

Why Anxious People Lean to the Left on Economic Policy

Personality, Social Exclusion, and Redistribution*

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Abstract

Liberals experience more distress than conservatives. Why? We offer a novel explanation, the social support hypothesis. Maintaining social support and avoiding exclusion are basic human motivations, but people differ in their sensitivity to the threat of social exclusion. Among people high in the personality trait neuroticism, exclusion easily triggers feelings of vulnerability and neediness. The social support hypothesis translates this to politics. Concerned with their own vulnerability, we find that neurotic people prefer policies of care—social welfare and redistribution—but not other left-wing policies. Specifically, it is anxiety—the facet of neuroticism tapping sensitivity to social threats—that drives this link. And it is only for people experiencing exclusion that anxiety predicts support for social welfare. Our results come from two experiments and four representative surveys across two continents. They help to resolve the puzzle of liberal distress while providing a new template for research on personality and politics.

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1 Introduction

Right-wing beliefs function as a salve for people who are chronically anxious and fearful, at least according to one of the oldest and most influential theories in political psychology (Fromm 1947; Jost et al. 2003; McClosky 1958; Reich 1946[1933]; Wilson 1973). Yet recent research shows that liberals, not conservatives, are more prone to negative emotions (Gimbrone et al. 2022; Helminen, Elovainio, and Jokela 2022). The link between mental health and ideology has generated much interest, sending journalists and pundits scrambling to figure out why liberals are so “depressed, anxious, or otherwise neurotic compared to conservatives” (al Gharbi 2023). Between January 2021 and January 2024, research on this topic was summarized and debated over 30 times in newspapers, magazines, and blogs (Table A1). The New York Times alone published 4 op-eds debating the significance of liberal distress, drawing passionate rejoinders from its readers (New York Times 2023).

While media coverage of the link between left-wing ideology and distress is new, the finding itself is not. For nearly two decades, researchers have consistently found that people high in neuroticism—a personality trait characterized by anxiety and emotional volatility—are more likely to support left-wing economic policies and to vote for parties that advocate redistribution (Aidt and Rauh 2018; Bakker 2017; Bakker and Lelkes 2018; Barbaranelli et al. 2007; Fatke 2017; Gerber et al. 2010, 2011, 2012; Mondak 2010; Mondak and Halperin 2008; Morton, Tyran, and Wengström 2011; Tepe and Vanhuysse 2020, see also Helminen, Elovainio, and Jokela 2022). In fact, political scientists observed this link in semi-structured interviews as early as the 1960s, leading some to propose that left-wing politics helps to satisfy people’s psychological needs (Lane 1965; Rothman and Lichter 1978). Yet, although political scientists have long observed this link, there is little consensus on why it exists.

Given renewed interest in the link between ideology and negative emotions, we think the time is right to refine our understanding of what drives this relationship. We propose the social support hypothesis, which argues that one reason neuroticism is linked to politics is because neurotic people are more sensitive to social exclusion and therefore more likely to feel needy and vulnerable. These feelings, in turn, cause people to favor policies associated with care and provisioning, such as redistribution. Notably, the social support hypothesis runs counter to the influential motivated social cognition theory of ideology, which predicts that fearful people should gravitate toward right-wing ideology in capitalist societies (Jost et al. 2003). Despite this theory’s popularity, we argue that the social support hypothesis is better able to

explain observed relationships between personality and economic attitudes.

Our hypothesis helps to address another surprising finding: Despite facing very different sets of risks and incentives, rich people and poor people both tend to embrace redistribution when they are high in neuroticism and reject it when they are low in neuroticism (Bakker 2017). This equivalence is difficult to reconcile with models of redistribution from political economy, which suggest that poorer people should generally want more redistribution (Meltzer and Richard 1981; Romer 1975; Rueda and Stegmueller 2019). However, the disconnect makes sense if we acknowledge that modern citizens interpret politics using intuitions that evolved for the small-scale world of our foraging ancestors (Aarøe and Petersen 2013, 2014; Hansen 2019). Humans have traditionally relied on our communities to survive health crises and food shortages, and this history has attuned our minds to social threats like exclusion and rejection (Bailey 1991; Kaplan et al. 2000; Sugiyama 2004a,b; Sugiyama and Chacon 2000). As a result, people living in modern environments often use social cues rather than finances to infer whether they will benefit from redistribution—especially when they are high in neuroticism.

Below we connect the politics of redistribution to theories about personality, evolution, and politics (Bakker 2023; Petersen 2023). First, although neuroticism captures both anxiety and emotional volatility, we show that it is primarily anxiety that predicts support for left-wing economic policies (but not for most social policies). This is because anxiety, but not volatility, is related to concerns about exclusion. Second, we show that anxiety’s predictive power is on par with, if not greater than, measures of respondents’ material security. Third, we show that the link between anxiety and left-wing economics is strongest among people who currently feel excluded or have little social support. Our results come from four representative surveys in the US and the Netherlands and two original experiments, totaling nearly 18,000 people.

In closing, we discuss how our findings may help explain mental health trends among liberals. We also discuss what our findings mean for two long-running debates in political science: how anxiety shapes political attitudes, and how, if at all, self-interest shapes voters’ support for redistribution. Lastly, we explain how our approach can be used to unravel other relationships between personality traits and political behaviors.

2 What is Neuroticism For?

Neuroticism is a stable individual difference defined by “negative emotionality, such as feeling anxious, nervous, sad, and tense” (John and Srivastava 1999, 121). It is often

measured by asking people whether they would characterize themselves as “anxious” and “easily upset.” But what is neuroticism, beyond differences in how people respond to surveys? By understanding the underlying psychology, we can make better predictions about how personality shapes people’s political behavior (Lukaszewski 2021; Lukaszewski et al. 2020). An initial answer comes from work on personality in political science (Gerber et al. 2010). These authors argue that neurotic people are “more anxious and worry prone,” which explains why they are “more likely to embrace liberal economic policies” that would soften the blow of a job loss and other economic vicissitudes (Gerber et al. 2010, 114). But if neurotic people are generally worry-prone, one might also expect them to favor specific policies related to military threats and terrorism—obvious topics of worry. In fact, neuroticism does not consistently predict people’s views on national security (Gravelle, Reifler, and Scotto 2020; Mondak 2010). This suggests that something more specific than worry is driving the link between neuroticism and economic attitudes. One clue comes from the finding that that neurotic people are especially attuned to social threats, especially social exclusion—being rejected or shunned (Denissen and Penke 2008; Gunthert, Cohen, and Armeli 1999; Nezlek et al. 2012).

It is not obvious that people who are prone to negative emotions should be especially sensitive to social exclusion. There are many kinds of threats - natural disasters, wild animals, food poisoning—that are deadlier for modern humans than rejection. To understand why rejection hurts so much, we must understand our species’ evolution. All animals possess neural systems for managing threats, and humans experience the activation of this system as anxiety (Gray and McNaughton 2000). But humans differ from other animals in the threats we have typically faced. More than other mammals, humans evolved to live in complex groups (Dunbar 1996). A major benefit of this is that in times of need, we could turn to our communities for help. Yet our reliance on our communities also made us uniquely vulnerable to social exclusion. Our species evolved in small bands of foragers with little ability to store resources for emergencies (Kelly 1995). When our ancestors suffered misfortune—*injury, illness, or just bad luck foraging*—they could not go to the fridge or an ATM. They relied on their communities for care. If group members were unwilling to help, a broken bone or a fever could spell death.

Studies of contemporary foraging groups illustrate the challenges that our species faced during its evolution. Among the Shiwiar, a forager-horticulturalist group in the Ecuadorian Amazon, about 65% of the adults would have already died had they not been supported by the community during hardships (Sugiyama 2004a,b). Heavy reliance on social support to survive health emergencies is also documented among the Ache foragers of Paraguay (Kaplan et al. 2000). Among the Efe of Africa,

temporary disability prevented the men from foraging so often it would be like a modern office worker calling in sick one day a week, every week (Bailey 1991). The same is true of the Yora of Peru, where men were unable to hunt due to disability on 10% of days (Sugiyama and Chacon 2000). Without aid from the community, these men and their families would have had difficulty surviving.

Given that social support was the difference between life and death for our ancestors, it's likely that our minds evolved psychological abilities to maintain support and avoid exclusion. Consistent with this expectation, psychologists have found that our minds possess an early-warning system that looks for cues of rejection and responds by activating parts of the brain's pain network associated with anxiety and distress (Eisenberger 2013; Kross et al. 2011; MacDonald and Leary 2005). The outputs of this system—feelings like helplessness, vulnerability, and impending harm—are unpleasant, but they would have helped our ancestors by warning them of potential exclusion and driving them to recruit support (Leary and Baumeister 2000; Spoor and Williams 2007). This early-warning system is especially reactive and intense in neurotic people, making them particularly likely to feel helpless and needy when they think they have been rejected (Denissen and Penke 2008; Gunthert, Cohen, and Armeli 1999; Nezlek et al. 2012).

Importantly for our hypothesis, the overall trait of neuroticism, as traditionally measured, is composed of at least two distinct facets (which likely derive from two related but somewhat independent brain systems; DeYoung 2010; Gray and McNaughton 2000). One major facet of neuroticism picks up on differences in the system that generates anxiety and distress; this facet, called anxiety, shapes whether people feel vulnerable when threatened and is implicated in the social support hypothesis (Bainbridge, Ludeke, and Smillie 2022). The other facet picks up on differences in reactive anger and mood swings; this facet, called emotional volatility, is unrelated to whether people feel vulnerable (DeYoung 2010). Because anxiety, but not volatility, indexes how easily people feel insecure and needy in response to social exclusion, we expect the anxiety facet but not the volatility facet to predict people's views about economics.

Above we took for granted that the tuning of evolved psychological systems can differ from person to person, producing stable traits like neuroticism and its facets anxiety and volatility. But why, if managing social threats was so important for survival, is this system so much more reactive in some people than others (Bleidorn et al. 2022)? There might initially appear to be a tension between describing anxiety as a universal, evolved psychological mechanism and as a heritable individual difference. But such a tension is likely illusory (Lopez and McDermott 2012). People differ genetically on most traits because our genomes are constantly mutating. These mu-

tations introduce small, probabilistic differences in how people’s brains develop which may then be inherited by their children (Kondrashov 2017). Beyond genes, randomness in development is also important. Even animals with identical genomes raised in identical environments develop differently due to inherent randomness in how cells translate the genetic code. The resulting differences are often just as stable as differences attributable to genes (Mitchell 2018). For neuroticism specifically, studies of adoptees, twins, and their families find that variation in the trait is mostly due to genetic differences and randomness (Boomsma et al. 2018; Matteson, McGue, and Iacono 2013). Thus, even traits that were important for human survival—including feeling vulnerable when excluded—develop differently in different people (Tooby and Cosmides 1990).

3 Connecting Neuroticism to the Politics of Redistribution

This psychology of inclusion and exclusion evolved to operate in a world few modern humans inhabit. For our ancestors, exclusion meant that you would soon be needy and helpless. With the inventions of the refrigerator and the ATM, exclusion no longer carries such severe consequences. Yet, as Aarøe and Petersen explain, “individuals’ representations of many culturally modern phenomena are shaped by mental programs that evolved to process evolutionarily recurrent equivalents” (2013, 2551). This leads to a key premise of our hypothesis: When modern people reason about economic policy, they often use intuitions designed for reasoning about care and sharing within small foraging bands (Delton et al. 2018). Consider the finding that people argue for more redistribution when they are hungry (Aarøe and Petersen 2013; Petersen et al. 2014). If you live in a foraging community with friends and family, it makes sense to advocate for sharing when hungry—your arguments might actually get you more food. Such an intuition seems irrational in a modern state—your individual opinion is largely irrelevant and, regardless, policies change too slowly to solve your momentary hunger. Nonetheless, evolved intuitions may lead neurotic people to respond to cues of exclusion by supporting government policies that provide care and resources.

A countervailing force, however, is that debates over economic policy are often technical and dry compared to debates over social policies like abortion and same-sex marriage. Because of this complexity citizens may have difficulty connecting economic policy to their own needs and predispositions—laypeople may not always interpret these debates using evolved intuitions about mutual aid. Indeed, people

who are politically engaged can more easily connect their interests and values to economic policy (Federico and Malka 2018). Thus, a lack political engagement may limit the extent to which feeling vulnerable pushes people to the left on economic policy; people may need to be familiar with the way that politicians talk about redistribution and welfare before they begin to perceive these programs as “evolutionarily recurrent equivalents” of caring and sharing in small groups (Aarøe and Petersen 2013).

In sum, the social support hypothesis explains when and why neurotic people prefer redistribution according to the following logic:

1. When anxious, people feel needy and try to secure care and provisioning.
2. Because humans evolved in ecologies where social support and not money was a key source of material security, our anxiety system is selectively triggered by cues of exclusion.
3. Because people often interpret modern politics with evolved intuitions, people with sensitive systems for managing social threats—those high in neuroticism, specifically its anxiety facet—will advocate for government policies that provide care and provisioning for the vulnerable, particularly when they feel excluded.
4. The link between anxiety and left-wing economics might be limited to people who are politically engaged.

We test the social support hypothesis using four representative datasets from the US and the Netherlands and two original experiments. First, we show that dispositionally anxious people express more support for redistribution and social welfare programs, but not for left-wing policies with less connection to care and resources, like legalizing same-sex marriage and easing restrictions on immigration. We also expand on previous analyses, which did not consider other sources of vulnerability. We do so by controlling for multiple sources of material security, including income, wealth (proxied by homeownership), job loss, and health insurance. We then compare the predictive power of these variables with anxiety. These controls help to rule out the possibility that anxiety is confounded with economic hardship. They also allow us to see how anxiety compares with variables that are often thought to shape economic attitudes.

Second, we directly compare the power of neuroticism’s facets of anxiety and volatility to predict people’s views on redistribution. According to the social support hypothesis, of the two facets anxiety should primarily drive whether people support

left-wing economic policy because only anxiety reflects how sensitive people are to exclusion.

Third, we test whether it is specifically anxious people who currently feel excluded who support left-wing economic policy. Remember that anxiety is triggered by an early-warning system that scans for threats, especially exclusion and injury. For anxious people, this alarm is more easily triggered. But being more easily triggered does not mean that it is always on and blaring. Consider that if a fire alarm is sensitive, it's not that its siren is continuously ringing. Instead, it takes fewer smoke particles to set it off. Similarly, neurotic people do not feel anxiety continuously. Instead, their anxiety should be more easily triggered by signs of exclusion. We test this in two ways. As one method we use existing datasets to test whether it is people who are both anxious and who have little social support who want more redistribution. As another method, we use original experiments. While we cannot manipulate people's personalities, we can manipulate social exclusion (Wolf et al. 2015). We simulate exclusion by having subjects write a brief profile that is posted in a (fake) online group. We then manipulate the number of likes their profile receives from other group members. It should be among rejected people—those who receive few likes—that anxiety most matters for predicting whether they support redistribution.

Finally, we test whether any links between anxiety and redistribution were confined to the politically engaged. Unlike the other predictions derived from the social support hypothesis, which were robustly supported in our results, the effect of political engagement was inconsistent across datasets. This suggests that if engagement matters for the anxiety–redistribution link, the real effect is not large. This points to the power of evolved intuitions involving exclusion, vulnerability, and care: Regardless of their political engagement, people easily connect these ideas to what might seem to be sterile economic policy.

4 Data and Methods

4.1 Data

We used data from four nationally representative surveys: the American National Election Studies (ANES); the Cooperative Election Study (CES; formerly the Cooperative Congressional Election Study [CCES]); The American Panel Survey (TAPS); and the Longitudinal Internet studies for the Social Sciences (LISS). The first three are US samples; LISS is a Dutch sample. We searched for surveys having measures of personality, political attitudes, personal economic security, and perceptions of social

exclusion. Most had all four; the ANES is missing only perceptions of exclusion. We also ran original experiments with two online convenience samples in the US using CloudResearch (Litman, Robinson, and Abberbock 2017). See Table 1 and Appendix B for information on each sample.

Table 1: Overview of Datasets

Sample	N	Econ Attitudes	Anxiety	Social Exclusion	Appendices
<i>Nationally Representative Samples</i>					
United States					
ANES 2012	4,743	8 Items	1 Item		B.1
ANES 2016	3,285				
CCES 2016	2,082	3 Items	1 Item	Facebook Friends	B.2
CCES 2018	752				
CES 2020	1,501				
TAPS 2013	995	6 Items	2 Items	Self-report	B.3
Netherlands					
LISS 2008	3,108	1 Item	4 Items	Self-report	B.4
<i>Convenience Samples</i>					
United States					
CloudResearch 2022	378	4 Items	3 Items	Experiment	B.5
CloudResearch 2023	913				

Note: In TAPS, we average anxiety items from two back-to-back administrations of the TIPI to increase reliability ($r = .57$, $p < .001$). Sample sizes reflect the number of complete cases in the regressions reported in Figs. 2 and 3. Note we drop additional cases when the social exclusion variables are included (see Appendix C).

