more likely to hold stronger beliefs that opposition parties or institutions are untrustworthy when making governmental decisions. There is no research that investigates the gap between social trust and inclinations towards violence. I intend to investigate citizens' beliefs in social trust and their inclinations towards political violence.

How does a citizen's view of social trust influence their tendency toward political violence? I argue that individuals who have limited social trust within their respective communities are more likely to develop an inclination toward political violence. This is primarily because they lack faith in the actions and intentions of those around them, including political leaders and fellow citizens (Marien & Hooghe, 2011). Their diminished sense of trust leads them to perceive the existing political and social systems as unresponsive, unjust, or corrupt (Marien & Hooghe, 2011). Furthermore, these individuals may not fully consider or empathize with the consequences of violence on others, viewing such actions to address perceived grievances or to bring about change in an environment they feel is otherwise unreceptive to their concerns. *Hypothesis: Individuals' lack of social trust leads to an inclination towards political violence.*

The hypothesis, individuals' lack of social trust leads to an inclination towards political violence, in plain language, is how likely an individual is to be drawn to politically violent acts in relation to social trust. These acts are those that are directly connected to events within politics, such as the Capitol riot on January 6th, 2021, just before President Biden's inauguration, where citizens are actively engaging in violence against a political figure or system.

Research Design

To test my hypothesis: individuals' lack of social trust leads to an inclination towards political violence, I will be using a multivariate regression analysis. To obtain numerical data, the survey platform Prolific Academic will be used. This includes a survey with 200 respondents, and these data will be nationally representative as the respondents are randomly selected. The respondents will be randomly chosen from Prolific Academic based upon age, sex, race, and political affiliation as provided by the respondent.

I will measure the independent and dependent variables with the survey published on Prolific Academic. My independent variable, social trust, will be measured through a series of questions, including: "Generally speaking, would you say that most people can be trusted, or that you can't be too careful dealing with people?" (1. Most are trustworthy 2. Can't be too careful, 3. Depends), "Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair?" (1. Try to be fair 2. Take advantage 3. Depends), and "Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?" (1. Try to be helpful 2. Look out for themselves 3. Depends). Each of the independent variable questions had a final option titled "do not know" that was removed before the final analysis due to a lack of responses.

The dependent variable, inclination towards political violence, will be measured based on a series of questions including "To what

extent do you agree or disagree with the statement violence is sometimes justified to achieve political goals" (1. Strongly agree 2. to 5. Strongly disagree), "Do you believe that political violence (e.g., violent protests, riots, or armed resistance) can be an effective way to bring about social or political change?" (1. Yes 2. Unsure 3. No), and finally, "How acceptable do you think it is for people to use violence in response to political oppression or government actions they disagree with?" (1. Very acceptable to 5. Very unacceptable). To control for confounding factors that may have an impact on the inclination that one may have to political violence, there are general questions also published in the survey for control purposes. These control variables include the demographic factors of age, gender, race, socioeconomic status, educational background, political ideology, and party ID.

In the data collection for my survey, I will be relying on a series of multivariate regression analyses as it provides an insight into the relationships between my independent and dependent variables and allows for control of various confounding variables. Regression analyses also allow for measures of statistical significance and a quantitative way to view just how impactful the variables are on the dependent variable. Within the survey, there will be a series of questions that account for confounding variables that may influence individuals' inclination towards political violence. These control variables are represented as quantitative data, so they can be measured and controlled in comparison to the primary independent variable of theoretical interest, social trust.

Results

Table 1: Regression Model of the Belief that Violence is an Effective Way to Bring about Change

	Dependent variable: Violence Change
Age	0.10***
	(0.03)
Race	-0.01
	(0.13)
Gender	0.14
	(0.10)
Education	-0.04
	(0.03)
Ideology	-0.39*
	(0.21)
Party ID	-0.17**
	(0.07)
Trust People	-0.02
	(0.07)
Take Advantage	0.05
	(0.07)
Helpful	-0.09
	(0.07)
Constant	2.87***
	(0.36)
Observations	194
R^2	0.10
Adjusted R^2	0.06
Residual Std. Error	0.72 (df = 184)
F Statistic	2.38** (df = 9; 184)
Note:	*p**p***p<0.01

The first multivariate regression that I ran focused on the dependent variable of disagreement with the effectiveness of violence to bring about change, which

addresses the agreement that the survey taker believes "that political violence can be an effective way to bring about change" from 1 (yes), 2 (unsure), and 3 (no). The regression found that the independent variables age, ideology, and Republican were statistically significant at the 0.01 level. The variable, age, had a regression coefficient of 0.10; in plain language, this means that for every 10-year increase in age, the belief that political violence is not an effective way to bring about change increases by 0.10 scale points. Ideology had a regression coefficient of -0.39, meaning that for every increase from very conservative (1) to very liberal (5), or the more liberal individuals are, the less likely by 0.39 scale points they are to believe that political violence is not an effective way to bring about change, meaning that more liberal individuals are more likely to believe that political violence is an effective way to bring about change. This number falls at the significance level of 0.1. The variable, Republican, had a regression coefficient of -0.17, meaning in plain language that for every change from Not Republican to Republican, Republicans scored 0.17 scale points less on the dependent variable, which means that Republicans are more likely to view political violence as an effective means of change. This regression analysis found that the R squared was 0.10, meaning that the regression model accounted for 10% of the variance in the dependent variable. The constant was 2.87, meaning that if all the independent variables are measured at zero, the respondents would score at a level of 2.87 on the scale of 1 to 3.

Given the multivariate regression analysis of my dependent variable, which is the disagreement that political violence is an effective way to bring about change, the regression does not support my hypothesis. There were significant control variables such as age, ideology, and whether the respondent was Republican.

Table 2: Regression Model of the Belief that Violence is Acceptable to Use as a Response

	Dependent variable: Violence Accepted
Age	0.22***
	(0.04)
Race	0.01
	(0.16)
Gender	0.26*
	(0.14)
Education	-0.13***
	(0.04)
Ideology	-0.21
	(0.27)
Party ID	-0.25***
	(0.09)
Trust People	0.01
	(0.10)
Take Advantage	-0.01
	(0.09)
Helpful	-0.12
	(0.09)
Constant	4.57***
	(0.47)
Observations	194
R2	0.21
Adjusted R2	0.17
Residual Std. Error	0.93 (df = 184)
F Statistic	5.47*** (df = 9; 184)
Note:	*p**p***p<0.01

The second multivariate regression that I ran focused on whether violence is recognized as an acceptable response, from 1 (very acceptable) to 5 (very unacceptable). The regression found that the independent variables age, whether the respondent was a woman, highest level of education, and whether the respondent was a Republican, were statistically significant at the level of 0.1. Age had a regression coefficient of 0.22, meaning in plain language that for every ten-year increase in age, the belief that the use of violence is not an acceptable response increases by 0.22 scale points. Whether or not the respondent was a woman had a regression coefficient of 0.26, meaning that women scored 0.26 points more and were more likely to believe that violence is unacceptable. The variable highest level of education had a regression coefficient of -0.13; the higher the level of education the respondents had, they score 0.13 points less on the scale that indicated the belief that violence is unacceptable. In plain language, respondents with higher education levels were more likely to find violence acceptable. Whether or not the respondent was Republican had a regression coefficient of -0.25, meaning that Republicans score 0.25 points less on the scale. In plain language, Republicans are more likely to believe that violence is an acceptable response. This regression analysis found that the R squared was 0.21, meaning the regression model accounted for 21% of the variance in the dependent variable. The constant was 4.57, meaning if all of the independent variables are measured at zero, the respondents would score at a level of 4.57 on a scale of 1 – 5 on how acceptable they believe violence is as a response.

Although there were results that were statistically significant at the 0.01 level, the regression analysis that focuses on how acceptable the use of violence is, does not support my hypothesis as the independent variables that measured at that level were control variables and did not address social trust.

Table 3: Regression Model of the Belief that Violence is Justified to Achieve Political Goals

	Dependent variable: Violence Justified
Age	0.18***
	(0.05)
Race	0.09
	(0.19)
Gender	0.22
	(0.15)
Education	-0.12**
	(0.05)
Ideology	-0.13
	(0.30)
Party ID	-0.04
	(0.10)
Trust	-0.13
	(0.11)
Take Advantage	-0.02
	(0.11)
Helpful	-0.17
	(0.10)
Constant	4.48***
	(0.53)
Observations	194
R2	0.16
Adjusted R2	0.12
Residual Std. Error	1.05 (df = 184)
F Statistic	3.87*** (df = 9; 184)
Note:	*p**p***p<0.01

The third multivariate regression that I ran focused on the dependent variable of disagreement with justification of violence, which addresses the belief on "how justifiable the use of violence to achieve political goals" from 1 (strongly agree) to 5 (strongly disagree), meaning higher values equal more disagreement with justifying violence. The regression found that the independent variables age and highest level of education were statistically significant at the 0.01 and 0.05 levels, respectively. Age had a regression coefficient of 0.18, meaning that for every ten-year increase in age, respondents score 0.18 scale points more on the disagreement scale that the use of violence is justified to achieve political goals, meaning the older, the more likely that individuals are to disagree that violence is justified. Highest level of education had a regression coefficient of -0.12, meaning that for every increase in level of education, respondents score 0.12 scale points less on the disagreement scale, showing that individuals with higher levels of education were more likely to agree that violence is sometimes justified to achieve political goals. This regression analysis found that the R squared was 0.16, meaning that the regression model accounted for 16% of the variance in the dependent variable. The constant was 4.48, meaning that if all the independent variables are measured at zero, the respondents would score at a level of 4.48 on the scale of 1–5 (strongly agree to strongly disagree).

Although there were results that fell at a point that was statistically significant at the 0.01 level, the regression analysis that focuses on the belief that the violence is justified to achieve political goals does not support my hypothesis, as the independent variables that were measured at that level were control variables and did not directly address social trust.

All in all, I performed three separate multivariate regression analyses, each focused on my dependent variables that fell under the category of political violence. In this case, although I had various control variables that performed well in the model, my hypothesis, that individuals' lack of social trust leads to an inclination towards political violence, was challenged. This could be accounted for with some alternative explanations; the sample size was too small to account for a truly nationally representative body, the survey was completed online, reverse causality, instead of social trust reducing political violence, exposure to political violence might reduce social trust, and question framing, or order could have affected responses. The results also suggest that the theorized relationship between social trust and political violence may be more dependent on the context of specific relationships instead of core beliefs.

Conclusion

My hypothesis - that a lack of social trust leads to an inclination towards political violence - was found to be statistically insignificant. This conclusion was drawn from an online stratified sample from Prolific Academic, which found nationally represented respondents based upon gender, age, race, and various other factors. Although factors such as trust towards the government or social trust in other situations have been researched in the past, social trust was an independent variable that has never focused on inclinations towards political violence. Although I addressed this gap in my research, social trust was found not to have an impact on inclinations towards political violence. My other independent variables age, level of education, and party ID measured with Republican as the base category, were found to be statistically significant in regards to

inclination towards political violence, which aligns with research in articles such as that from Armaly & Enders (2024), Armaly et Al (2022), and a Pew research survey (2007), which also found them significant in relation to political violence.