4.2 Measuring Personality and Economic Preferences

To measure personality, we used scales based on the Big Five taxonomy, which organizes personality into traits of neuroticism, agreeableness, extraversion, conscientiousness, and openness to experience (John and Srivastava 1999). These scales ask respondents to rate how well a series of adjectives and phrases describe themselves (see Table 2 and Appendix B). In the ANES, CES, and TAPS, we used the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, and Swann Jr. 2003); in LISS, we used the International Personality Item Pool inventory (IPIP; Goldberg et al. 2006); and in the CloudResearch samples, we used the Big Five Aspects Scale (BFAS; DeYoung, Quilty, and Peterson 2007). These inventories were not designed to measure specific facets of the Big Five traits like anxiety. However, the IPIP and BFAS both draw from a group of items that psychologists have validated for measuring these facets (Goldberg 1999; Johnson 2014; Maples et al. 2014). Therefore, we constructed

anxiety and volatility scales in LISS and CloudResearch following the assignment of items to facets recommended in these studies (see Table 2).¹ The remaining datasets used the TIPI, which has only two total items for measuring neuroticism (as with the other four traits). This precluded constructing scales for each facet. Instead, in these samples anxiety and volatility were each measured by a single, face-valid item (see Table 2). In TAPS, we averaged the same anxiety items from two back-to-back administrations of the TIPI to increase reliability ($r = .57$, $p < .001$). We reverse-scored items where necessary, averaged them, and then rescaled to create measures of anxiety, volatility, and each of the other Big Five personality traits that each ranged from 0 to 1.

To measure political attitudes, we used a variety of economic and non-economic policy items, as well as items that ask about symbolic ideology. In the US samples, we measured symbolic ideology using respondents' self-placement on a 7-point scale ranging from "extremely liberal" to "extremely conservative"; in the Dutch sample, we used an 11-point scale ranging from "left" to "right." We coded all items so that higher values correspond to more liberal/left-wing attitudes and rescaled them to range from 0 to 1.

Although we initially look at individual policy attitudes, we later use summary measures of economic attitudes by averaging across the items shown in Fig. 1 (Anscombe, Rodden, and Snyder 2008). In TAPS, we used only the May 2013 items (marked with asterisks) to construct our measure of economic ideology; because TAPS's items are spread across two waves (May and July), using them all would force us to drop over a hundred respondents. Complete wordings are in Appendix B and short descriptions are in Fig. 1.

4.3 Analysis Strategy

In the ANES, CES, and CloudResearch samples, the same items are used to measure key variables across multiple waves. Therefore, within each survey, we analyzed the data of respondents from all waves simultaneously using hierarchical linear models with random intercepts for survey wave. This increases the precision of our estimates while allowing for differences in means between waves. We estimated ordinary least squares (OLS) models for the LISS and TAPS datasets.

¹The BFAS was designed to measure two aspects within each Big Five personality trait (DeYoung, Quilty, and Peterson 2007). In this taxonomy, anxiety, sadness, and introversion are grouped together under the withdrawal aspect. However, recent research suggests that anxiety and sadness are better thought of as separate predispositions (Soto and John 2017). Therefore, we only used withdrawal items validated for measuring the anxiety facet of neuroticism (Johnson 2014; Maples et al. 2014). We report pre-registered results using withdrawal in Appendix C (Tables C20 and C21).

Table 2: Items Used to Measure Neuroticism’s Facets

Facet	ANES, CES, TAPS	LISS	CloudResearch
Anxiety	<p><i>“Anxious, easily upset”</i></p>	<p>“Get stressed out easily”</p> <p>“Am easily disturbed”</p> <p>“Worry about things”</p> <p>“Am relaxed most of the time”</p>	<p>“Feel threatened easily”</p> <p>“Worry about things”</p> <p>“Am afraid of many things”</p>
Volatility	<p><i>“Calm, emotionally stable”</i></p>	<p>“Have frequent mood swings”</p> <p>“Change my mood a lot”</p> <p>“Get irritated easily”</p> <p>“Get upset easily”</p>	<p>“Get angry easily”</p> <p>“Get upset easily”</p> <p>“Change my mood a lot”</p> <p>“Am a person whose moods go up and down easily”</p> <p>“Get easily agitated”</p> <p>“Can be stirred up easily”</p> <p>“Rarely get irritated”</p> <p>“Keep my emotions under control”</p> <p>“Rarely lose my composure”</p> <p>“Am not easily annoyed”</p>

Note: Italicized items are reverse-coded. Assignment of items to anxiety and volatility facets is based on Johnson (2014) and Maples et al. (2014).

All models estimated on the four representative datasets included the following variables as predictors: age, sex, race, education, income, homeownership, employment status, health insurance, the Big Five personality traits (openness, conscientiousness, extraversion, agreeableness), and the anxiety and volatility facets of neuroticism. Models estimated on the CloudResearch data did not include homeownership, employment status, health insurance, or the other Big Five traits; due to space constraints, we only asked about basic demographics, political engagement, and neuroticism in our experiments. In all analyses, positive coefficients indicate that a variable is associated with more liberal/left-wing attitudes and negative coefficients indicate that a variable is associated with more conservative/right-wing attitudes. Unless otherwise noted, we report unstandardized regression coefficients.

5 Results

5.1 Do Anxious People Lean to the Left on Economic Policy?

The social support hypothesis predicts that, on average, anxiety-prone people will support policies that provide care and resources—namely, left-wing economic policies like social welfare programs and redistribution. In Figure 1, we show results for economic policies as dots, for non-economic policies as x’s, and for symbolic ideology as empty squares. Across all five datasets, anxious people voiced greater support

for left-wing economic policies. These include having the government provide jobs and a good standard of living; increasing spending on welfare, healthcare, and unemployment insurance; raising taxes on the wealthy; and reducing income inequality. Meanwhile, the evidence that anxiety is related to conservative attitudes is weak and inconsistent. While anxiety is related to anti-abortion attitudes in the ANES, this result fails to replicate in CES and TAPS. Overall, these results are consistent with much of the existing literature on personality and politics, which finds that neuroticism is generally related to economic attitudes (Bakker 2017; Bakker and Lelkes 2018; Gerber et al. 2011).

Contrary to expectations, Figure 1 also shows that anxiety is consistently related to left-wing stances on three non-economic issues—gun control, affirmative action, and the death penalty. In hindsight, the fact that anxious people support gun control should not be surprising; shootings are a highly salient harm often inflicted on vulnerable people, so it makes sense that anxious people would support policies designed to prevent them. A general squeamishness and aversion to harm could also explain why anxious people oppose capital punishment (Perkins et al. 2013). However, we do not have an equally straightforward explanation for why anxious people support affirmative action. It may be that any policies that aim to nurture vulnerable groups sound appealing to anxious people, even when they are not able to benefit from them. Notably, the idea that anxious people view gun control, affirmative action, and capital punishment through the same lens of harm and care that they apply to redistribution could help to explain why these three issues cluster with economic attitudes and not social attitudes in factor analytic studies (Everett 2013; Treier and Hillygus 2009; Weeden and Kurzban 2016).

Also contrary to our expectations, anxious people take significantly more liberal stances on all four non-economic policies in the CloudResearch dataset—though the strongest results are nonetheless for public healthcare and government guaranteed jobs, consistent with our hypothesis. Given that this result is unique to our CloudResearch data, we suspected that it may be due to the fact that online convenience samples tend to exhibit unusually high levels of ideological consistency (Kalmoe 2020). In Appendix C, we test this hunch by controlling for a potential cause of ideological sorting, partisan identification (Layman and Carsey 2002). As expected, anxiety remains a strong predictor of support for public healthcare and government guaranteed jobs when we control for partisan identification, whereas point estimates for three of the four non-economic attitudes drop to zero and become non-significant (Table C9).

Overall, the most consistent associations across all datasets and countries are between anxiety and support for policies that provide care and resources to vulnerable

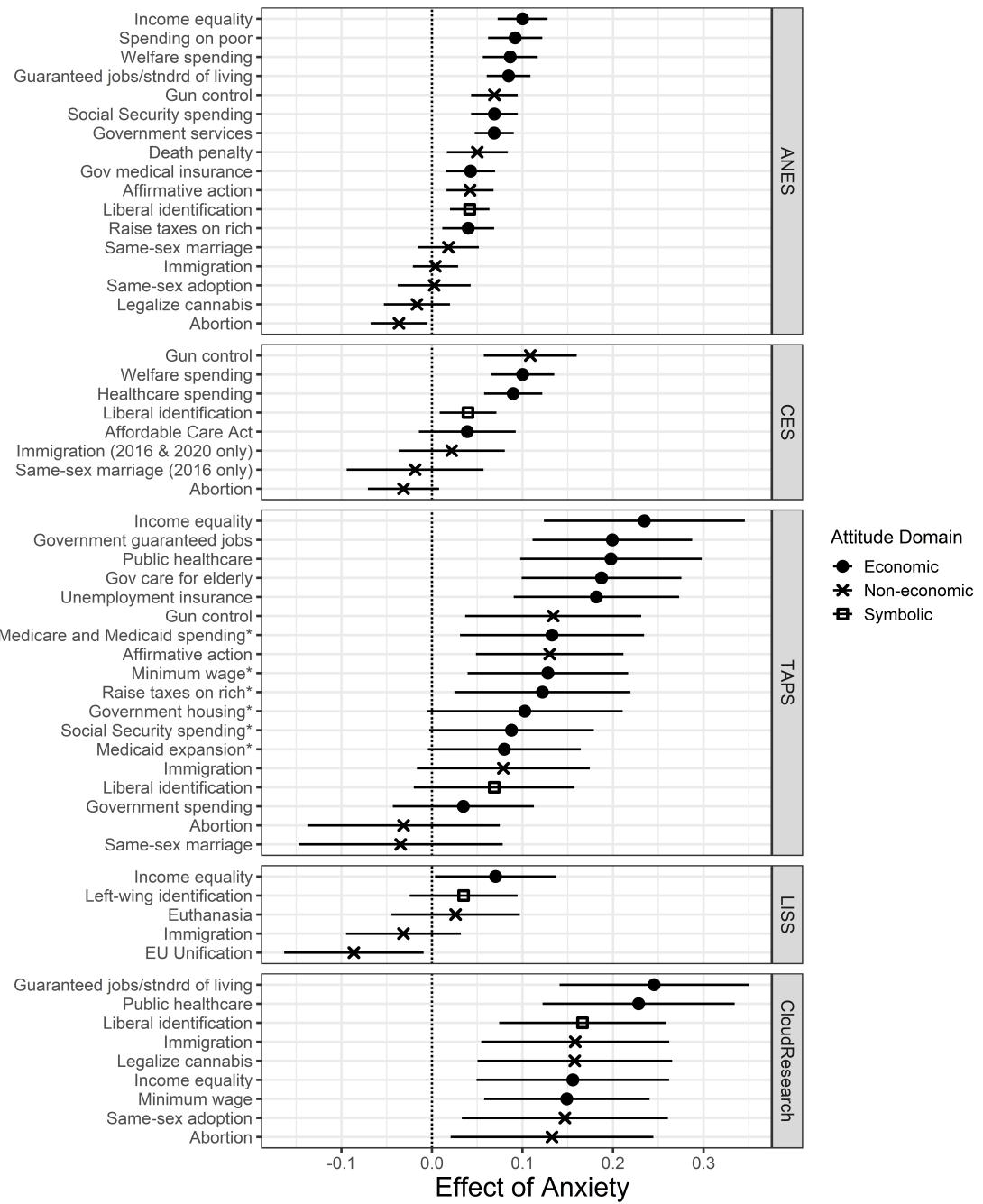


Figure 1: Anxiety Predicts Economic but Not Social Attitudes in the US and Netherlands

Note: The figure displays unstandardized regression coefficients with 95% confidence intervals. All ANES, CES, TAPS, and LISS models control for demographic variables, socioeconomic variables, and personality traits. Full regression tables and alternative specifications are in Tables C1 to C9. For TAPS policies, an asterisk indicates that the item is included in the economic attitudes scale.

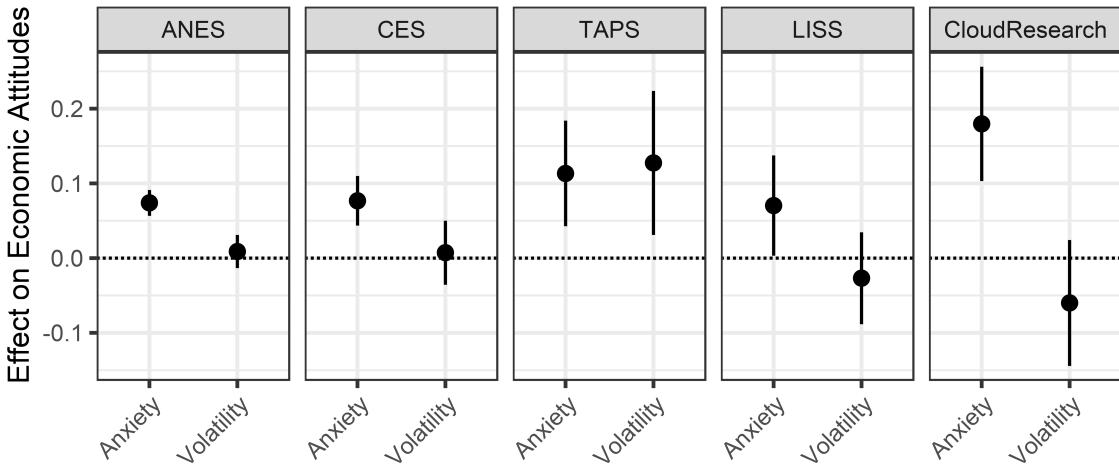


Figure 2: Anxiety, but Not Volatility, Predicts Economic Attitudes

Note: The figure displays unstandardized regression coefficients with 95% confidence intervals. All ANES, CES, TAPS, and LISS models control for demographic variables, socioeconomic variables, and personality traits. Full regression tables are in Table C10

people. And interestingly, anxiety always has a stronger relationship with at least some specific welfare state policies than with respondent's symbolic identification as a liberal versus conservative or as left-wing versus right-wing.

5.2 Do Anxious, but not Volatile, People Support Redistribution?

According to the social support hypothesis, neurotic people are drawn to left-wing economic policy because they are prone to anxiety; their tendency toward emotional volatility is irrelevant to this relationship because volatility is unrelated to how people think about care and sharing. While the effects of anxiety reported in Figure 1 already account for the effects of volatility, they do not show how important these traits are relative to each other. In Figure 2, we plot the marginal effects of anxiety and volatility from models predicting people's overall economic ideology. As these results show, anxiety matters more than volatility in 4 of our 5 datasets. Relative to the least anxious people, the most anxious are 7 to 18 points more left-wing on a 100-point scale (shifts of .26 to .68 SDs, respectively). Meanwhile, only one dataset shows a statistically significant effect of volatility, and its effect is negative in two others. Overall, the relationship between anxiety and economic attitudes is consistent and positive, whereas the relationship between volatility and economic attitudes is at

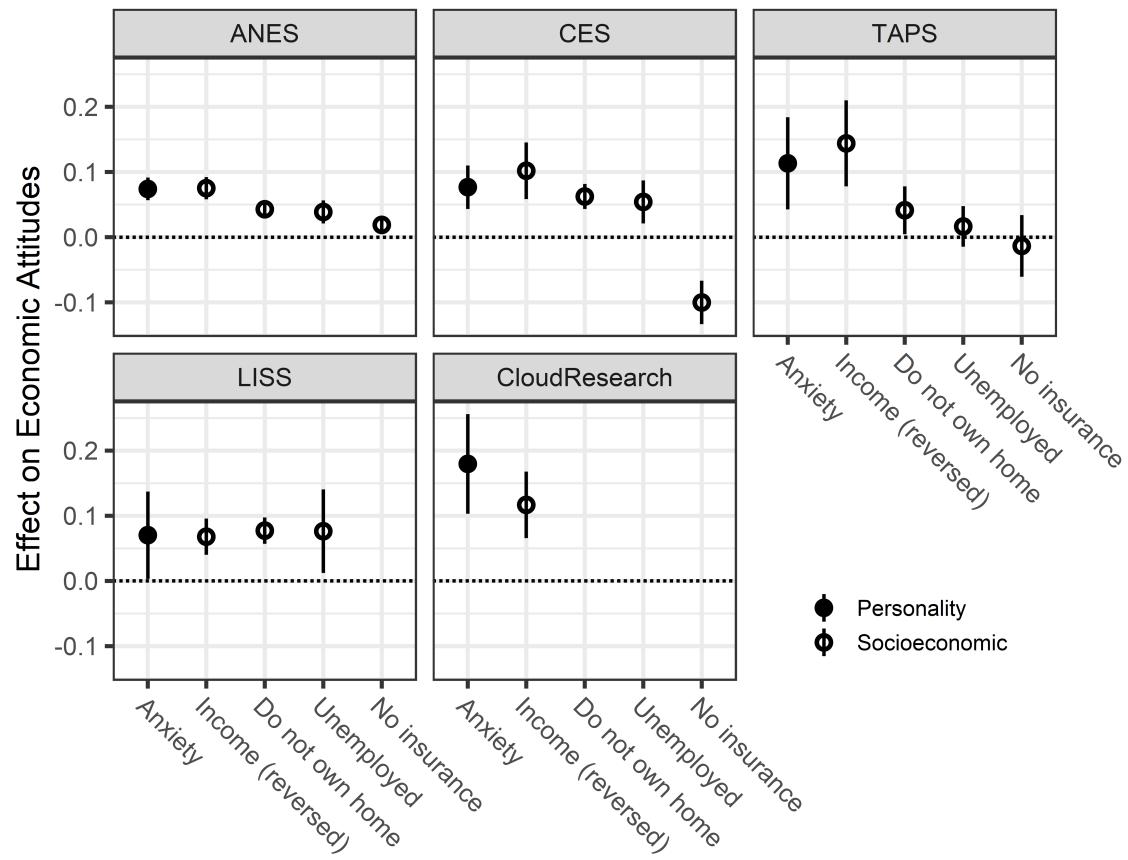


Figure 3: Anxiety Is Better than or Equal to Material Security in Predicting Economic Attitudes

Note: The figure displays unstandardized regression coefficients with 95% confidence intervals. All ANES, CES, TAPS, and LISS models control for demographic variables, socioeconomic variables, and personality traits. Full regression tables are in Table C10

best inconsistent.²

5.3 How Does Anxiety Compare to Material Insecurity?

Conventional wisdom holds that people’s economic status should loom largest when they decide whether to support redistribution (Meltzer and Richard 1981; Romer 1975; Rueda and Stegmüller 2019). In the models reported above, we included controls for income, home ownership, unemployment, and health insurance. To get a sense of how anxiety stacks up against these economic factors, we plot their marginal effects in Figure 3. As shown by the filled dots, anxiety’s predictive power is generally as strong as or stronger than homeownership, unemployment, and insurance, and is as strong as or slightly weaker than income. To put this in perspective, this means that a person’s answer to a single question about whether they are “anxious, easily upset” tells you as much about their economic attitudes as the amount of money they earn each year—a shocking equivalence.