As my research did not find social trust to have an impact on inclinations towards political violence, it can be assumed that the two are not connected. However, the survey that took place had only 194 respondents, a very small number which may have skewed results towards one end or another. I believe that with a greater respondent pool, the results may change in terms of significance to an extent. If more time was involved, I would include a survey question that questions the respondent's role of civic engagement, as it may control for individuals who have a lack of connection toward political movements, voting, or goals, and may allow for more homed in research, which I believe opens opportunities for more targeted future research. My hypothesis challenges existing beliefs surrounding political violence in this current era and suggests that trust could play a role in politically violent acts, and points toward the possibility that other factors, such as partisanship, may have a greater explanation. Future research should explore under what conditions, if any, social trust can shape political behavior, and whether other institutional or psychological factors have an impact on the relationship.

References

Armaly, M. T., Buckley, D. T., & Enders, A. M. (2022). Christian nationalism and political violence: Victimhood, racial identity, conspiracy, and support for the capitol attacks. *Political Behavior*, *44*(2), 937–960. https://doi.org/10.1007/s11109-021-09758-y

Armaly, M. T., & Enders, A. M. (2024). Who supports political violence? *Perspectives on Politics*, *22*(2), 427–444. https://doi.org/10.1017/S1537592722001086

Boyette, C. (2025). *Melissa Hortman: Who was the minnesota state representative assassinated in her home?*. CNN. https://www.cnn.com/2025/06/14/us/melissa-hortman-minnesota-assassination

Cagle, D., & Davis, N. T. (2024). Civility norm violations and political accountability. *Social Science Quarterly*, *105*(3), 832–842. https://doi.org/10.1111/ssqu.13383

Friedman, G. (2008). Identifying the place of democratic norms in democratic peace. *International Studies Review*, *10*(3), 548–570. https://doi.org/10.1111/j.1468-2486.2008.00804.x

Geurkink, B., Zaslove, A., Sluiter, R., & Jacobs, K. (2020). Populist attitudes, political trust, and external political efficacy: Old wine in new bottles? *Political Studies*, *68*(1), 247–267. https://doi.org/10.1177/0032321719842768

Goodhart, M. (2011). Democratic accountability in global politics: Norms, not agents. *The Journal of Politics*, *73*(1), 45–60. https://doi.org/10.1017/S002238161000085X

Kingzette, J., Druckman, J. N., Klar, S., Krupnikov, Y., Levendusky, M., & Ryan, J. B. (2021). How affective polarization undermines support for democratic norms. *Public Opinion Quarterly*, *85*(2), 663–677. https://doi.org/10.1093/poq/nfab029

Klein, E. (2020). *Why we're polarized* (First Avid Reader Press hardcover edition.). Avid Reader Press.

Marien, S., & Hooghe, M. (2011) Does political trust matter? An empirical investigation into the relation between political trust and support for law compliance. *European Journal of Political Research*, 50(2), 267–291. https://doi.org/10.1111/j.1475-6765.2010.01930.x

Pew Research Center. (2007, February 22). Americans and Social Trust: Who, where and why. Pew Research Center. https://www.pewresearch.org/social-trends/2007/02/22/americans-and-social-trust-who-where-and-why/

Sarnhoff , L. (2024). *Trump assassination attempt timeline: Witnesses spotted gunman 2 minutes before shooting*. ABC News. https://abcnews.go.com/US/timeline-trump-assassination-attempt-unfolded-rally-pennsylvania/story?id=111933309

VanDusky-Allen, J., & Utych, S. M. (2021). The effect of partisan representation at different levels of government on satisfaction with democracy in the United States. *State Politics & Policy Quarterly*, 21(4), 403–429. https://doi.org/10.1017/spq.2021.2

van der Meer, T. W. G., & Janssen, L. A. (2025). The static and dynamic effects of political distrust on support for representative democracy and its rivals. *Political Behavior*. https://doi.org/10.1007/s11109-024-09994-y

World Health Organization (Who) World Report on Violence and Health. Geneva: 2002.

How Many Do You See?

Alexa Benitez

Abstract

Public misperceptions about the size of the immigrant and undocumented immigrant populations have been widely documented, yet limited research has explored the psychological traits that may contribute to these inaccuracies, particularly within the U.S. context. While previous studies have focused on media exposure, group threat, and social attitudes, this study investigates whether personality traits, specifically the Big Five, predict individuals' innumeracy regarding undocumented immigrants. I conducted research on three hypotheses. First, individuals who score high in neuroticism on the TIPI will be more likely to overestimate the proportion of the undocumented immigrant population. Second, individuals who score high in openness to experience on the TIPI will be more likely to provide a more accurate estimate of the proportion of the undocumented immigrant population. Third, individuals who score high in agreeableness on the TIPI will be less likely to overestimate the proportion of the undocumented immigrant population. Using a cross-sectional survey of 341 U.S. adults recruited via Prolific Academic, participants completed the Ten-Item Personality Inventory (TIPI) and estimated the proportion of both immigrants and undocumented immigrants living in the U.S. Over half of the sample overestimated the undocumented population, with even greater overestimation for the general immigrant population. A multivariate regression analysis was conducted, controlling for economic, cognitive, emotional, and demographic factors. The results showed that individuals high in openness were more likely to overestimate the undocumented population, contrary to the initial hypothesis. In a logistic regression model examining predictors of accurate estimation, political conservatism was the only statistically significant factor. This model showed that more conservative individuals were less likely to estimate the undocumented population accurately and, in fact, tended to overestimate. None of the Big Five traits were significant predictors of accurate estimation in this model. These findings suggest that political ideology is the strongest determinant of demographic numeracy. Future research should investigate the mechanisms by which ideological worldviews influence fact-based judgments, particularly in politically charged domains like immigration.

Introduction

What effect do personality traits have on Americans' misperceptions about undocumented immigrants? While numerous studies have documented public overestimation of immigrant group size, particularly undocumented immigrants, much of this work focuses on external influences like media exposure and neighborhood demographics (Alesina et al., 2022; Herda, 2010). However, limited information is known regarding how different personality traits could potentially affect an individual's perceptions.

This research examines the role of personality traits in innumeracy, which is the overestimation of the population of undocumented immigrants in the United States. This issue needs to be addressed, given that misperceptions about immigration can influence political behavior, enhance xenophobia, and negatively shape policy preferences (Meltzer & Schemer, 2021; Kosic et al., 2005; Goldsmith, 2009).

A large number of researchers discuss the cognitive and social origins of innumeracy (Herda, 2010; Gallagher, 2003; Schlueter & Davidov, 2013). Additional research shows that people exposed to anti-immigrant media are more likely to overestimate immigrant populations, especially when they lack personal contact with undocumented individuals (Gallagher, 2003; Herda, 2010; Schlueter & Davidov, 2013). Other studies show that there is a relation between local environment and group threat and the tendency of the people to overestimate the national immigrant numbers (Lundmark, 2017; Sigelman & Niemi, 2001; Wong, 2007). Nonetheless, current research has failed to explore the relationship between personality traits and these perceptions. There is only limited research, mostly conducted outside the U.S., that investigates the role of dispositional factors, including fearfulness or empathy, as potential mediators of innumeracy (Ackermann & Ackermann, 2015; Hannuschke et al., 2019).

This research fills this gap by suggesting that neuroticism, openness to experience, and agreeableness, three of the Big Five personality traits, can significantly predict differences in overestimation. Neuroticism may enhance innumeracy due to the increased vulnerability to threats (Barlow et al., 2014), openness may decrease the likelihood of overestimation by enhancing cognitive flexibility and curiosity (Silvia & Christensen, 2020), and agreeableness may act as a shield against negative stereotypes due to prosociality (Hilbig et al., 2014). For these reasons, I addressed the following theories. Individuals who score high in neuroticism tend to be more emotionally responsive and may view immigrants as a threat, and therefore are likely to overestimate their population size (Marcus et al., 1995). Individuals who score high in openness are considered more tolerant and receptive to diverse perspectives, which might cause them to challenge stereotypes, thus decreasing the likelihood of overestimation (Silvia & Christensen, 2020). Finally, people who score high in agreeableness are generally compassionate and less likely to harbour prejudiced attitudes, which may make them less susceptible to fear-based messages, thus also decreasing the likelihood of overestimation (Hilbig et al., 2014).

To test this theory, I performed a cross-sectional survey with a national sample of 341 U.S. adults obtained from Prolific Academic. The participants answered a 32-item questionnaire with the Ten Item Personality Inventory (TIPI), immigration perception questions, and a set of demographic and control measures derived from previous studies (Gustafson, 2008; Herda, 2013; Paquet & Lawlor, 2022). I conducted a multiple regression analysis along with a logistic regression analysis to establish the relationship between personality traits and overestimation, after accounting for economic vulnerability, cognitive vulnerability, emotional attitudes, and other demographic variables. The results showed that individuals who scored higher in openness to experience were more likely to overestimate the proportion of undocumented immigrants, contrary to the hypothesis, while neuroticism and agreeableness were not statistically significant predictors of innumeracy. These findings suggest that more research is

needed to understand how psychological traits interact with political and informational environments.

Literature Review

In recent years, a growing body of scholarship has examined the determinants of innumeracy. Research in the field of innumeracy has found that "respondents greatly overestimate the total number of immigrants" (Alesina et al., 2022). It is for this reason that I ask, what effect do personality traits have on Americans' innumeracy regarding undocumented immigrants? In this section of the paper, I will discuss the major schools of thought in recent scholarship, as well as the limitations of this scholarship, before ultimately providing a plausible alternative explanation. The three schools of thought I will be discussing are anti-immigrant media, social environment, and psychological predispositions.

Multiple studies about innumeracy have studied how media shape how people perceive issues. Research has shown that selective reporting on immigration can set the public agenda, which can result in skewing attitudes toward immigrants (Farris & Silber Mohamed, 2018). Moreover, prolonged exposure to anti-immigrant media messages leads individuals to cultivate distorted views of reality by resulting in more perceived threats associated with undocumented immigrants (Meltzer & Schemer, 2021). Herda (2010) shows that European people tend to misjudge immigrant numbers because they rarely meet immigrants in person and are frequently exposed to stereotypes. Gallagher (2003) observed in his research that local television news in the United States displays criminal acts by people of color at higher rates than their actual numbers, thus creating inaccurate public perceptions of immigrant and racial demographics. People who watched these programs extensively made incorrect population estimates about racial groups. Herda (2010) demonstrates that media contact with immigration information stands as a major predictor of innumeracy for individuals without immigrant encounters. Schlueter and Davidov (2013) support this by demonstrating that media representations can distort public perceptions of group size, especially when they are not balanced by interpersonal contact.

The second school of thought emphasizes local context and group threat. Research by Lundmark (2017) supports the idea of "subjective neighborhood assessments," meaning that people rely on their personal perceptions of who lives in their neighborhood, rather than actual data, which can distort how they estimate national immigrant numbers. The negative effects of social psychological dynamics become more significant because of the group threat theory. According to Sigelman and Niemi (2001), the perception of demographic change often leads people to see it as a zero-sum game, which means out-group size growth represents potential losses for the in-group. Wong (2007) builds upon this theory by explaining that people create their mental images of minority group size through the combination of personal context and media cues, which often leads to number inflation due to symbolic threats.