5.4 When Do Anxious People Support Redistribution?

We showed above that anxious people lean to the left on economic policy. According to the social support hypothesis, it is primarily when people are excluded that being predisposed to anxiety should predict whether they support redistribution and social welfare. We tested this prediction in LISS, TAPS, and CES. As shown in Figure 4, this was the case: It was primarily among people who felt they had poor social support or who had fewer (online) friends that anxiety predicted left-wing economic attitudes.

Figure 4 was generated in the following way. To measure social exclusion in LISS, we reverse-scored and averaged two items: “There are enough people I can count on in case of a misfortune” and “I know a lot of people that I can fully rely on” ($r = .51$, $p < .001$). To measure social exclusion in TAPS, we reverse-scored the following item: “I have a good support system (family and friends).” In the CES, we measured social exclusion using the number of friends that respondents have on Facebook. Respondents who use Facebook (about 80% of the sample) chose from four options: 1-100 friends, 101-250 friends, 251-500 friends, and more than 500 friends. Although

²Despite anxiety being a better predictor than volatility, readers may wonder how Figure 1, which plotted individual policy items as a function of anxiety, would have looked using (a) volatility and (b) overall neuroticism as predictors. We report these results in Figs. C1 and C2. The results for overall neuroticism are similar to those for anxiety alone. In some cases the relationships are stronger, while in others they are weaker (Fig.C2). Most of the results for volatility are not statistically significant, as would be expected from the social support hypothesis.

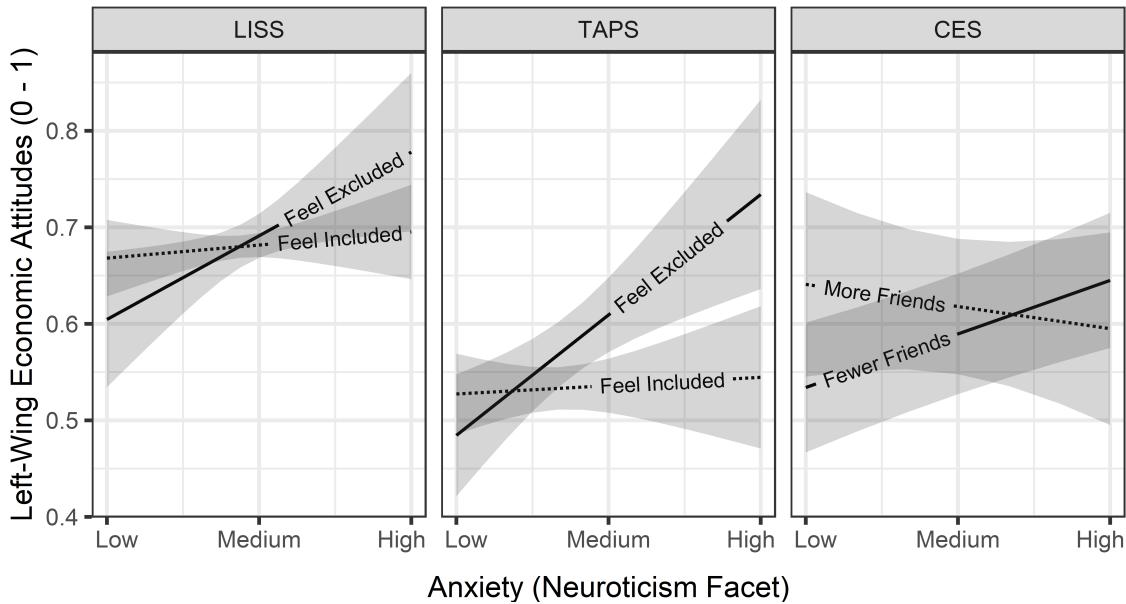


Figure 4: Anxiety Predicts Economic Attitudes Only Among People Who Feel Excluded

Note: The figure displays predicted values with 95% confidence intervals. All models control for demographic variables, socioeconomic variables, personality traits, and interactions between each personality trait and social exclusion or social network size. Full regression tables and alternative specifications are in Tables C11 and C12

Facebook friends are not the same as actual friends and family, people's sense of inclusion is strongly influenced by social media (Cingel, Carter, and Krause 2022). Moreover, a recent meta-analysis finds that people with fewer Facebook friends report lower self-esteem (Liu and Baumeister 2016), which is known to track people's feelings of inclusion and exclusion (Leary and Baumeister 2000). While researchers do not know whether the relationship between Facebook friends and self-esteem is causal, what matters for our purposes is that having fewer Facebook friends is a reasonable indicator of a person's degree of (felt) social inclusion.

To test whether exclusion activates the relationship between anxiety and economic attitudes, we add the exclusion variables and exclusion \times anxiety interaction terms to the models reported in Figs. 2 and 3. We also add interactions between exclusion and each of the other Big Five personality traits as well as volatility to ensure that the effects of anxiety are not confounded with other traits (Blackwell and Olson 2022). As shown in Fig. 4, in all three samples, it was primarily among excluded people that being anxious predicted leaning left on economics. In LISS and TAPS, among included people, anxiety did not predict economic attitudes (LISS: $b = .03$, $p = .534$; TAPS: $b = .02$, $p = .750$). But among excluded people, the most

anxious were 22 and 33 points further to the left, respectively (changes of .87 and 1.38 SDs; p's = .031 and .002). In TAPS, this interaction was significant in the fully specified model ($b = .31$, $p = .026$). In LISS, the interaction between anxiety and exclusion was not significant in the full model ($b = .20$, $p = .114$), but it was significant when we included only the direct effects of the other Big Five traits ($b = .27$, $p = .003$; the interaction in the reduced TAPS model is also significant: $b = .29$; $p = .009$; see Table C11).

The same pattern appears in the CES. Among people with more than 500 Facebook friends, anxiety does not predict economic attitudes ($b = -.05$, $p = .501$). But among people with 1-100 and 101-250 Facebook friends, the most anxious are 16 and 21 points further to the left than the least anxious, respectively (p's = .059 and .013). There is a nonsignificant trend for those with 251-500 friends, such that more anxious people lean to the left by 9 points ($p = .333$). We find similar results when we include only the direct effects of volatility and the other Big Five traits (1-100: $b = .12$, $p = .070$; 101-250: $b = .18$, $p = .013$; 251-500: $b = .10$, $p = .166$; > 500: $b = -.03$, $p = .614$; see Table C12).

To obtain more precision in the data on CES Facebook friends, we swapped out the four-category variable with a binary variable indicating whether a person has more than 500 friends versus 500 or fewer friends. These are the results graphed in the third panel of Fig. 4. As before, among people with many friends, anxiety did not predict economic attitudes ($b = -.04$, $p = .510$). But among people with fewer friends, the most anxious were 11 points further left than the least anxious (a change of .34 SDs, $p < .001$). (The interaction between anxiety and having 500 or fewer Facebook friends was significant in both the fully specified and reduced models; Full: $b = .16$, $p = .036$; Reduced: $b = .14$, $p = .026$; see Table C12). Thus, in line with the social support hypothesis, anxious people do not always favor redistribution and social welfare—instead, they turn to these policies primarily when they feel socially excluded.

One might worry that people who feel socially excluded also tend to be materially insecure. If so, then the interactions between anxiety and exclusion shown above might actually be picking up on the fact that anxiety changes how people respond to material insecurity. To address this possibility, we re-estimated the models reported in Figure 4 while controlling for interactions between anxiety and each of our socioeconomic variables. Figure 5 reveals little support for this alternative. First and importantly, even with the interactions between anxiety and material security controlled for, there are generally still strong interactions between anxiety and exclusion, as shown by the filled dots. Second, in all three datasets, anxious people lean left on economic policy to the same extent whether they are materially secure or

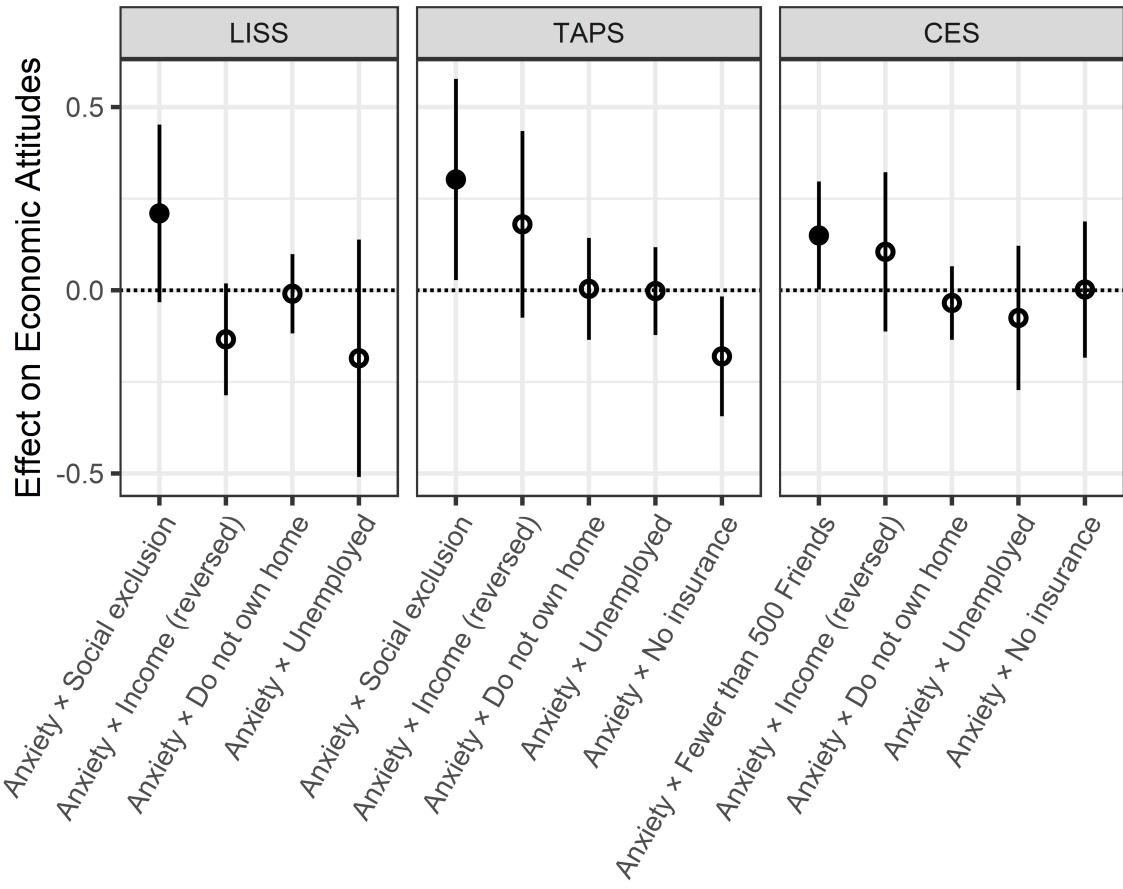


Figure 5: Social Exclusion, not Material Insecurity, Activates the Link Between Anxiety and Economic Attitudes

Note: The figure displays unstandardized regression coefficients with 95% confidence intervals. All models control for demographic variables, personality traits, and interactions between each personality trait and social exclusion or social network size. Full regression tables and alternative specifications are in Table C13

insecure; these null interactions are shown by the unfilled circles (cf. Bakker 2017). In TAPS and CES, the interactions between anxiety and exclusion remain significant (TAPS: $b = .30$, $p = .031$; CES: $b = .15$, $p = .047$). The magnitude of the anxiety interaction term is similar in our Dutch LISS sample; although it falls short of significance in the fully specified model ($b = .21$, $p = .090$), it is significant in a model that includes only the direct effects of the other Big Five traits ($b = .28$, $p = .002$). The interaction in the reduced TAPS and CES models are also significant (TAPS: $b = .29$, $p = .011$; CES: $b = .13$, $p = .037$; see Table C13).

Since the data analyzed in this section is cross-sectional, it could be the case that anxiety causes people to be or feel socially excluded, and this in turn causes them to prefer left-wing economic policies. Although reasonable, we find little evidence that anxiety determines who reports being excluded. The correlations between anxiety and perceptions of social exclusion are minimal (LISS: $r = .15$, $p < .001$; TAPS: $r = .20$, $p < .001$), and anxious people report slightly more Facebook friends than less anxious people, although this effect is also small (Spearman's $\rho = .08$, $p < .001$). Though not dispositive, these weak relationships suggest that our results are not due to anxiety causing people to be or feel excluded; instead, they suggest that anxiety-proneness shapes how people respond to exclusion when they perceive it.

5.5 Is It Really Social Exclusion? An Experiment

The previous results measured people's networks and feelings of exclusion. This leaves open an alternative hypothesis: Perhaps people logically reason that their social connections are sources of material support to fall back on in an emergency—a place to sleep, a meal to eat, or money to borrow. If so, then anxious people may be responding rationally to the prospect of losing material support and not to the exclusion itself. In contrast, according to the social support hypothesis, the reason why anxious people seek government assistance when excluded is because of an evolved sensitivity to cues of exclusion. In ancestral environments, exclusion and a loss of resources were necessarily connected: The only people in a position to reject us were those whom we knew personally and who could actually help us. But in modern environments, exclusion can be decoupled from tangible help. For instance, strangers on social media can reject us, but they would never have been sources of food or shelter in any event. Thus, due to the evolved connection between rejection and deprivation, rejection by strangers can lead people to feel vulnerable and to seek alternative ways to buffer themselves in times of need—even though such a connection is not strictly rational.

To discriminate between these possibilities, we fielded two experiments. We ma-

nipulated exclusion in a way that could not rationally be connected to expectations of receiving material support. We did this by simulating ostracism in an online forum. The ostracizers were anonymous others whom participants had no chance of meeting in real life (Wolf et al. 2015). According to the social support hypothesis, people excluded by anonymous strangers should react similarly to people excluded in real life: When excluded, anxious people should favor left-wing economic policies; when included, there should be less of a connection between anxiety and economic attitudes. According to the alternative hypothesis, rejection by strangers should not matter and we should see a pattern different from the ones in previous datasets: Anxious people might lean left on economics, but whether they do so will be unaffected by whether they are included or excluded.

5.5.1 Experimental Methods

The two experiments were identical, were fielded using CloudResearch, and were pre-registered. The only difference was that the first was fielded in June 2022 ($n = 378$) and the second in January 2023 ($n = 913$).³ Participants first provided demographics, completed a neuroticism questionnaire, and reported their political engagement. They then went to a “discussion portal.” We deceived them by telling them that we were studying whether likeable people are seen as better communicators. Participants built a profile by entering their first name, picking an artificially generated face, and writing a short biography (to preserve anonymity, none of these were recorded). Participants’ profiles then appeared alongside eleven fake profiles. These are shown in Fig. 6; screenshots of the full experiment are shown in Appendix D. Participants read their partners’ profiles and clicked “like” on ones they liked. Counters showed each profile’s like-count. Profiles were displayed for three minutes as the like-counts increased. Participants were randomized into one of two conditions. In the inclusion condition, participants received six likes, the average number received by the other profiles (not counting likes given by the participants). In the exclusion condition, participants received one like, the fewest across all profiles. Finally, participants gave their opinions on economic and social policies (see Appendix B.5) and responded to an open-ended attention check. They were debriefed after completing the survey.

Despite its simplicity, this manipulation is consistently found to make people feel as if they had been rejected by a real group (Lutz and Schneider 2021; Schneider et al. 2017; Wolf et al. 2015). In this sense, “minimal exclusion” experiments like

³These sample sizes are the number of participants whose data we analyzed. Additional participants were eliminated for failing attention checks; see Appendix B.5.2. We report results including respondents who failed attention checks in Table C19

these are the flipside of minimal group experiments, where researchers sort strangers into groups based on arbitrary criteria (e.g., the outcome of a coin toss, what art people prefer; Diehl 1990). Initially, researchers intended for minimal groups to serve as mere controls against which to measure the effects of important identities like race and nationality (Tajfel 1970). But to their surprise, people placed great psychological importance on these groups—a finding that is now well-replicated (Balliet, Wu, and De Dreu 2014). If people feel a genuine sense of attachment to groups formed minutes earlier on the basis of a coin flip, it’s reasonable to expect that being excluded from arbitrary groups would also provoke powerful emotions. And this is precisely what experiments find (Hartgerink et al. 2015). In fact, people feel bad when excluded from a minimal group even if they dislike the group members (Gonsalkorale and Williams 2007). Though surprising, these results make sense from an evolutionary perspective. Any groups that our ancestors had the chance to join would have been composed of people who they would meet again—not random strangers (Krasnow et al. 2013). Therefore, it makes sense for our minds to treat any groups that we happen to be a part of as if they really mattered, even if we know analytically that they do not.

Both experiments were pre-registered (Appendix F). However, for the first experiment we did not pre-register any predictions about the moderating effect of political engagement. Thus, at a formal level, readers should consider analyses of engagement in that study as exploratory. Nonetheless, the possibility that engagement would matter was always part of our thinking. This is why it was on the short list of variables measured prior to our manipulation, which comprised only demographics, symbolic ideology, neuroticism, and political engagement. For the second experiment, we did pre-register predictions about engagement, which we describe below.

5.5.2 Experiment Results

In our first experiment, anxious people leaned to the left economically, but it did not matter whether they were included or excluded; see the top left panel of Fig. 7.⁴ Recall, however, that we suspected that people who are politically engaged might be particularly good at connecting personal motivations with policy. Thus, perhaps exclusion amplifies the link between anxiety and support for redistribution only among the politically engaged. This was the case, as shown in the bottom left panel of

⁴We pre-registered analyses using the withdrawal aspect of neuroticism, which includes anxiety, sadness, and introversion. After fielding our studies, we refined our theory to reflect that anxiety is distinct from sadness (Soto and John 2017, see our footnote 1). Therefore, we deviate from our pre-registration by using only anxiety items. We report our pre-registered analyses in Tables C20 and C21

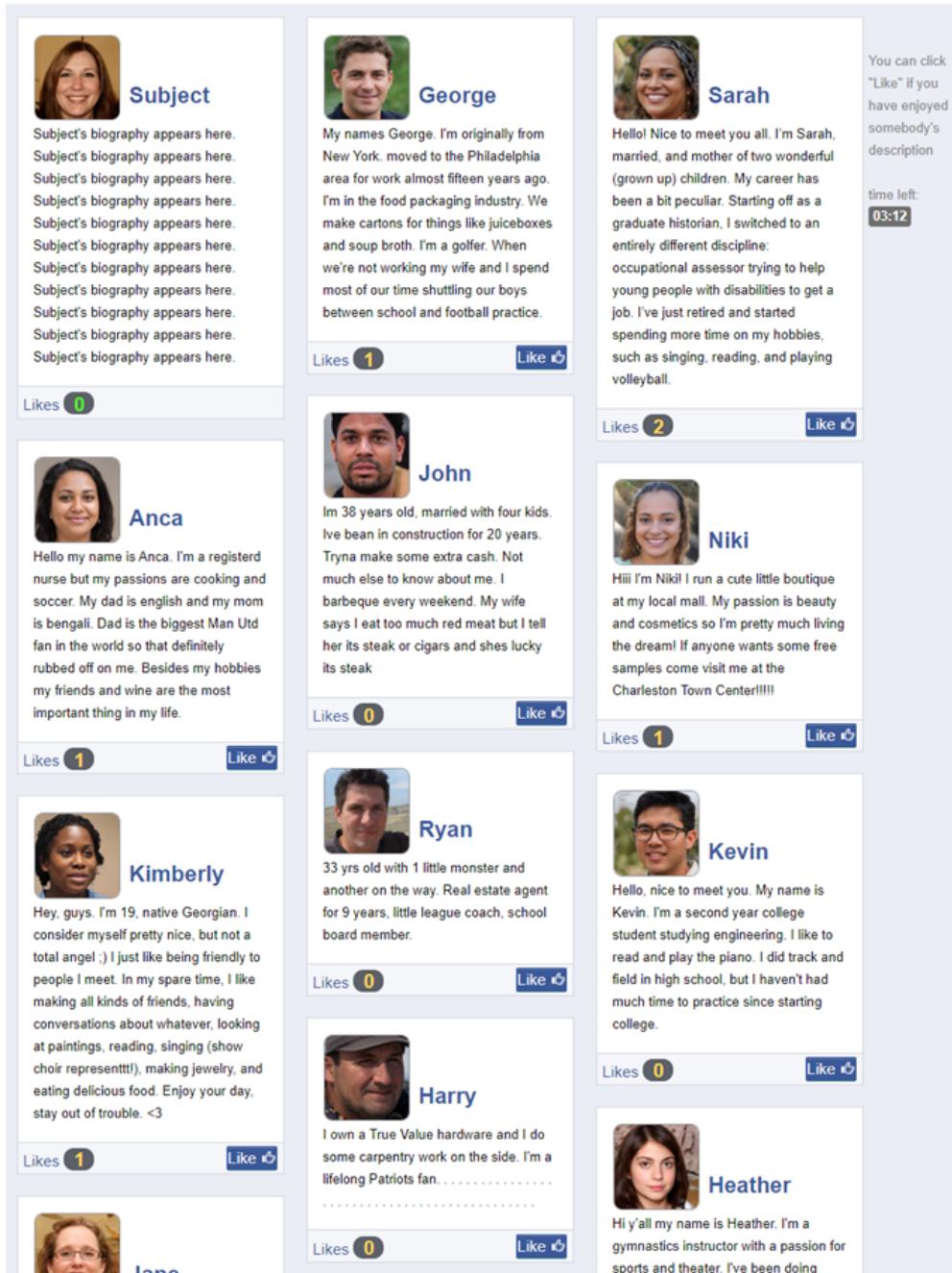


Figure 6: The Fake Profiles

Note: The subject's custom profile always appeared in the top left corner. All subjects saw identical sets of fake profiles. Each of the fake profiles received and gave a pre-determined number of likes to one another and to the subject. The subject could choose to like or not like any of the fake profiles. A zoomed out version of this image with all fake profiles, as well as images of the rest of the experiment, are in Appendix E.

Fig. 7, which plots respondents scoring above the median in political engagement. Among engaged participants who were included, anxiety did not predict economic attitudes ($b = .01$, $p = .960$). But among engaged participants who were excluded, the most anxious were 53 points further to the left on economic policy than the least anxious (a difference of 1.90 SDs; $p = .014$).⁵

Following our first experiment, we pre-registered a second experiment to replicate the three-way interaction between anxiety, exclusion, and engagement. This experiment was a direct replication, but with a sample nearly two and half times larger, giving us 80% power to detect the three-way interaction found in the first study (Baranger 2023). Here, the effect of political engagement was weaker and not statistically significant (three-way interaction: $b = .16$, $p = .490$). Instead, we found a more straightforward pattern, as shown in the top middle panel of Fig. 7: Among the excluded, anxious people leaned to the left on economics ($b = .35$, $SD = 1.34$, $p < .001$); among the included, the relationship was weaker and not statistically significant ($b = .06$, $SD = .22$, $p = .374$).

Figure 7 graphs each study separately and combined using hierarchical linear models. When combined, the interaction between anxiety and social exclusion is significant whether considering all participants or just the politically engaged (full sample: $b = .23$, $SD = .87$, $p = .003$; politically engaged: $b = .50$, $SD = 1.83$, $p = .001$; Table C16). We also find some unanticipated results. First, we find that being excluded causes respondents higher in volatility to report more economically conservative attitudes ($b = -.19$, $SD = -.73$, $p = .025$; Table C16). Though we did not predict this result, it is consistent with studies which find that anger increases economic conservatism (Kettle and Salerno 2017). Second, and contrary to expectations, we find that being excluded has a positive effect on the relationship between anxiety and social attitudes in the pooled sample ($b = .25$, $p = .001$; Table C17). Though we can only speculate, we believe that this result may be due to a weakness of our design. In our surveys, respondents always answered the economic policy questions immediately before the social policy questions. We did this to avoid priming people's political identities with potent social issues like abortion before measuring our outcome variables (Johnston and Wronski 2015). However, it is possible that people who responded to the treatment by reporting more left-wing economic atti-

⁵The three-way interaction between engagement, anxiety, and exclusion was statistically significant ($b = .84$, $SD = 3.00$, $p = .031$). However, very large sample sizes are often required to detect three-way interaction effects. Using the method developed by Baranger (2023, see also Baranger et al. 2023), we found that we only had 41% power to detect the three-way interaction effect in our first study. Therefore, it is perhaps not surprising that we did not replicate this finding in our well-powered second study ($b = .14$, $SD = .63$, $p = .490$).

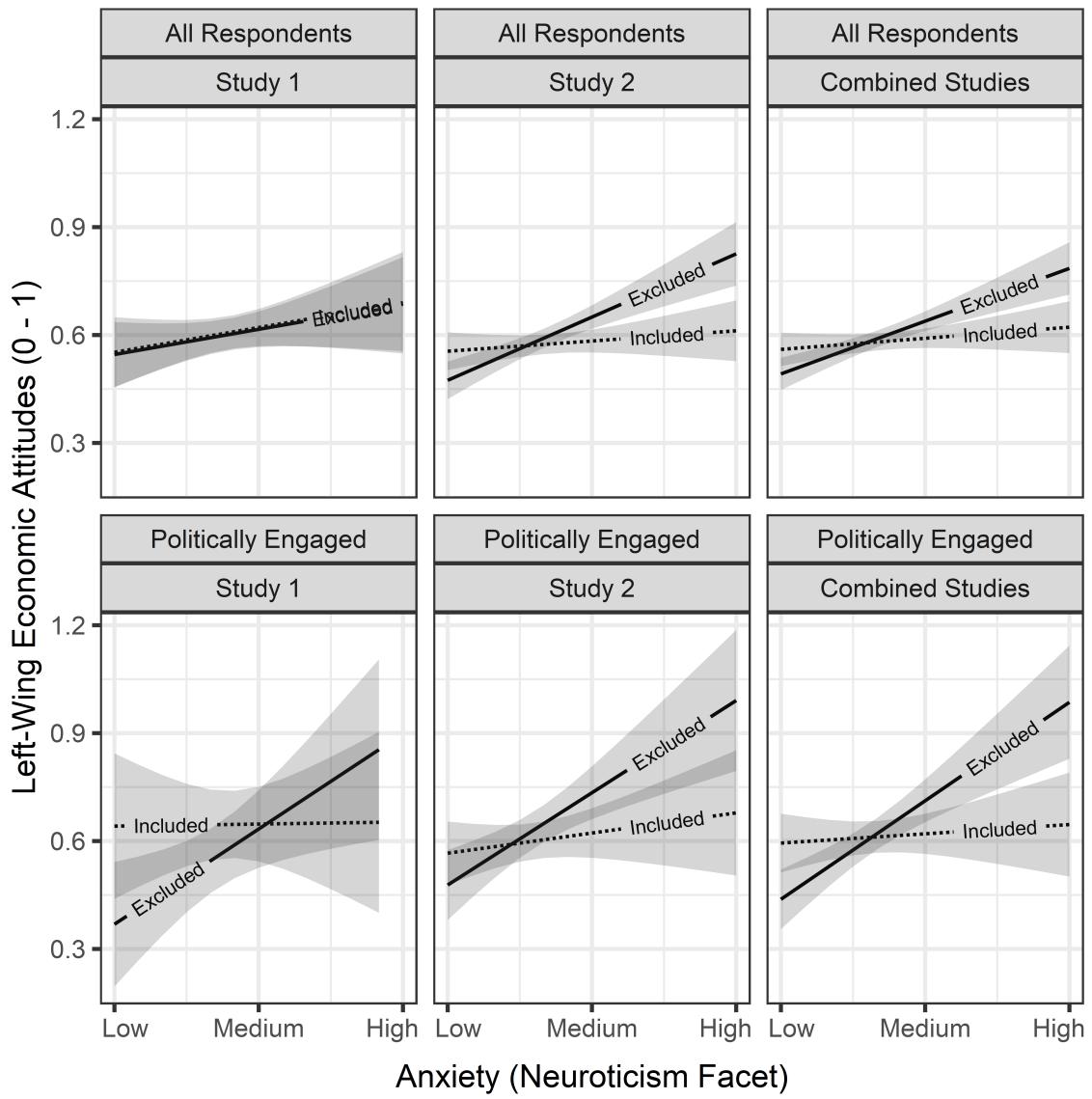


Figure 7: Experimentally Manipulated Social Exclusion Activates the Relationship Between Anxiety and Economic Attitudes

Note: The figure displays predicted values with 95% confidence intervals. All models control for demographic variables, income, volatility, and interactions between each independent variable and the binary treatment indicator. Full regression outputs and alternative specifications are in Tables C14 to C21

tudes also gave more left-wing answers to the social policies to appear ideologically consistent (Coppock and Green 2022; Groenendyk, Kimbrough, and Pickup 2023).

One might worry that our results are due to anxious subjects in the exclusion condition reporting more socially desirable political views. To test this, participants in Study 1 answered the policy questions twice—once reflecting their personal views and once reflecting the most common views of their friends and acquaintances. We then checked whether excluded, anxious people report views closer to whey they believe others hold. Contradicting the alternative hypothesis, they do not (Table C18).

In sum, our experimental results are consistent with the social support hypothesis: Among those who were excluded by strangers, anxiety predicted left-wing economic attitudes; among those included by strangers, there is little relationship between anxiety and economic attitudes. The evidence did not favor the alternative hypothesis, which held that people draw an explicit connection between being excluded and losing material support. While this alternative might predict the results from the representative samples, it predicts no role for exclusion by anonymous strangers.

We also found some evidence that for politically engaged people, the link between anxiety and redistribution is magnified. In our experiments, we found that engagement moderated the interaction between anxiety and exclusion in one sample but not in the other. In the appendix, we checked whether engagement moderated the relationship between anxiety and economic attitudes. It did, but the result was not robust to alternative specifications and emerged in only two of our five datasets (Table D1). However, we also found evidence that these null results may have been due to our use of very short anxiety scales (Fig. D1). Finally, we also checked whether engagement moderated the anxiety-exclusion interactions in our cross-sectional analyses. We found large three-way interactions in CES and LISS consistent with our experimental results, though the LISS result was not statistically significant (CES: $b = .66$, $p = .004$; LISS: $b = 1.16$, $p = .094$; see Table D2). Altogether, the effect of political engagement was inconsistent across datasets, suggesting that if the effect is real, it is not large.

6 Conclusion

Why are liberals so anxious? Pundits speculate that current events or social trends are to blame (see Table A1). Meanwhile, some academics argue that liberals experience more distress because they struggle to ignore injustices (Gimbrone et al. 2022; Napier and Jost 2008). Our results suggest that the answer is more complicated. On the one hand, anxious people lean to the left on economic issues, but not generally on social issues. This result runs contrary to the idea that liberals are anxious

because they care more about injustice; presumably, the plight of undocumented immigrants and sexual minorities are just as distressing as poverty and income inequality. Instead, our results suggest that anxious people are more likely to identify as liberal because left-wing economic policies satisfy their psychological needs for care and material security. We also found that anxiety predicted most left-wing economic attitudes better than it did calling oneself a liberal, suggesting that studies that look only at symbolic liberal-conservative identification will often underestimate the relationship between ideology and anxiety (e.g., Jost 2006; Sibley, Osborne, and Duckitt 2012). This result underlines the importance of using fine-grained measures when making claims about ideology (Feldman and Johnston 2014).