The third school of thought involves psychological predispositions. This is the least studied area, especially in U.S.-based research. Research on psychological traits remains limited because most studies investigate social or structural variables. The authors Ackermann and Ackermann (2015) state that emotional instability, together with anxiety and distrust, form individual-level factors which lead to anti-immigrant

attitudes in South Africa. However, this study conducted by the researchers did not analyze direct group size perceptions. The authors Hannuschke et al. (2019) propose that dispositional empathy and anxiety affect immigration attitudes through affective distortions, which also impact numerical estimates. Moreover, Marcus et al. (1995) tied emotional responsiveness, especially anxiety and fear, to political decision-making, which may indirectly affect demographic estimations.

The aforementioned studies indicate that psychological predispositions matter, yet they lack Big Five personality traits entirely. This research develops current understanding by analyzing the effect of neuroticism, openness to experience, and agreeableness personality traits on people who tend to overestimate the actual number of undocumented immigrants. Additionally, it expands the work on innumeracy in the U.S. context through the combination of personality psychology with established media and group threat models. To provide more context, the Big Five are considered stable personality traits that serve as a framework in psychology for describing behavioral characteristics, which consist of individuals' patterns of thought, emotion, and behavior (Soto, 2018). The five traits include: agreeableness, extraversion, conscientiousness, neuroticism, and openness to experience. By incorporating this model, researchers can better account for how internal psychological traits interact with environmental factors such as media exposure to influence cognitive biases, like innumeracy.

Theory

Existing literature on innumeracy regarding undocumented immigrants does not discuss the role of personality traits in shaping individuals' overestimation of the undocumented immigrant population, specifically in regard to the Big Five personality traits. Scholarship in the realm of innumeracy has explored the effects of media exposure and social environment, but there is limited research on how different personality traits may increase individuals' vulnerability to overestimate undocumented immigrants (Herda, 2010; Gallagher, 2003; Schlueter & Davidov, 2013). Current research on the psychological effects of innumeracy has been predominantly addressed through social explanations such as social exposure to undocumented immigrants but has largely neglected the role of personality traits such as neuroticism (Herda, 2010; Ackermann & Ackermann, 2015; Hannuschke et al., 2019). This gap in the literature is significant given that one's exposure to media and social environment will not significantly impact one's innumeracy if personality traits are the main factor. Additionally, limited research has been done in the United States despite it being the largest immigrant population worldwide (Statistica, 2025). By incorporating the Big Five personality traits through the Ten-Item Personality Inventory-(TIPI), this study aims to provide an alternative explanation with regards to the influences on individuals' innumeracy regarding undocumented immigrants.

I propose that neuroticism, openness to experience, and agreeableness play a significant role in influencing innumeracy. First, in the case of neuroticism, individuals who score lower in emotional stability (score high in neuroticism) on the TIPI are more likely to overestimate the size of the undocumented immigrant population due to their predisposition to have a heightened stress response to threat (Barlow et al., 2014). Their response to threat-related information could, in turn, make these individuals more susceptible to fear-based media that exaggerate the proportion

of undocumented immigrants, which would explain why studies have found a relationship between media exposure and innumeracy. Second, I claim that individuals who score high in openness to experience on the TIPI are expected to provide more accurate estimations. Being that openness to experience is determined by those who are more complex and receptive to diverse perspectives (Silvia & Christensen, 2020), this could make them less vulnerable to fear-driven misinformation as well as less affected by their social environment, the inverse of those who score high in neuroticism. Lastly, I claim that individuals who score higher in agreeableness on the TIPI, which is determined by their sympathy and prosocial behavior (Hilbig, 2014), are expected to be less likely to overestimate the proportion of undocumented immigrants. Since the TIPI considers prosocial behavior when determining how agreeable an individual is, this could mean that having prosocial behavior makes you more resistant to the negative portrayals of undocumented immigrants, since these individuals would be more likely to sympathize with them, thus leading them to not rely on fear-driven narratives. Taken together, these expectations point toward a common mechanism: personality traits shape innumeracy by influencing how individuals perceive information about immigrants. Specifically, neuroticism heightens perceptions of threat, openness to experience affects receptivity to information and social diversity, and agreeableness promotes prosocial orientations that can counter negative stereotypes. These mechanisms provide a causal pathway linking personality traits to whether individuals overestimate the size of the undocumented immigrant population. Based on these theoretical expectations, I propose the following hypotheses:

H1: Individuals who score high in neuroticism on the TIPI will be more likely to overestimate the proportion of the undocumented immigrant population.

H2: Individuals who score high in openness to experience on the TIPI will be more likely to provide a more accurate estimate of the proportion of the undocumented immigrant population.

H3: Individuals who score high in agreeableness on the TIPI will be less likely to overestimate the proportion of the undocumented immigrant population.

Research Design

To test whether personality traits affect individuals ' innumeracy, my study will employ a cross-sectional survey design, utilizing both the Ten-Item Personality Inventory (TIPI) and a questionnaire based on Herda (2010), adapted to the American context with an emphasis on innumeracy regarding undocumented immigrants rather than immigrants in general. The survey was a representative sample that included responses from 341 adults living in the United States, sampled using the online platform Prolific Academic. Participants were compensated for completing a 32-question survey. Additionally, participants were 18 years or older. As mentioned, I will use the TIPI test to determine personality traits. This portion of the test will consist of 10 short questions about the participants' personality traits.

To determine individuals' overestimation of undocumented immigrants, I will be using sections of a European questionnaire (Herda, 2010) that were utilized to evaluate individuals' overestimation of immigrant populations. The dependent variable was respondents' estimation of the undocumented immigrant population.

Participants were asked: "Out of every 100 people living in the United States, how many do you think are undocumented immigrants?" Respondents will be directed to select an option. The options I will provide the respondents with are the following: less than 5%, 5% to less than 10%, 10% to less than 15%, 15% to less than 20%, 20% to less than 20%, and over 20%. Responses were compared to the actual number, based on publicly available estimates from the Pew Research Center, American Immigration Council, and the Migration Policy Institute (Pew Research Center, 2024; American Immigration Council, 2024; Migration Policy Institute, 2024). This allowed for the construction of a variable measuring numerical inaccuracy or "innumeracy."