Importantly, we find that context is crucial for explaining the link between anxiety and economic attitudes. In both cross-sectional and experimental analyses, we find that anxious people embrace left-wing economic policies when they feel excluded. Recently, researchers have argued that social media use is a major cause of increasing loneliness among young people, in part because it amplifies the natural tendency to engage in social comparison and competition (Twenge et al. 2021). Thus, our results suggest that rising distress among young liberals since 2010 may be caused, in part, by feelings of rejection and alienation linked to social media use (Gimbrone et al. 2022).

Besides explaining why liberals are more anxious than conservatives, our results speak to a long-running debate over the political consequences of anxiety. One of the oldest and most influential theories in political psychology is that people adopt right-wing beliefs to assuage their worries and fears (Fromm 1947; Jost et al. 2003; Reich 1946[1933]; Wilson 1973). The seminal studies in this literature make strong claims: As children, conservatives are said to be “indecisive and vacillating, easily victimized, inhibited, fearful, self-unrevealing, adult-seeking, shy, neat, compliant, anxious when confronted by ambiguity, and fearful [sic – fearful is listed twice]” (Block and Block 2006, 741). As adults, they are “poorly integrated psychologically, anxious, often perceiving themselves as inadequate, and subject to excessive feelings of guilt” (McClosky 1958, 37-38) and characterized by “a generalized susceptibility to experiencing threat or anxiety in the face of uncertainty” (Wilson 1973, 259). Moreover, conservative beliefs are “significantly (but not completely) related to motivational concerns having to do with the psychological management of uncertainty and fear” (Jost et al. 2003, 369). Compare these sketches of putative conservatives to the adjectives that personality psychologists use to define the high end of the neuroticism continuum: anxious, easily upset, worried, afraid of many things, easily threatened. One would expect conservatives to rate themselves high on these adjectives. Our results, combined with existing research, show that they do not.

Our findings contrast especially with some predictions from motivated social cognition theory (Jost et al. 2003)—namely, that (a) fearful people support laissez-faire economics because unregulated markets stymie change and thereby provide a sense of physical security, and (b) fearful people cling to the idea that markets reward merit to avoid facing the fact that capitalism is unjust and exploitative. Indeed, these authors themselves note the tension between their theory and findings on personality and politics: “To the extent that conservatives are more generally fearful than others, one might expect that they would also exhibit higher levels of neuroticism, but this does not generally seem to be the case” (Jost et al. 2003, 362). In fact, contra the interpretation provided by the theory of motivated social cognition, one might expect those low in anxiety to be more willing to take risks and embrace the vicissitudes of unregulated market economies (Gerber et al. 2011). After all, less anxious people feel secure in their relationships, providing a fallback in case risk-taking goes wrong. Additionally, some theories of risk-taking suggest that emotionally secure people will prefer high-risk, high-reward environments to safer, more predictable environments (Nettle 2009).

Our results also further a different debate in political science: whether people’s economic attitudes are driven by pocket-book concerns. Harold Lasswell (1936) famously argued that politics is about who gets what, when, and how. Political scientists continually debate when and how people get what they want, but often take for granted that what they want is money (Weeden and Kurzban 2017). Thus, a classic hypothesis is that people who have less money or expect to earn less want redistribution, while those who have more want the government to leave them alone (Meltzer and Richard 1981; Romer 1975). Yet income, wealth, and job prospects tell us surprisingly little about people’s economic attitudes (Rueda and Stegmueller 2019). We suggest that this is partly because the human anxiety system is calibrated to an ancestral life where friends served the role that welfare states serve today. Consequently, we find that being socially excluded enhances the connection between being anxiety-prone and wanting redistribution. No such effects are observed for material insecurity, whether that is having little income or wealth, being unemployed, or lacking health insurance. Pocketbooks and bank accounts are recent inventions, but the need for social support and its attendant psychology have long been with us.

Beyond welfare state support, our theory shows how taking evolved psychology into account can explain seemingly irrational currents in public opinion. Research in political economy often starts, with good reason, with a simple theory—for instance, “people maximize money”—and uses that to predict what people want from politics. When people’s behavior deviates from these simple models, researchers add other currencies to the list of things to be maximized—“people maximize money” becomes

“people maximize money and status and meaning.” This creates a more accurate picture, but risks turning theories into ad hoc descriptions of behavior. Our approach instead starts by considering the problems our ancestors faced and what we know about how the mind solves these problems. For instance, the psychology of inclusion and exclusion is more complicated than trying to maximize inclusion. Instead, cues of exclusion activate parts of the brain’s pain network, making people feel vulnerable and motivating them to seek care and support (Leary and Baumeister 2000; MacDonald and Leary 2005; Spoor and Williams 2007). By acknowledging this complexity, we were able to make novel predictions about the link between personality and politics.

We are certainly not the first to apply personality or evolution to politics (Bakker 2023; Petersen 2023). But we think we have contributed a novel way of combining them that could be used to unravel other connections between personality and political behavior. The Big Five framework is by far the most popular approach to personality in political science (Gerber et al. 2011). Yet, a persistent criticism of the Big Five is that identifying five factors that describe how traits correlate does not reveal what personality is or how it works (Block 1995; Eysenck 1992). In contrast to the atheoretical nature of the Big Five framework, evolutionary psychologists view personality traits as differences in the tuning of universal psychological systems (Lukaszewski et al. 2020; Tooby and Cosmides 1990). Researchers can build stronger theories by linking personality traits to these systems. This is particularly helpful for designing experiments. It is difficult to manipulate someone’s personality, and research suggests that personality is mostly stable (Bleidorn et al. 2022). But if researchers understand the psychology that a trait is embedded within, then they can design manipulations that affect downstream political attitudes and behaviors in predictable ways (Lavine et al. 2002). Here, we connected the neuroticism facet of anxiety to a system designed to manage inclusion and exclusion. This same approach could be pursued with other personality traits. For instance, by connecting agreeableness to the evolved psychology of anger, political scientists can build on research linking this personality trait to populism (Bakker, Schumacher, and Rooduijn 2021; Lukaszewski et al. 2020).

In summary, this paper combines two bodies of work—research in political science linking neuroticism to political attitudes and research in psychology linking neuroticism to differences in how the brain’s anxiety system responds to social exclusion. This involved tracing connections between political science, social and personality psychology, behavioral genetics, and anthropology. Drawing on this work, we showed that sensitivity to social exclusion explains why anxious people lean left on economics. Thus, the social support hypothesis allows us to move past arguments over whether

our economic preferences are rational or irrational by presenting a third option: our economic preferences follow a logic of self-interest calibrated to an environment that no longer exists.

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Online Appendix for “Why Anxious People Lean to the Left on Economic Policy”

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A Media Coverage of the Ideological Asymmetry in Emotional Distress

Table A1: Recent articles about emotional distress among liberals

No.	Title	Source	Year
1	Personality Traits, Mental Illness, and Ideology	Psychology Today	2021a
2	The Unexpected Relationship Between Ideology and Anxiety	Psychology Today	2021b
3	Over 50% Of Liberal, White Women Under 30 Have A Mental Health Issue. Are We Worried Yet?	Evie Magazine	2021
4	Science: White Libs More Likely to Have Mental Health Problems	Washington Free Beacon	2021
5	Study: Young White Liberals More Likely to Have Mental Health Problems	Breitbart	2021
6	White Liberals More Likely to Have a Mental Health Condition	Washington Times	2021
7	Anxiety Disorder Symptoms are More Common among Those with Left-Wing Political Views in Great Britain	PsyPost	2021
8	Conservatives Are Happier Than Liberals. Discuss.	New York Times	2021
9	How Liberals Can Be Happier	New York Times	2021
10	Why Are Liberals Less Happy Than Conservatives	Institute for Family Studies	2022
11	Being Politically Conservative Doesn't Lead to Greater Happiness	The Psychologist	2022
12	Why Are Conservatives Happier Than Liberals?	RealClearScience	2022
13	Why Conservatives Are Happier Than Liberals	The Spectator	2022
14	Do Liberal Politics, LGBT Identity and Declining Mental Illness Go Together?	Daily Citizen	2022
15	Why Being Conservative Is Correlated with Higher Happiness	Tufts University Research Briefs	2023
16	How to Understand the Well-Being Gap Between Liberals and Conservatives	American Affairs	2023
17	Are Liberals Truly More Depressed than Conservatives	Northeastern Global News	2023
18	Why Are Young Liberals So Depressed?	Substack (Matt Yglesias)	2023
19	Left-Wing Writer: Young Liberals More Depressed than Young Conservatives	Breitbart	2023
20	Study Finds Young Liberals Are More Depressed Than Young Conservatives	Turning Point USA	2023
21	Why Are Young Conservatives Less Depressed?	Mere Orthodoxy	2023
22	Why the Mental Health of Liberal Girls Sank First and Fastest	Substack (Jonathan Haidt)	2023
23	Why Depression Rates Are Higher Among Liberals	Columbia Magazine	2023
24	How the Right Turned Radical and the Left Became Depressed	New York Times	2023
25	Liberals Keep Telling Young People They're Doomed—No Wonder They're So Depressed	New York Post	2023
26	Is Politics Making Kids Depressed?	Wall Street Journal	2023
27	The Self-Destructive Effects of Progressive Sadness	New York Times	2023
28	Why So Sad, Liberals? Study Shows Young Liberals More Depressed Than Conservatives	Fox News	2023
29	The Despair of Young Liberal Women	Survey Center on American Life	2023
30	How Parents' Political Views are Affecting Their Kids' Mental Health	New York Post	2023
31	Political Ideology, Religious Attendance and Mental Illness	Substack (Ryan Burge)	2024

Note: See references for additional information and URLs.

B Data and Methods

B.1 The American National Election Studies (ANES)

Dataset description: The ANES is a face-to-face and internet survey that is fielded to a national probability sample of US eligible voters before and after each presidential election. The TIPI was asked in the 2012 and 2016 ANES Time Series studies. We use items that were fielded in both the 2012 and 2016 Time Series studies to assemble our combined ANES sample.

Economic Attitudes

1. The government should take measures to reduce differences in income levels [1. Agree strongly, 2. Agree somewhat, 3. Neither agree nor disagree, 4. Disagree somewhat, 5. Disagree strongly] (Reversed)
2. Where would you place yourself on this scale, or haven't you thought much about this? [1. Government should see to a job and good standard of living ... 7. Government should let each person get ahead on their own] (Reversed)
3. Should federal spending on Social Security be increased, decreased, or kept about the same? [1. Increased, 2. Decreased, 3. Kept about the same] (Reversed; 3. coded as 0.5)
4. Should federal spending on welfare be increased, decreased, or kept about the same? [1. Increased, 2. Decreased, 3. Kept about the same] (Reversed; 3. coded as 0.5)
5. Should federal spending on aid to the poor be increased, decreased, or kept about the same? [1. Increased, 2. Decreased, 3. Kept about the same] (Reversed; 3. coded as 0.5)
6. Where would you place yourself on this scale, or haven't you thought much about this? [1. Government should provide many fewer services ... 7. Government should provide many more services]
7. Where would you place yourself on this scale, or haven't you thought much about this? [1. Government insurance plan ... 7. Private insurance plan] (Reversed)

8. Do you favor, oppose, or neither favor nor oppose increasing income taxes on people making over one million dollars per year? [1. Favor, 2. Oppose, 3. Neither favor nor oppose] (Reversed; 3. coded as 0.5)

Non-Economic Attitudes

1. Do you think gay or lesbian couples should be legally permitted to adopt children? [Yes, No] (Reversed)
2. Which comes closest to your view? [1. Gay and lesbian couples should be allowed to legally marry, 2. Gay and lesbian couples should be allowed to form civil unions but not legally marry, 3. There should be no legal recognition of a gay or lesbian couple's relationship] (Reversed)
3. There has been some discussion about abortion during recent years. Which one of the opinions on this page best agrees with your view? You can just tell me the number of the opinion you choose. [1. By law, abortion should never be permitted, 2. The law should permit abortion only in case of rape, incest, or when the woman's life is in danger, 3. The law should permit abortion for reasons other than rape, incest, or danger to the woman, 4. By law, a woman should always be able to obtain an abortion as a matter of personal choice]
4. Do you favor, oppose, or neither favor nor oppose the use of marijuana being legal? [1. Favor, 2. Oppose, 3. Neither favor nor oppose] (Reversed; 3. coded as 0.5)
5. Do you favor or oppose the death penalty for persons convicted of murder? [1. Favor, 2. Oppose, 3. Neither favor nor oppose] (Reversed; 3. coded as 0.5)
6. Do you think the federal government should make it more difficult for people to buy a gun than it is now, make it easier for people to buy a gun, or keep these rules about the same as they are now? [1. More difficult, 2. Easier, 3. Keep these rules about the same] (Reversed; 3. coded as 0.5)
7. Which comes closest to your view about what government policy should be toward unauthorized immigrants now living in the United States? You can just tell me the number of your choice. [1. Make all unauthorized immigrants felons and send them back to their home country, 2. Have a guest worker program that allows unauthorized immigrants to remain, 3. Allow unauthorized immigrants to remain in the united states with certain requirements, 4. Allow unauthorized immigrants to remain in the united states without penalties]

8. Do you favor, oppose, or neither favor nor oppose allowing universities to increase the number of black students studying at their schools by considering race along with other factors when choosing students? [1. Favor a great deal, 2. Favor moderately, 3. Favor a little. 4. Neither favor nor oppose, 5. Oppose a little, 6. Oppose moderately, 7. Oppose a great deal]

Political Engagement

1. Some people don't pay much attention to political campaigns. How about you? Would you say that you have been very much interested, somewhat interested or not much interested in the political campaigns so far this year? [very much interested, somewhat interested, or not much interested] (Reversed)
2. How often do you pay attention to what's going on in government and politics? Always, most of the time, about half the time, some of the time, or never? [Always, most of the time, about half the time, some of the time, or never] (Reversed)

B.2 The Cooperative Election Study (CES)

Dataset description: The CES is an annual internet survey administered by YouGov. Data collection is coordinated by multiple teams at different universities. Each university team is given a contract for a nationally representative sample of 1,000 respondents and is allowed to include their own questions alongside the core CES items (Anscombe and Rivers 2013). The sampling process in a given year is the same for all teams. In 2016, three CES teams included the complete TIPI in their modules—New York University (NYU; Egan 2022), the University of California, Merced (UCM; Theodoridis 2022), and the University of Notre Dame (UND; Layman 2022). The NYU team fielded the TIPI again in 2018 (Egan 2020), and both the NYU team and a team at National Cheng Kung University (NCK) fielded the TIPI in 2020 (Egan and Nagler 2022; Wang 2022).

Economic Attitudes

1. Thinking now about health care policy, would you support or oppose each of the following proposals? *Repeal the Affordable Care Act* [Support, Oppose]
2. State legislatures must make choices when making spending decisions on important state programs. Would you like your legislature to increase or decrease spending on the five areas below? *Welfare* [1. Greatly increase, 2. Slightly increase, 3. Maintain, 4. Slightly decrease, 5. Greatly decrease]
3. State legislatures must make choices when making spending decisions on important state programs. Would you like your legislature to increase or decrease spending on the five areas below? *Healthcare* [1. Greatly increase, 2. Slightly increase, 3. Maintain, 4. Slightly decrease, 5. Greatly decrease]

Non-Economic Attitudes (*Items 3 & 4 analyzed in Figure 1 but not included in scale*)

1. Do you support or oppose each of the following proposals? *Make abortions illegal in all circumstances* [Support, Oppose]
2. On the issue of gun regulation, are you for or against each of the following proposals? *Ban assault rifles* [Support, Oppose] (Reversed)
3. Do you favor or oppose allowing gays and lesbians to marry legally? [Support, Oppose] (Reversed)

4. What do you think the U.S. government should do about immigration? *Increase the number of border patrols on the U.S.-Mexican border* [Support, Oppose]

Political Engagement

1. How often do you follow politics in the news? [1. Most of the time, 2. Some of the time, 3. Only now and then, 4. Hardly at all]

B.3 The American Panel Study (TAPS)

Dataset description: TAPS is a monthly internet panel survey that ran from December 2011 through February 2018. Questions were fielded to a nationally representative sample of approximately 2,000 US adults, with additional respondents recruited over time to combat attrition. In August of 2013, the TAPS panelists answered a question about the strength of their social support systems. We used responses from the months immediately before and after this question was fielded in our TAPS models. In May and July, panelists were asked different two different sets of questions about economic policy and redistribution. We analyze each of these items separately in Figure 1. However, we use only the May items in subsequent analyses because a large number of panelists did not complete the July wave. In both May and September, panelists were administered the TIPI. We combine responses from both months to increase reliability (anxiety inter-wave $r = .57$, $p < .001$). We also used items fielded in April, October, and December to measure socioeconomic covariates.