The independent variables were based on the Ten-Item Personality Inventory (TIPI), developed by Gosling, Rentfrow, and Swann (2003). The TIPI uses two questions per trait, each rated on a 7-point Likert scale. The following traits will be assessed: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experiences. To reduce response bias, one question in each trait pair is reverse-coded (Gosling et al., 2003). The test utilizes the 7-point Likert scale, where respondents will be asked "How much do you agree or disagree with the following statement on a scale of 1-7" and the numbers will be coded for as the following: 1 = Disagree strongly, 2 = Disagree moderately, 3 = Disagree a little, 4 = Neither agree nor disagree, 5 = Agree a little, 6 = Agree moderately, 7 = Agree strongly. All respondents will answer the same questions to ensure that their personalities are taken into account and compared to their innumeracy. Low scores in emotional stability will indicate high scores in neuroticism. I used these items to compute scores for my independent variables, being that of neuroticism, openness to experience, and agreeableness to determine if my hypotheses were supported.

The data will be analyzed using a multiple regression analysis to assess the relationship between each of the Big Five personality traits and the respondent's estimated undocumented immigrant population. The dependent variable will be the overestimation of undocumented immigrants, which will be a continuous measure derived from the survey responses. The independent variables will be the Big Five personality traits, which are measured by the TIPI. In addition to the key personality variables, I included multiple control variables identified in previous literature. These were grouped into four categories: demographic (age, gender, education, race), economic (income level, employment status), cognitive (knowing an undocumented immigrant, living in a racially homogeneous area, media exposure), and emotional (conservatism, cultural attitudes, crime concerns). These variables were drawn from studies by Herda (2013) and Meltzer and Schemer (2021), which documented their relevance in shaping immigration attitudes and perceived threat. To control for economic vulnerability, I will ask questions regarding whether they have unemployment experience and their income. As for cognitive factors, respondents will be asked if they have regular contact with undocumented immigrants, such as having friends or neighbors. The second part of the cognitive factors is media exposure, and I will be asking how much exposure, if any, they have to the following: television, political newspapers, and political radio. Lastly, to address emotional factors, I will ask the following questions: whether the U.S. cultural life is generally undermined or enriched by people coming to live here from other countries, if the U.S. crime problem is worsened by immigrants, and the respondent's political ideology. The

data will be analyzed using a multivariate regression analysis and a logistic regression model to assess the relationship between each of the Big Five personality traits and the respondent's estimated undocumented immigrant population as well as the control variables.

The multiple regression analysis will use three of the Big Five personality traits as the main independent variables to establish whether scores in neuroticism, conscientiousness, and openness predict innumeracy, given that they are the personality traits I have hypothesized the effect of on innumeracy. The other two personality traits within the Big Five, extroversion and conscientiousness, will still be used in the multiple regression analysis; however, there were no hypotheses created for these personality traits, since there was limited research regarding their effect on innumeracy. As for the control factors, I will include economic vulnerability to test whether the effects of personality traits remain significant after accounting for economic factors, as well as cognitive and emotional factors. The finding of this multiple regression analysis will test if the relationship between personality traits and innumeracy has an overall statistically significant effect on innumeracy when including all of the control variables.

Results

The results of the multivariate regression analysis addressed the participants' overestimation of the undocumented immigrant population based on Big Five personality traits and a broad set of demographic, economic, emotional, and cognitive variables. Holding all other variables in the model constant, several predictors were statistically significant. In this study, variables with $p < 0.1$ were considered marginally significant, those with $p < 0.05$ were statistically significant, and those with $p < 0.01$ indicated highly significant relationships. An increase of one point on the Openness to Experience scale was associated with a 0.18-point increase in overestimation ($p < 0.05$). The relationship between education and overestimation was negative since a one-unit increase in education was associated with a 0.15-point decrease ($p < 0.05$). Television exposure was positively related to overestimation and increased overestimation by 0.12 points ($p < 0.05$). Age had a positive effect, and an increase of one unit in age resulted in an increase of 0.10 in overestimation ($p < 0.1$). Being female was a significant predictor, and it was associated with a 0.64-point increase in overestimation ($p < 0.01$). Identifying as White resulted in a 0.88-point reduction in overestimation ($p < 0.01$).

Table 1: Variables that Explain Respondents' Level of Overestimation Regarding the Proportion of Undocumented Immigrants

Dependent variable: Overestimation of the Proportion o Undocumented Immigrants	
Extroversion	0.002
	(0.06)
Agreeableness	0.06
	(0.08)
Conscientiousness	0.10
	(0.08)
Neuroticism	-0.03
	(0.06)
Openness	0.18**
	(0.08)
Age	0.10
	(0.06)
Gender	0.64***
	(0.18)
Education	-0.15**
	(0.06)
White	-0.88***
	(0.18)
Income	-0.01
	(0.06)
Unemployment	0.01
	(0.18)
Ideology	0.10
	(0.09)
Culture	-0.03
	(0.08)
Crime	-0.22*
	(0.12)
Friends	0.63***
	(0.18)
Neighbors	-0.10
	(0.10)
Television	0.12**
	(0.06)
Newspaper	-0.07
	(0.07)
Listening to News	0.06
	(0.07)
Constant	10.02***
	(1.48)
Observations	341
R^2	0.26
Adjusted R^2	0.22
Residual Std. Error	1.52 (df = 316)
F Statistic	6.027*** (df = 19; 321)

Note:

The dependent variable is whether individuals overestimated the proportion of undocumented immigrants.