Economic Attitudes

May 2013

1. Indicate your level of agreement with each statement: *Federal personal income taxes for individuals with incomes higher than \$250,000 should be raised* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)
2. Indicate your level of agreement with each statement: *The federal government should guarantee a higher minimum hourly wage for workers* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)
3. Indicate your level of agreement with each statement: *Medicaid should be extended to cover more people* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)
4. Please indicate whether the federal government should spend more, the same, or less on each of the following: *Medicare and Medicaid, the health care programs* [Spend More, Spend About the Same, Spend Less] (Reversed)
5. Please indicate whether the federal government should spend more, the same, or less on each of the following: *Social Security, the income program for the elderly* [Spend More, Spend About the Same, Spend Less] (Reversed)

6. Please indicate whether the federal government should spend more, the same, or less on each of the following: *Housing programs for low income people* [Spend More, Spend About the Same, Spend Less] (Reversed)

July 2013

7. Which actions are you in favor of and which are you against? *Cuts in government spending* [Strongly Favor, Favor, Neither Favor nor Against, Against, Strongly Against]
8. Do you think it should be the government's responsibility to provide a job for everyone who wants one? [Definitely Should Be, Probably Should Be, Probably Should Not Be, Definitely Should Not Be] (Reversed)
9. Do you think it should be the government's responsibility to provide health care for the sick? [Definitely Should Be, Probably Should Be, Probably Should Not Be, Definitely Should Not Be] (Reversed)
10. Do you think it should be the government's responsibility to provide a decent standard of living for the old? [Definitely Should Be, Probably Should Be, Probably Should Not Be, Definitely Should Not Be] (Reversed)
11. Do you think it should be the government's responsibility to provide a decent standard of living for the unemployed? [Definitely Should Be, Probably Should Be, Probably Should Not Be, Definitely Should Not Be] (Reversed)
12. Do you think it should be the government's responsibility to reduce income differences between the rich and poor? [Definitely Should Be, Probably Should Be, Probably Should Not Be, Definitely Should Not Be] (Reversed)

Non-Economic Attitudes

May 2013

1. Indicate your level of agreement with each statement: *Federal programs that provide health care benefits should allow funding for abortions.* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)
2. Indicate your level of agreement with each statement: *The federal government should recognize the validity of a same-sex marriage where state law does.* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)

3. Indicate your level of agreement with each statement: *The government should find a way to allow people who are in the U.S. illegally to stay in the U.S.* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)
4. Indicate your level of agreement with each statement: *Federal law should ban the possession of handguns except by law enforcement personnel.* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)
5. Indicate your level of agreement with each statement: *The federal government should support programs designed to help minorities get better jobs and education.* [Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree] (Reversed)

Political Engagement

November 2013

1. In general, how interested are you in politics and public affairs? [Very Interested, Somewhat Interested, Slightly Interested, Not at all Interested] (Reversed)

B.4 Longitudinal Internet studies for the Social Sciences (LISS)

Dataset description: The LISS is a monthly internet panel survey that has run since October 2007. Questions are fielded to a nationally representative sample of Dutch households, comprising approximately 7,500 individuals. Themed survey modules are fielded annually. We use data from the initial administrations of the relevant modules to construct a LISS cross-section. In May of 2008, panelists completed the International Personality Item Pool battery (IPIP), a 50-item personality inventory (Goldberg et al. 2006). We use the IPIP to construct a 4-item anxiety scale ($\alpha = .748$) and 4-item volatility scale ($\alpha = .795$). To measure political attitudes, we use items fielded in December of 2007. We use data from December 2007, January 2008, and June 2008 to measure demographic and socioeconomic covariates.

Economic Attitudes

1. Some people believe that differences in income should increase in our country. Others feel that they should decrease. Still others hold an opinion that lies somewhere in between. Where would you place yourself on a scale from 1 to 5, where 1 means that differences in income should increase and 5 means that these should decrease? [1. Differences in income should increase ... 5. Differences in income should increase] (Reversed)

Non-Economic Attitudes

1. should be permitted if the patient expresses that wish. Still others hold an opinion that lies somewhere in between. Where would you place yourself on a scale from 1 to 5, where 1 means that euthanasia should be forbidden and 5 means that euthanasia should be permitted? [1. Euthanasia should be forbidden ... 5. Euthanasia should be permitted]
2. Some people and political parties feel that European unification should go a step further. Others think that European unification has already gone too far. Where would you place yourself on a scale from 1 to 5, where 1 means that European unification should go further and 5 means that it has already gone too far? [1. European unification should go further ... 5. European unification has already gone too far] (Reversed)
3. In the Netherlands, some people believe that immigrants are entitled to live here while retaining their own culture. Others feel that they should adapt entirely to Dutch culture. Where would you place yourself on a scale of 1 to 5, where 1 means that immigrants can retain their own culture and 5 means that

they should adapt entirely? [1. Immigrants can retain their own culture . . . 5. Immigrants should adapt entirely to Dutch culture]

Political Engagement

1. Are you very interested in the news, fairly interested or not interested? [1. Very interested, 2. Fairly interested, 3. Not interested] (Reversed)
2. Are you very interested in political topics, fairly interested or not interested? [1. Very interested, 2. Fairly interested, 3. Not interested] (Reversed)

B.5 CloudResearch Studies

Dataset description: We fielded two experiments via CloudResearch (Litman, Robinson, and Abberbock 2017) in June 2022 ($n = 404$) and January 2023 ($n = 996$). Note that the sample sizes reported here differ from those in the main text. The main text presents descriptive and inferential results estimated after we dropped respondents who failed our attention checks. The samples sizes reported here are for the complete samples (see C19 for models including full samples). In both surveys, we measured economic attitudes with four items worded similarly to ones included in the ANES. These items asked respondents' opinions on income inequality, guaranteed jobs and income, public healthcare, and the minimum wage. We used the Big Five Aspects Scale (BFAS; DeYoung, Quilty, and Peterson 2007) to create 3-item anxiety scales (2022: $\alpha = .831$; 2023: $\alpha = .809$), and 10-item volatility scales (2022: $\alpha = .948$; 2023: $\alpha = .930$).

Economic Attitudes

1. Some people feel the government should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. Where would you place yourself on this scale? [1. Government should see to jobs and standard of living ... 7. Government should let each person get ahead on own] (R)
2. Some people feel that all medical expenses should be paid by individuals through private insurance plans. Others feel there should be a government insurance plan which would cover all medical and hospital expenses for everyone. Where would you place yourself on this scale? [1. Private insurance plan ... 7. Government insurance plan]
3. Some people feel that the government should take measures to ensure that everybody earns the same amount of money. Others feel that the government should let people make whatever amount of money they can earn with their skills. Where would you place yourself on this scale? [1. Equalize income ... 7. Allow differences in income] (R)
4. Some people think the government should make it illegal to pay workers less than a certain amount. Other people think that businesses should be allowed to pay as little as they want. Where would you place yourself on this scale? [1. Businesses should be able to pay as little as they want ... 7. Businesses should have to pay a minimum wage]

Non-Economic Attitudes

1. Some people feel that women should always be able to obtain abortions as a matter of personal choice. Others feel that abortion is never justifiable and should be illegal. Still others fall somewhere in between, arguing that abortion should be legal when the mother's life is in danger or in cases of rape or incest. Where would you place yourself on this scale? [1. A woman should always be able to obtain an abortion as a matter of personal choice . . . 7. Abortion should never be permitted] (R)
2. Some people feel that gay and lesbian couples should be legally permitted to adopt children. Others feel that children should only be adopted into traditional households with one mother and one father. Where would you place yourself on this scale? [1. Gay and lesbian couples should be able to adopt children . . . 7. It should be illegal for gay and lesbian couples to adopt children] (R)
3. Some people think that marijuana should be legal for adults to purchase and use recreationally. Others think that marijuana should remain illegal. Still others fall somewhere in between, arguing that doctors should be allowed to prescribe marijuana for certain conditions. Where would you place yourself on this scale? [1. Marijuana should remain illegal under all circumstances . . . 7. Marijuana should be completely legal]
4. Some people feel that we should allow more immigrants into the United States. Others feel that we already accept too many immigrants and should turn more away. Where would you place yourself on this scale? [1. The US should accept fewer immigrants . . . 7. The US should accept more immigrants]

Political Engagement

1. Some people think about politics a lot and spend their free time reading up on the latest political news. Others don't pay any attention to political news, and when politics comes up in conversation they feel bored. Where would you place yourself on this scale? [1. Not at all interested in politics . . . 7. Extremely interested in politics]

B.5.1 Research Ethics

Our institution's IRB authorized both studies and granted a waiver of documentation of consent, judging them to pose not more than a minimal risk to subjects' wellbeing

(Stony Brook University IRB2022-00288). In both experiments, subjects were paid \$1.50 for approximately 10 minutes of participation. This rate is equivalent to \$9 an hour, above the United States federal minimum wage of \$7.25 per hour. Before being allowed to participate, subjects read a consent form and affirmed that they understood and accepted potential risks and conditions of participation (such as the risk of emotional discomfort and the condition that they be at least 18 years of age). In the consent form, we warned subjects that, because they would be participating in an online group study in real time, we could not stop the other participants from sharing offensive or distressing content. While the premise of this warning was deceptive, it nonetheless allowed us to advise prospective subjects that they might experience emotional distress during participation. This consent form was reviewed and authorized by our institution’s IRB. After completing the study, participants were immediately debriefed. They were told that all profiles in the discussion portal were fakes created by the researchers and that all likes given by the other profiles were automated.

B.5.2 Attention Checks

To ensure response quality, we screened respondents using open-ended attention checks. In Study 1, we asked respondents to “Please write down THREE facts people in your group shared about themselves. The three facts can all be from one person or they can be from different people.” We intended for respondents to write three facts about the fake profiles that they had seen. However, some respondents misinterpreted our request. After the discussion group treatment but before the attention check, we gave respondents the following instructions: “For the next few questions, we’d like you to answer them how you think the average person in your social circle would answer them. In other words, give the answer that most of your family, friends, and coworkers would give.” Evidently, some respondents interpreted the phrase “your group” in the attention check to mean their real-life social group rather than the fake discussion group. Because of this, we did not flag incorrect responses as long as they referred to people’s traits or characteristics. In Study 2, we asked respondents to “Please write down TWO (2) facts that people in your discussion group shared about themselves. The two facts can be from one person or they can be from different people.” We manually checked all responses and flagged ones that were gibberish or non-sequiturs. All responses and our coding of them are included in the replication data file under the columns “Attn_Check_Orig” and “flagged,” respectively. Screening left us with 384 respondents in the 2022 study and 919 respondents in the 2023 study. Including respondents who failed the attention

checks causes some of the results to become statistically insignificant and shrinks the magnitude of the results by about one third (C19). In Table B1, we show that flagged respondents were just as likely to be in the treatment and control conditions in each study. Flagged respondents were more likely to score at or above the sample median of anxiety in Study 1 but were less likely to score high at or above the median in Study 2.

Table B1: Respondents who Failed Attention Check by Experimental Condition and Anxiety Score

	Study 1 (June 2022)			Study 2 (January 2023)		
	Passed Check	Failed Check	Rate	Passed Check	Failed Check	Rate
Control	184	14	7.1%	457	42	8.4%
Treatment	194	12	5.8%	456	41	8.3%
Anxiety ($>$ median)	183	16	8.0%	524	27	4.9%
Anxiety (\leq median)	195	10	4.9%	389	56	12.6%
Overall	378	26	6.4%	913	83	8.3%

Note: The table shows the number of respondents who passed or failed the attention check, along with the failure rate, across two studies conducted in June 2022 and January 2023.

C Full Regression Output and Alternative Specifications

Table C1: ANES Models from Figure 1 (Economic Attitudes)

DV:	Income equality	Gov jobs	Social Security	Welfare	Spend on poor	Gov services	Gov insurance	Tax rich
Anxiety	.100 (.014)***	.085 (.012)***	.069 (.013)***	.086 (.015)***	.092 (.015)***	.069 (.011)***	.043 (.014)**	.040 (.015)**
Volatility	−.018 (.018)	.015 (.016)	.000 (.017)	−.021 (.020)	.022 (.020)	−.003 (.014)	.057 (.018)**	.025 (.019)
Agreeableness	.016 (.021)	.071 (.019)***	.091 (.020)***	.072 (.023)**	.136 (.023)***	.081 (.017)***	.048 (.021)*	.099 (.022)***
Extraversion	−.048 (.016)**	−.035 (.014)*	.051 (.015)***	−.060 (.018)***	−.011 (.018)	−.009 (.013)	−.080 (.016)***	−.040 (.017)*
Conscientiousness	−.111 (.021)***	−.106 (.018)***	−.012 (.019)	−.213 (.023)***	−.136 (.023)***	−.112 (.016)***	−.118 (.020)***	.017 (.022)
Openness	.185 (.020)***	.167 (.018)***	.064 (.019)***	.186 (.022)***	.171 (.022)***	.143 (.016)***	.269 (.020)***	.175 (.021)***
Income	−.104 (.014)***	−.085 (.012)***	−.079 (.013)***	−.123 (.015)***	−.111 (.015)***	−.059 (.011)***	−.071 (.014)***	.013 (.014)
Own Home	−.041 (.008)***	−.034 (.007)***	−.010 (.008)	−.076 (.009)***	−.070 (.009)***	−.044 (.006)***	−.048 (.008)***	−.014 (.009)
Unemployed	.015 (.014)	.038 (.013)**	.024 (.013)	.084 (.016)***	.042 (.016)**	.021 (.011)	.041 (.014)**	.027 (.015)
Uninsured	.016 (.011)	.023 (.010)*	.000 (.010)	.023 (.012)	.031 (.012)*	.003 (.009)	.058 (.011)***	−.007 (.012)
Education	−.063 (.024)**	−.016 (.021)	−.266 (.023)***	.059 (.027)*	−.089 (.027)***	.001 (.019)	.113 (.024)***	.036 (.025)
Age	−.113 (.016)***	−.054 (.014)***	.150 (.015)***	.032 (.018)	.023 (.018)	−.013 (.013)	−.004 (.016)	.091 (.017)***
Male	−.038 (.007)***	−.041 (.006)***	−.036 (.007)***	−.038 (.008)***	−.045 (.008)***	−.041 (.006)***	−.013 (.007)	−.032 (.008)***
Black	.150 (.011)***	.152 (.009)***	.122 (.010)***	.190 (.012)***	.235 (.012)***	.159 (.008)***	.108 (.011)***	.057 (.011)***
Hispanic	.110 (.011)***	.085 (.009)***	.039 (.010)***	.094 (.012)***	.119 (.012)***	.091 (.008)***	.075 (.010)***	.037 (.011)***
Other	.080 (.014)***	.056 (.013)***	.023 (.013)	.056 (.016)***	.053 (.016)***	.054 (.011)***	.046 (.014)**	.020 (.015)
(Intercept)	.566 (.077)***	.443 (.027)***	.739 (.045)***	.376 (.036)***	.589 (.043)***	.442 (.027)***	.347 (.031)***	.524 (.040)***
N	8186	8223	8189	8193	8191	8222	8217	8211
−2 × Log Lik.	4205.235	2069.343	3119.385	5745.148	5572.105	210.296	3997.550	4865.906

Note: Results are from hierarchical linear models estimated with maximum likelihood. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C2: ANES Models from Figure 1 (Non-Economic Attitudes)