*p<0.1, **p<0.05,***<0.01

Concern about crime and personal relationships with undocumented immigrants were also significant variables. A one-unit decrease in concern about immigrants worsening crime was associated with a 0.22-point decrease in overestimation ($p < 0.1$). Finally, having friends who are or have been undocumented immigrants corresponded to a 0.63-point increase in overestimation ($p < 0.01$).

As we can see, the second hypothesis was contradicted by the finding that higher openness to experience was associated with greater overestimation ($p = 0.030$). This finding suggests that individuals high in openness may be more focused on immigration as a prominent social issue and overestimate its scale. Neither neuroticism nor agreeableness were statistically significant predictors, so there was no support for Hypothesis 1 or 3. This lack of significance may be because these traits have a small independent effect when social, cognitive, and demographic variables are controlled. The compact nature of the TIPI scale may also have limited its ability to fully capture the complexity of emotional traits such as neuroticism. The model's constant was 10.02 ($p < 0.01$), which means that for an individual who scores zero on all independent variables, the predicted estimate of the size of the undocumented immigrant population is approximately 10 percent. This baseline could reflect the perceptions of respondents with low exposure and concern. Notably, individuals who reported low concern about immigrants increasing crime were significantly less likely to overestimate the undocumented population ($p < 0.1$), further supporting the role of emotional attitudes in shaping innumeracy. The model's R-squared was 0.263, meaning that 26.3% of the variation in respondents' overestimation was explained by the combination of personality

traits, demographic characteristics, and exposure variables.

Table 2: Logistic Regression of Variables Affecting Individuals' Accurate Estimations Regarding the Proportion of Undocumented Immigrants

	Dependent Variable: Accurate Est. of Undocumented Immigrant Pop.:
Extroversion	-0.28*
	(.14)
Agreeableness	0.04
	(.16)
Conscientiousness	0.11
	(.15)
Neuroticism	-0.09
	(.13)
Openness	-0.05
	(.15)
Age	0.07
	(.11)
Gender (Female)	-0.67***
	(.25)
Education	0.13
	(.12)
White	0.61***
	(.21)
Income	0.20**
	(.09)
Unemployment	0.06
	(.24)
Ideology	-0.40**
	(.16)
Culture	-0.08
	(.14)
Crime Concern	0.23*
	(.13)
Undocumented Friends	-0.17*
	(.10)
Homogeneous Neighborhood	-0.12
	(.15)
TV Exposure	-0.09*
	(.05)
Newspaper	-0.04
	(.06)
Listening to News	0.05
	(.06)
Constant	-1.08***
	(.31)

*p<0.1, **p<0.05,***<0.01

The dependent variable is whether an individual correctly estimated the proportion of undocumented immigrants with a total of 341 observations.

These findings raise the question: Who was accurately estimating the undocumented immigrant population? A logistic regression analysis with the dependent variable being those who accurately estimated the proportion of undocumented immigrants. The previous variable was transformed into a new variable, which showed whether respondents exceeded the actual percentage of undocumented immigrants (coded as 1) or not (coded as 0). Individuals who responded "less than 5%" were the group that was coded as 1. The model evaluated the independent variables' ability to forecast inaccuracy instead of their effect on the degree of inaccuracy. The logistic regression analysis provided new insights by predicting the probability of respondents making incorrect estimates about undocumented immigrant numbers. The results showed that respondents who were more extroverted tended to make less accurate estimates. Women demonstrated a lower probability of making accurate estimates than men in this study, which mirrored the gender pattern observed in the linear model. The identification as White increased the probability of making accurate estimates, and higher income levels also led to better estimation accuracy. The findings supported previous research by showing that the more conservative an individual was, the less accurate their predictions were and tended to overestimate the undocumented population, which may relate to political perception research regarding ideological distortions. The presence of undocumented friends slightly reduced estimation accuracy, which may be due to the fact that personal experiences can modify how people perceive undocumented population numbers. The analysis showed that increased television exposure led to marginally less accurate estimation, possibly because media narratives create immigration scale distortions that are independent of political ideology.

Discussion and Conclusion

This research aimed to study how personality traits affect innumeracy, specifically through the analysis of the overestimation of the undocumented immigrant population in the United States. Although neuroticism, openness to experience, and agreeableness were thought to have distinct effects on misperceptions, the study found alternative results. The findings reveal that individuals who scored higher in openness to experience were a strong predictor of overestimation, while both neuroticism and agreeableness did not result in any statistical significance. These findings were contrary to my expectation that higher scores in openness would lead to better accuracy, along with better awareness of others' perspectives, because of a possible attentiveness to prominent political issues in the media.

The logistic regression analysis built upon this knowledge by showing which characteristics lead people to make more accurate population size estimates. The model revealed that White respondents who earned more money and watched television less frequently provided more accurate estimates. People who were extroverted, along with political conservatives, females, and those with undocumented friends, demonstrated lower estimation accuracy. Media exposure research confirms these findings because visual and emotional storytelling mechanisms dominate statistical understanding, especially among people who base their judgments on personal experiences (Meltzer & Schemer, 2021).

These findings expand knowledge about the relationships between political thinking and psychological characteristics. The research indicates that openness, together with other personality traits, impacts innumeracy, but they function as part of a complex system. The relationship between personality traits and demographic characteristics, together with cognitive factors and media exposure, produces complex interactions that make it difficult to establish straightforward cause-and-effect relationships.

However, the study has limitations. The Ten-Item Personality Inventory (TIPI) provides limited ability to detect subtle trait effects, particularly when analyzing complex constructs such as neuroticism. Moreover, the study used a national distribution of participants through online methods, which could have resulted in selection biases that could be addressed by including questions regarding the regions the respondents were from. Additionally, future studies should implement longer personality assessments along with experimental methods to achieve better causal effect measurement. Another possibility would be to address increased exposure to diverse or politically charged information, which should be studied as possible variables that may affect innumeracy. Moreover, more questions regarding personality traits should be added, especially regarding neuroticism.

This study reveals alternative directions for studying how personal dispositions affect incorrect factual beliefs. Future research needs to determine whether personality traits require personalized political numeracy intervention approaches and how traits affect intervention success rates. Researchers should explore the relationship between media environments and how different personality traits, such as conscientiousness and political trust, produce biased perceptions about marginalized groups. Building informed public discourse alongside equitable policy outcomes requires understanding which groups are most likely to misinterpret vital demographic information. It is clear that in the U.S., a vast number of the population is currently overestimating the undocumented immigrant population, but the main question is why.

References

Ackermann, K., & Ackermann, M. (2015). The Big Five in context: Personality, diversity and attitudes toward equal opportunities for immigrants in Switzerland. *Swiss Political Science Review*, 21(3), 396–418. https://doi.org/10.1111/spsr.12170

Alesina, A., Miano, A., & Stantcheva, S. (2022). Immigration and redistribution. *The Review of Economic Studies*, 90(1), 1–41. https://doi.org/10.1093/restud/rdac011

American Immigration Council. (2024). *Facts about immigration and the U.S. economy*. https://www.americanimmigrationcouncil.org

Barlow, D. H., Ellard, K. K., Sauer-Zavala, S., Bullis, J. R., & Carl, J. R. (2014). The origins of neuroticism. *Perspectives on Psychological Science*, 9(5), 481–496. https://doi.org/10.1177/1745691614544528

Farris, E. M., & Silber Mohamed, H. (2018). Picturing immigration: How the media criminalizes immigrants. *Politics, Groups, and Identities*, 6(4), 814–824. https://doi.org/10.1080/21565503.2017.1380053

Gallagher, C. A. (2003). Miscounting race: Explaining whites' misperceptions of the African American population. *Sociological Perspectives*, 46(3), 381–396. https://doi.org/10.1525/sop.2003.46.3.381

Goldsmith, B. (2009). Immigration myths: Why amnesty and mass immigration are bad for America. *The Social Contract Press*, 19(3), 5–12.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37(6), 504–528. https://doi.org/10.1016/S0092-6566(03)00046-1

Herda, D. (2010). How many immigrants? Foreign-born population innumeracy in Europe. *Public Opinion Quarterly*, 74(4), 674–695. https://doi.org/10.1093/poq/nfq041

Herda, D. (2013). Too many immigrants? Examining alternative forms of immigrant population innumeracy. *Sociological Perspectives*, 56(2), 211–236. https://doi.org/10.1525/sop.2013.56.2.211

Herda, D. (2024). Miscounting immigrants in South Africa: Understanding misperceptions in the immigrant population innumeracy capital of the world. *South African Review of Sociology*, 54(1), 100–118. https://doi.org/10.1080/21528586.2024.2349102

Hilbig, B. E., Glöckner, A., & Zettler, I. (2014). Personality and prosocial behavior: Linking basic traits and social value orientations. *Journal of Personality and Social Psychology*, 107(3), 529–539. https://doi.org/10.1037/a0036074

Hannuschke, M., Hoenig, M. K., & Heil, S. (2019). Personality and opposition to immigration: Empirical evidence from Germany. *European Political Science Review*, 11(2), 217–236. https://doi.org/10.1017/S175577391800031X

Kosic, A., Mannetti, L., & Livi, S. (2005). Social categorization and internalization of discriminatory attitudes: The role of personal and normative factors. *International Journal of Intercultural Relations*, 29(6), 597–619. https://doi.org/10.1016/j.ijintrel.2005.06.004

Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., & Wood, S. L. (1995). With malice toward some: How people make civil liberties judgments. *Cambridge University Press*.

Meltzer, C. E., & Schemer, C. (2021). Media trust and the mediating role of perceived media bias: How ideological homophily shapes trust in political communication. *Mass Communication and Society*, 24(1), 57–80. https://doi.org/10.1080/15205436.2020.1796426

Migration Policy Institute. (2024). *Data Hub: Unauthorized immigrant population*. https://www.migrationpolicy.org/data/unauthorized-immigrant-population

Paquet, C., & Lawlor, A. (2022). Media effects on immigration attitudes: The importance of exposure frequency and media type. *International Journal of Public Opinion Research*, 34(3), 1–14. https://doi.org/10.1093/ijpor/edac002\

Pew Research Center. (2024). *Unauthorized immigrant population trends*. https://www.pewresearch.org

Schlueter, E., & Davidov, E. (2013). Contextual sources of perceived group threat: Negative immigration-related news reports, immigrant group size and their interaction, Spain 1996–2007. *European Sociological Review*, 29(2), 179–191. https://doi.org/10.1093/esr/jcr054

Sigelman, L., & Niemi, R. G. (2001). Innumeracy about minority populations. *Public Opinion Quarterly*, 65(1), 86–94. https://doi.org/10.1086/320037

Silvia, P. J., & Christensen, A. P. (2020). Looking up at the curious personality: Individual differences in curiosity and openness to experience. *Current Opinion in Behavioral Sciences*, 35, 1–6. https://doi.org/10.1016/j.cobeha.2020.05.013

Soto, C. J. (2018). Big Five personality traits. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.), *The SAGE encyclopedia of lifespan human development* (pp. 240–241). Sage.

Statista. (2025). Countries with most immigrants worldwide. https://www.statista.com/statistics/1378084/migrants-stock-world-highest-population/

CALL FOR SUBMISSIONS

We invite student researchers submit their original research, policy analyses, book reviews, and essays to CURJ. Join us in advancing the field of political science and contributing to informed decision-making and societal progress. Thank you for considering the Cook Undergraduate Research Journal as a platform to share your significant contributions to the field!

Sincerely,

The Cook Undergraduate Research
Journal Editorial Board