DV:	Same-sex adoption	Abortion weed	Legal weed	Death penalty	Gun control	Immigration	Affirmative action	Same-sex marriage	Ideo ID
Anxiety	.002 (.021)	-.036 (.016)*	-.017 (.019)	.050 (.017)**	.069 (.013)***	.004 (.013)	.042 (.013)**	.018 (.017)	.042 (.011)***
Volatility	.076 (.026)**	.067 (.020)**	.100 (.024)***	-.035 (.022)	-.013 (.017)	-.005 (.016)	-.017 (.017)	.057 (.022)**	.028 (.014)
Agreeableness	.043 (.031)	-.065 (.024)**	-.040 (.028)	.098 (.026)***	.102 (.020)***	.062 (.019)**	.062 (.020)**	.004 (.026)	.040 (.017)*
Extraversion	-.005 (.024)	-.048 (.019)*	.004 (.022)	-.072 (.020)***	-.012 (.015)	-.023 (.015)	-.029 (.016)	-.048 (.020)*	-.031 (.013)*
Conscientiousness	-.112 (.031)***	-.020 (.024)	-.115 (.028)***	-.232 (.025)***	-.002 (.019)	-.059 (.019)**	-.129 (.020)***	-.115 (.025)***	-.157 (.016)***
Openness	.284 (.030)***	.291 (.023)***	.353 (.027)***	.211 (.025)***	.092 (.019)***	.103 (.018)***	.117 (.019)***	.304 (.025)***	.248 (.016)***
Income	.088 (.020)***	.122 (.016)***	.037 (.018)*	-.013 (.017)	.064 (.013)***	.040 (.013)**	-.025 (.013)	.069 (.017)***	.009 (.011)
Own Home	-.023 (.012)	-.028 (.009)**	-.045 (.011)***	-.047 (.010)***	-.023 (.008)**	-.022 (.007)**	-.029 (.008)***	-.046 (.010)***	-.043 (.007)***
Unemployed	-.006 (.021)	.041 (.016)*	.025 (.019)	.013 (.018)	-.016 (.013)	-.018 (.013)	.004 (.014)	-.016 (.017)	.003 (.011)
Uninsured	.010 (.016)	.004 (.013)	.034 (.015)*	-.007 (.014)	-.010 (.010)	-.017 (.010)	.007 (.011)	.013 (.014)	.014 (.009)
Education	.267 (.036)***	.291 (.028)***	.087 (.032)**	.368 (.030)***	.134 (.023)***	.219 (.022)***	.109 (.023)***	.295 (.030)***	.149 (.019)***
Age	-.246 (.024)***	.055 (.019)**	-.274 (.022)***	.043 (.020)*	.088 (.015)***	.005 (.015)	.037 (.015)*	-.210 (.020)***	-.063 (.013)***
Male	-.072 (.011)***	-.020 (.008)*	.045 (.010)***	-.051 (.009)***	-.089 (.007)***	-.031 (.007)***	-.009 (.007)	-.047 (.009)***	-.039 (.006)***
Black	-.098 (.016)***	.063 (.012)***	-.021 (.014)	.170 (.013)***	.131 (.010)***	.111 (.010)***	.278 (.010)***	-.103 (.013)***	.081 (.009)***
Hispanic	-.061 (.016)***	-.041 (.012)***	-.069 (.014)***	.105 (.013)***	.090 (.010)***	.149 (.010)***	.150 (.010)***	-.013 (.010)***	.050 (.013)***
Other	-.057 (.021)**	.009 (.016)	-.052 (.019)**	.047 (.018)**	.055 (.013)***	.007 (.013)	.072 (.014)***	-.066 (.018)***	.017 (.012)
(Intercept)	.491 (.061)***	.286 (.038)***	.475 (.049)***	.071 (.039)	.445 (.030)***	.311 (.030)***	.235 (.042)***	.461 (.064)***	.349 (.025)***
N	8082	8181	8211	8085	8210	8190	8165	8166	7532
-2 × Log Lik.	10189.612	6275.612	8878.022	7307.285	3116.932	2579.163	3194.821	7390.856	-337.019

Note: Results are from hierarchical linear models estimated with maximum likelihood. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C3: CES Models from Figure 1

DV:	ACA (HLM)	Welfare (HLM)	Healthcare (HLM)	Abortion (HLM)	Guns (HLM)	Marriage (OLS)	Immigrant (HLM)	Ideo (HLM)	ID (HLM)
Anxiety	.039 (.027)	.100 (.018)***	.090 (.016)***	-.031 (.020)	.109 (.026)***	-.019 (.039)	.022 (.030)	.040 (.016)*	
Volatility	.016 (.035)	-.030 (.023)	.022 (.021)	.085 (.025)***	.060 (.033)	.112 (.049)*	.035 (.038)	.083 (.020)***	
Agreeableness	.056 (.040)	.072 (.026)**	.069 (.024)**	-.020 (.029)	.131 (.038)***	.009 (.057)	-.065 (.044)	.049 (.023)*	
Extraversion	-.128 (.029)***	-.036 (.019)	-.015 (.017)	-.076 (.022)***	-.094 (.028)***	-.113 (.042)**	-.096 (.032)**	-.036 (.017)*	
Conscientiousness	-.164 (.038)***	-.196 (.025)***	-.054 (.023)*	.086 (.028)**	.008 (.037)	-.076 (.054)	-.199 (.042)***	-.127 (.023)***	
Openness	.336 (.038)***	.190 (.024)***	.227 (.022)***	.202 (.028)***	.079 (.036)*	.371 (.054)***	.271 (.041)***	.282 (.022)***	
Income	-.034 (.036)	-.148 (.023)***	-.103 (.021)***	.098 (.026)***	-.007 (.034)	.110 (.052)*	.028 (.040)	-.007 (.021)	
Own Home	-.071 (.016)***	-.064 (.010)***	-.042 (.009)***	-.034 (.012)**	-.037 (.015)*	-.092 (.022)***	-.055 (.018)**	-.048 (.009)***	
Unemployed	.038 (.026)	.075 (.018)***	.043 (.016)**	.024 (.019)	.026 (.025)	-.024 (.040)	.051 (.028)	.028 (.015)	
Uninsured	-.126 (.027)***	-.075 (.018)***	-.061 (.016)***	.004 (.020)	-.086 (.025)***	-.016 (.039)	-.007 (.029)	-.028 (.016)	
Education	.219 (.025)***	.071 (.016)***	.030 (.015)*	.071 (.019)***	.185 (.024)***	.125 (.036)***	.157 (.028)***	.151 (.015)***	
Age	.000 (.000)	-.001 (.000)***	.000 (.000)	.002 (.000)***	.003 (.000)***	-.004 (.001)***	-.004 (.001)***	-.002 (.000)***	
Male	-.037 (.015)*	-.014 (.009)	-.027 (.009)**	-.023 (.011)*	-.148 (.014)***	-.045 (.020)*	-.071 (.016)***	-.024 (.009)**	
Black	.168 (.023)***	.105 (.016)***	.110 (.015)***	-.020 (.017)	.180 (.022)***	-.062 (.032)	.119 (.025)***	.071 (.013)***	
Hispanic	.057 (.025)*	.020 (.017)	.050 (.015)**	-.027 (.019)	.048 (.024)*	.017 (.037)	.118 (.028)***	.020 (.015)	
Other	-.006 (.026)	.000 (.017)	-.002 (.015)	-.009 (.019)	.030 (.025)	-.053 (.036)	-.002 (.028)	.005 (.015)	
(Intercept)	.405 (.071)***	.560 (.050)***	.553 (.046)***	.569 (.042)***	-.682 (.056)***	.653 (.082)***	.637 (.077)***	.383 (.034)***	
N	5054	4349	4354	5060	5045	2390	4194	5057	
R2						.072			
Adj.R2						.066			
-2 × Log Lik.	7000.556	1503.360	789.290	3906.889	6550.242		5800.127	1624.655	

Note: HLM results are from hierarchical linear models estimated with maximum likelihood. OLS results are from linear regressions estimated with ordinary least squares regressions. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C4: TAPS Models from Figure 1 (Economic Attitudes)

DV:	Tax rich	Minimum wage	Medicaid expansion	Medicare/Medicaid	Social Security	Gov housing
Anxiety	.122 (.050)*	.128 (.045)**	.080 (.043)	.133 (.052)*	.088 (.046)	.103 (.055)
Volatility	.149 (.068)*	.065 (.062)	.158 (.059)**	.150 (.071)*	.062 (.063)	.144 (.075)
Agreeableness	.144 (.065)*	.223 (.060)***	.194 (.057)***	.202 (.068)**	.149 (.060)*	.243 (.072)***
Extraversion	-.061 (.046)	-.021 (.042)	-.043 (.040)	-.027 (.048)	.069 (.042)	.049 (.050)
Conscientiousness	-.067 (.061)	-.145 (.056)**	-.159 (.053)**	-.110 (.065)	-.064 (.058)	-.260 (.068)***
Openness	.329 (.064)***	.275 (.059)***	.231 (.056)***	.226 (.067)***	.129 (.060)*	.240 (.070)***
Income	-.112 (.047)*	-.085 (.043)*	-.110 (.041)**	-.214 (.049)***	-.187 (.043)***	-.125 (.051)*
Own Home	-.017 (.026)	-.042 (.024)	-.048 (.023)*	-.014 (.027)	.007 (.024)	-.120 (.028)***
Unemployed	-.016 (.022)	-.010 (.020)	.034 (.019)	.048 (.023)*	-.023 (.021)	.031 (.024)
Uninsured	-.037 (.033)	-.014 (.030)	.053 (.029)	-.043 (.035)	-.010 (.031)	-.037 (.037)
Education	.001 (.081)	-.052 (.074)	.192 (.070)**	-.149 (.085)	-.367 (.075)***	.227 (.089)*
Age	.007 (.074)	-.020 (.068)	.051 (.064)	.301 (.078)***	.244 (.069)***	.199 (.081)*
Male	-.047 (.020)*	-.094 (.018)***	-.031 (.018)	-.050 (.021)*	-.050 (.019)**	-.078 (.022)***
Black	.125 (.039)**	.166 (.035)***	.179 (.034)***	.187 (.041)***	.141 (.036)***	.239 (.043)***
Hispanic	.050 (.033)	.101 (.030)***	.105 (.028)***	.063 (.034)	.071 (.031)*	.112 (.035)**
Other	-.046 (.039)	-.028 (.036)	.027 (.034)	.011 (.041)	.001 (.036)	.000 (.043)
(Intercept)	.392 (.099)***	.441 (.091)***	.149 (.087)	.373 (.106)***	.692 (.094)***	.137 (.111)
N	1085	1082	1085	1040	1044	1034
R2	.078	.139	.130	.143	.137	.153
Adj.R2	.064	.126	.117	.130	.124	.140

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C5: TAPS Models from Figure 1 (Economic Attitudes cont'd)

DV:	Gov spend-ing	Gov jobs	Healthcare	Old age care	Unemploy insurance	Income equality
Anxiety	.035 (.040)	.199 (.045)***	.198 (.051)***	.187 (.045)***	.182 (.047)***	.235 (.057)***
Volatility	.055 (.055)	.031 (.062)	.048 (.071)	.088 (.062)	-.006 (.064)	-.036 (.077)
Agreeableness	-.018 (.053)	.083 (.059)	.242 (.068)***	.191 (.060)**	.133 (.062)*	.070 (.074)
Extraversion	-.038 (.037)	.039 (.041)	-.037 (.047)	-.052 (.042)	-.032 (.043)	.037 (.052)
Conscientiousness	-.209 (.049)***	-.220 (.056)***	-.233 (.064)***	-.005 (.056)	-.198 (.058)***	-.205 (.070)**
Openness	.182 (.052)***	.118 (.058)*	.383 (.066)***	.277 (.059)***	.189 (.061)**	.326 (.073)***
Income	-.005 (.037)	-.166 (.042)***	-.076 (.048)	-.106 (.043)*	-.060 (.044)	-.180 (.052)***
Own Home	-.067 (.021)**	-.071 (.024)**	-.101 (.027)***	-.054 (.023)*	-.076 (.025)**	-.073 (.029)*
Unemployed	.030 (.018)	.010 (.020)	.029 (.023)	.028 (.020)	.026 (.021)	-.009 (.025)
Uninsured	-.018 (.026)	.022 (.030)	-.035 (.034)	.002 (.030)	.017 (.031)	.024 (.038)
Education	.437 (.065)***	-.008 (.074)	.146 (.083)	-.090 (.074)	.089 (.077)	.060 (.093)
Age	.118 (.060)*	-.101 (.068)	.059 (.077)	.079 (.068)	.027 (.071)	-.005 (.085)
Male	-.023 (.016)	-.061 (.018)***	-.061 (.021)**	-.075 (.018)***	-.024 (.019)	-.058 (.023)*
Black	.073 (.031)*	.227 (.034)***	.184 (.039)***	.137 (.035)***	.198 (.036)***	.232 (.044)***
Hispanic	.030 (.027)	.189 (.030)***	.099 (.034)**	.081 (.030)**	.111 (.032)***	.082 (.037)*
Other	-.027 (.031)	.025 (.037)	-.030 (.042)	-.010 (.037)	-.010 (.038)	.032 (.045)
(Intercept)	-.043 (.081)	.420 (.093)***	.273 (.106)*	.409 (.093)***	.326 (.097)***	.331 (.115)**
N	1058	1002	1002	1017	992	992
R2	.097	.216	.147	.139	.118	.138
Adj.R2	.083	.203	.133	.126	.103	.124

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C6: TAPS Models from Figure 1 (Non-Economic Attitudes)

DV:	Abortion	Same-sex marriage	Immigration	Gun control	Affirmative action	Ideo ID
Anxiety	-.031 (.054)	-.035 (.057)	.079 (.049)	.134 (.050)**	.130 (.042)**	.069 (.045)
Volatility	.166 (.074)*	.121 (.078)	-.040 (.066)	.108 (.068)	-.040 (.057)	.119 (.062)
Agreeableness	-.071 (.072)	-.023 (.076)	.026 (.064)	.086 (.065)	.219 (.055)***	.065 (.059)
Extraversion	-.079 (.050)	-.056 (.053)	-.011 (.045)	-.010 (.046)	-.017 (.038)	-.013 (.041)
Conscientiousness	-.161 (.067)*	-.343 (.071)***	-.175 (.060)**	-.060 (.061)	-.249 (.051)***	-.212 (.056)***
Openness	.404 (.070)***	.431 (.075)***	.205 (.063)**	.112 (.064)	.234 (.054)***	.417 (.058)***
Income	.104 (.051)*	.077 (.054)	.008 (.046)	.052 (.047)	-.077 (.039)*	-.054 (.042)
Own Home	-.139 (.028)***	-.131 (.030)***	-.052 (.025)*	-.089 (.026)***	-.040 (.022)	-.079 (.024)***
Unemployed	.026 (.024)	.006 (.025)	.030 (.021)	-.024 (.022)	.032 (.018)	.014 (.020)
Uninsured	-.022 (.036)	-.031 (.038)	-.019 (.032)	.005 (.033)	-.002 (.028)	-.045 (.031)
Education	.367 (.088)***	.532 (.093)***	.638 (.079)***	.407 (.081)***	.227 (.068)***	.393 (.074)***
Age	.177 (.080)*	-.044 (.085)	.088 (.072)	.196 (.074)**	.090 (.062)	-.024 (.067)
Male	-.069 (.022)**	-.113 (.023)***	-.033 (.020)	-.095 (.020)***	-.048 (.017)**	-.058 (.018)**
Black	.069 (.042)	-.078 (.045)	.136 (.038)***	.232 (.039)***	.290 (.032)***	.145 (.036)***
Hispanic	-.032 (.035)	.020 (.038)	.217 (.032)***	.140 (.032)***	.201 (.027)***	.037 (.030)
Other	-.032 (.043)	-.122 (.045)**	-.040 (.039)	.089 (.039)*	.037 (.033)	-.017 (.036)
(Intercept)	.103 (.109)	.305 (.115)**	-.056 (.098)	-.161 (.100)	.181 (.083)*	.094 (.092)
N	1088	1086	1078	1086	1081	985
R2	.094	.121	.127	.119	.194	.151
Adj.R2	.081	.108	.113	.106	.182	.137

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C7: LISS Models from Figure 1

	Income equality	Euthanasia	Immigration	EU Unification	Left-Right ID
Anxiety	.070 (.034)*	.026 (.036)	-.031 (.032)	-.086 (.039)*	.035 (.030)
Volatility	-.027 (.031)	.025 (.033)	-.054 (.030)	-.045 (.036)	-.061 (.028)*
Agreeableness	.308 (.051)***	-.036 (.054)	.199 (.049)***	-.009 (.058)	.198 (.046)***
Extraversion	-.105 (.031)***	.108 (.033)***	-.152 (.029)***	.022 (.035)	-.137 (.028)***
Conscientiousness	-.059 (.037)	-.037 (.040)	-.268 (.036)***	-.103 -.103 (.043)*	-.241 (.033)***
Openness	-.022 (.041)	.200 (.043)***	.279 (.039)***	.145 (.047)**	.211 (.037)***
Income	-.068 (.014)***	.009 (.015)	-.002 (.013)	.016 (.016)	-.012 (.013)
Own Home	-.077 (.010)***	.000 (.011)	.000 (.010)	.027 (.012)*	-.053 (.009)***
Unemployed	.076 (.033)*	-.008 (.035)	.013 (.031)	-.030 (.037)	.007 (.029)
Education	-.087 (.015)***	.024 (.016)	.140 (.015)***	.144 (.018)***	.055 (.014)***
Age	.198 (.028)***	.097 (.030)**	.026 (.027)	-.048 (.032)	.058 (.025)*
Male	-.016 (.010)	-.017 (.010)	-.026 (.009)**	.011 (.011)	-.023 (.009)**
Parents Foreign-Born	.020 (.015)	-.019 (.016)	.058 (.014)***	.038 (.017)*	.040 (.013)**
(Intercept)	.636 (.046)***	.636 (.049)***	.253 (.043)***	.352 (.053)***	.468 (.041)***
N	3108	3116	3154	2991	2888
R2	.098	.019	.089	.059	.064
Adj.R2	.095	.015	.086	.055	.060

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C8: CloudResearch Models from Figure 1

	Gov jobs	Healthcare equa- lity	Income equal- ity	Minimum wage	Abortion	Same- sex adop- tion	Legal weed	Immigratio n	Ideo ID
Anxiety	.231 (.050)***	.215 (.051)***	.139 (.050)**	.134 (.044)**	.130 (.053)*	.140 (.054)**	.135 (.051)**	.168 (.049)***	.168 (.044)***
Volatility	-.069 (.055)	-.023 (.056)	-.029 (.055)	-.115 (.048)*	-.042 (.058)	-.071 (.060)	-.031 (.056)	-.074 (.054)	-.020 (.048)
Income	-.112 (.033)***	-.142 (.034)***	-.191 (.034)***	-.040 (.030)	-.024 (.036)	-.020 (.036)	-.050 (.035)	-.093 (.033)**	-.101 (.029)***
Education	.011 (.031)	.049 (.032)	.001 (.032)	-.010 (.028)	.062 (.033)	.083 (.034)*	-.035 (.032)	.136 (.031)***	.069 (.027)*
Age	-.004 (.001)***	-.003 (.001)***	-.004 (.001)***	-.001 (.001)*	-.002 (.001)*	-.003 (.001)***	-.003 (.001)***	-.003 (.001)***	-.002 (.001)**
Male	-.044 (.019)*	-.013 (.019)	-.030 (.019)	-.082 (.017)***	-.051 (.020)*	-.048 (.021)*	.053 (.019)**	.020 (.019)	-.006 (.017)
Black	.107 (.032)**	.062 (.033)	.068 (.033)*	.021 (.028)	-.043 (.034)	-.095 (.035)**	-.065 (.033)*	.050 (.032)	.072 (.028)*
Other	.070 (.027)**	.031 (.027)	.087 (.027)**	.031 (.023)	.032 (.028)	.017 (.029)	-.043 (.027)	.107 (.026)***	.043 (.023)
(Intercept)	.657 (.047)***	.726 (.050)***	.610 (.051)***	.903 (.052)***	.732 (.051)***	.824 (.051)***	.839 (.052)***	.485 (.046)***	.591 (.041)***
N	1291	1291	1291	1291	1291	1291	1291	1291	1291
$-2 \times \text{Log Lik.}$	833.461	878.305	850.478	505.423	987.553	1043.389	878.141	780.162	492.213

Note: Results are from hierarchical linear models estimated with maximum likelihood. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C9: CloudResearch Models from Figure 1 Controlling for Partisanship

	Gov jobs	Healthcare equa- lity	Income equal- ity	Minimum wage	Abortion	Same- sex adop- tion	Legal weed	Immigration	ideo ID
Anxiety	.146 (.043)***	.119 (.042)**	.053 (.043)	.075 (.040)	.029 (.044)	.052 (.048)	.091 (.049)	.083 (.042)*	.043 (.023)
Volatility	-.052 (.047)	-.004 (.046)	-.012 (.048)	-.103 (.044)*	-.022 (.048)	-.054 (.052)	-.023 (.054)	-.057 (.046)	.004 (.025)
Party ID	.568 (.027)***	.633 (.026)***	.571 (.027)***	.390 (.025)***	.672 (.027)***	.586 (.030)***	.291 (.031)***	.570 (.026)***	.833 (.014)***
Income	-.051 (.029)	-.078 (.029)**	-.131 (.030)***	.001 (.028)	.046 (.029)	.044 (.032)	-.020 (.034)	-.030 (.028)	-.009 (.015)*
Education	-.056 (.027)*	-.025 (.027)	-.067 (.027)*	-.056 (.025)*	-.017 (.028)	.014 (.030)	-.069 (.031)*	.069 (.026)**	-.030 (.014)*
Age	-.003 (.001)***	-.002 (.001)**	-.003 (.001)***	-.001 (.001)	-.001 (.001)	-.002 (.001)**	-.002 (.001)**	-.002 (.001)**	-.001 (.000)*
Male	-.048 (.016)**	-.019 (.016)	-.035 (.016)*	-.086 (.015)***	-.056 (.017)***	-.053 (.018)**	.051 (.019)**	.016 (.016)	-.013 (.009)
Black	.040 (.028)	-.013 (.028)	.001 (.028)	-.025 (.026)	-.122 (.029)***	-.164 (.031)***	-.099 (.032)**	-.017 (.027)	-.025 (.015)
Other	.045 (.023)*	.004 (.023)	.062 (.023)**	.014 (.022)	.002 (.023)	-.010 (.025)	-.056 (.026)*	.082 (.022)***	.006 (.012)*
(Intercept)	.342 (.043)***	.375 (.047)***	.294 (.046)***	.686 (.054)***	.359 (.044)***	.500 (.048)***	.678 (.053)***	.170 (.042)***	.129 (.023)***
N	1291	1291	1291	1291	1291	1291	1291	1291	1291
$-2 \times \text{Log Lik.}$	454.910	407.456	472.687	290.255	495.450	707.267	796.375	379.764	- 1167.943

Note: Results are from hierarchical linear models estimated with maximum likelihood. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

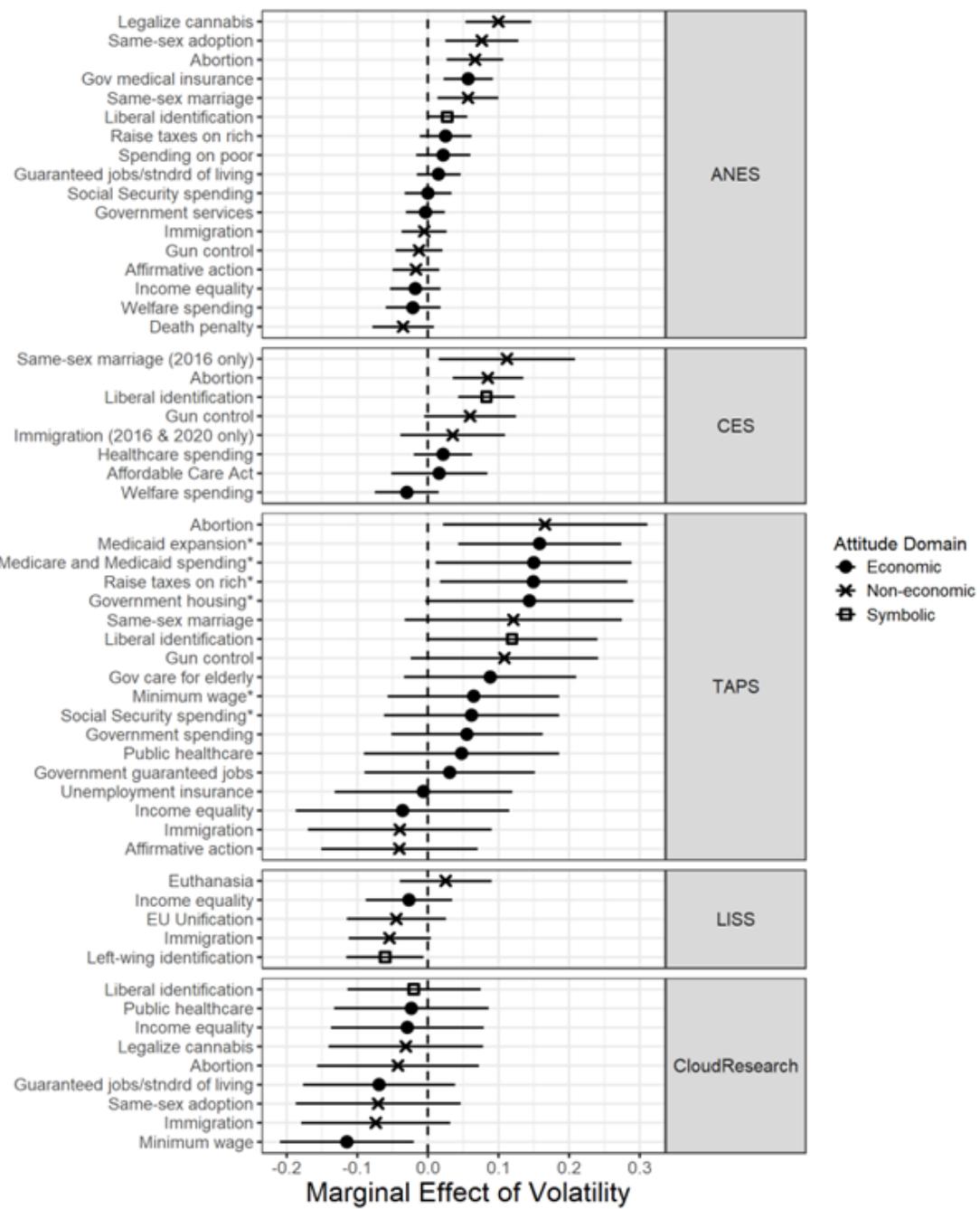


Figure C1: Volatility Results From Figure 1 Models

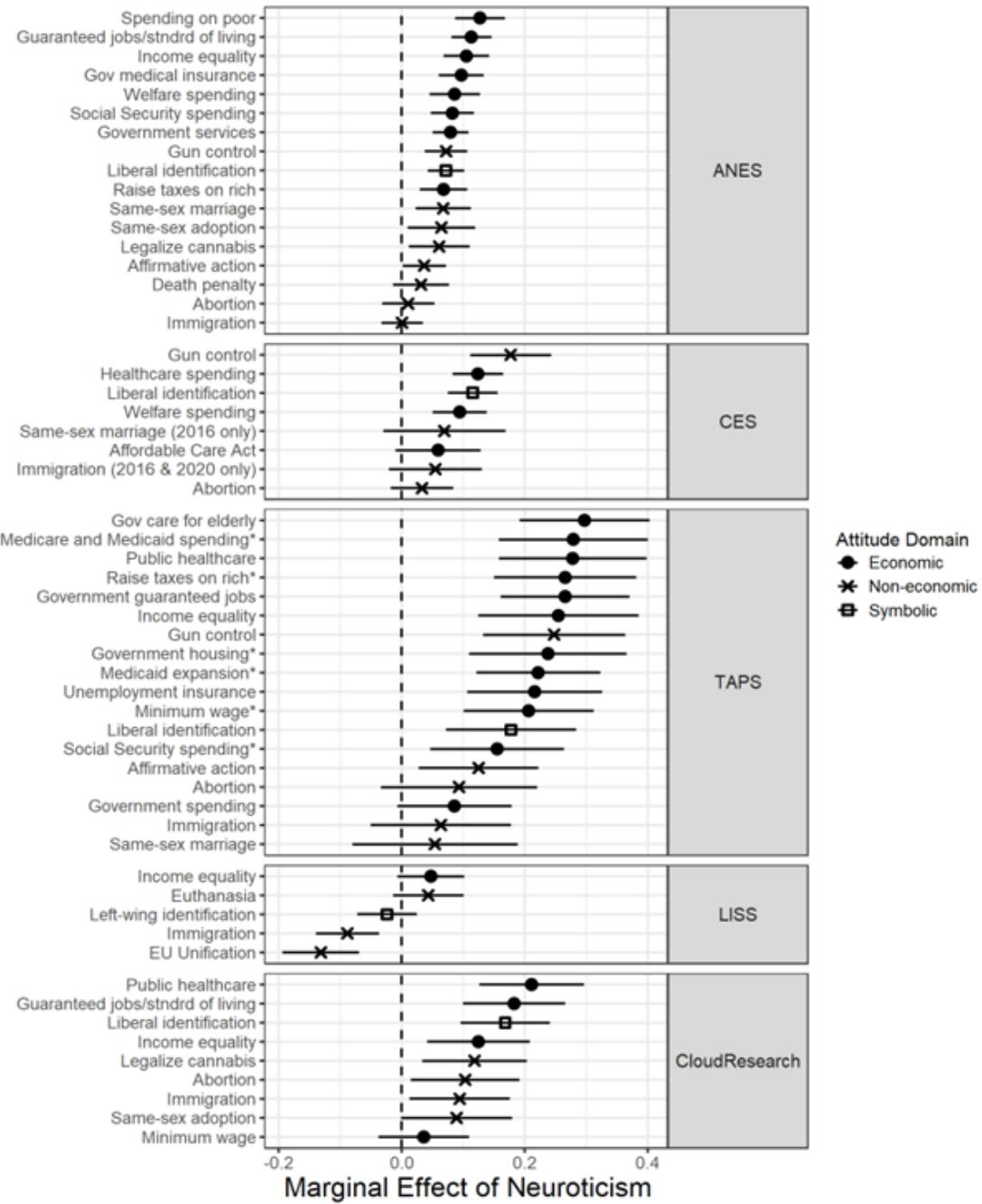


Figure C2: Neuroticism Results From Figure 1 Models

Table C10: Models from Figures 2 and 3

DV:	DV: Economic Attitude Scales				
	ANES (HLM)	CES (HLM)	TAPS (OLS)	LISS (OLS)	CR (HLM)
Anxiety	.074 (.009)***	.077 (.017)***	.113 (.036)**	.070 (.034)*	.180 (.039)***
Volatility	.009 (.011)	.007 (.022)	.127 (.049)**	-.027 (.031)	-.060 (.043)
Agreeableness	.076 (.013)***	.061 (.024)*	.205 (.047)***	.308 (.051)***	
Extraversion	-.030 (.010)**	-.057 (.018)**	-.004 (.033)	-.105 (.031)***	
Conscientiousness	-.103 (.013)***	-.137 (.024)***	-.137 (.044)**	-.059 (.037)	
Openness	.173 (.013)***	.243 (.023)***	.235 (.046)***	-.022 (.041)	
Income (reversed)	.075 (.009)***	.102 (.022)***	.144 (.034)***	.068 (.014)***	.117 (.026)***
Do not own home	.043 (.005)***	.062 (.010)***	.041 (.019)*	.077 (.010)***	
Unemployed	.039 (.009)***	.054 (.017)**	.016 (.016)	.076 (.033)*	
Uninsured	.019 (.007)**	-.100 (.017)***	-.013 (.024)		
Education	-.030 (.015)	.110 (.016)***	-.029 (.058)	-.087 (.015)***	.012 (.024)
Age	.016 (.010)	.000 (.000)	.120 (.054)*	.198 (.028)***	-.003 (.001)***
Male	-.036 (.005)***	-.029 (.009)**	-.057 (.015)***	-.016 (.010)	-.042 (.015)**
Black	.148 (.007)***	.134 (.015)***	.170 (.028)***		.065 (.025)*
Hispanic	.082 (.007)***	.045 (.016)**	.087 (.024)***		
Other (LISS = Parents Foreign-Born)	.048 (.009)***	-.001 (.016)	-.007 (.028)	.020 (.015)	.054 (.021)**
(Intercept)	.387 (.027)***	.352 (.052)***	.180 (.079)*	.491 (.046)***	.607 (.040)***
N	8028	4335	995	3108	1291
R2			.202	.098	
Adj.R2			.189	.095	
-2 × Log Lik.	-3514.833	1088.314			201.981

Note: HLM results are from hierarchical linear models estimated with maximum likelihood. OLS results are from linear regressions estimated with ordinary least squares regressions. Unstandardized coefficients are reported with standard errors in parentheses. The “Hispanic” response option was accidentally left off the survey given to our first CloudResearch sample. To combine the samples, we pool respondents who indicated “Hispanic” with those who indicated “Other” in the second sample. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C11: LISS and TAPS Models from Figure 4 and Alternative Specifications

	DV: Economic Attitude Scales			
	LISS		TAPS	
	Reduced Model	Full Model	Reduced Model	Full Model
Anxiety x Exclusion	.266 (.088)**	.195 (.123)	.287 (.111)**	.310 (.139)*
Volatility x Exclusion		.093 (.116)		-.135 (.181)
Agreeableness x Exclusion		-.002 (.174)		-.049 (.174)
Extraversion x Exclusion		.058 (.112)		.253 (.133)
Conscientiousness x Exclusion		-.113 (.132)		.120 (.164)
Openness x Exclusion		-.067 (.136)		-.343 (.171)*
Social Exclusion	-.116 (.045)*	-.030 (.149)	-.052 (.052)	.025 (.238)
Anxiety	.012 (.039)	.027 (.044)	.025 (.048)	.017 (.054)
Volatility	-.034 (.032)	-.054 (.040)	.112 (.050)*	.152 (.074)*
Agreeableness	.306 (.052)***	.305 (.067)***	.211 (.047)***	.223 (.068)**
Extraversion	-.106 (.032)***	-.121 (.041)**	.008 (.034)	-.056 (.048)
Conscientiousness	-.058 (.038)	-.033 (.048)	-.147 (.045)**	-.187 (.066)**
Openness	-.027 (.041)	-.011 (.053)	.229 (.046)***	.321 (.066)***
Income	-.069 (.014)***	-.069 (.014)***	-.139 (.034)***	-.138 (.034)***
Own Home	-.078 (.010)***	-.078 (.010)***	-.038 (.019)*	-.040 (.019)*
Unemployed	.070 (.033)*	.070 (.033)*	.018 (.016)	.018 (.016)
Uninsured			-.021 (.024)	-.021 (.024)
Education	-.088 (.016)***	-.088 (.016)***	-.043 (.059)	-.033 (.059)
Age	.194 (.028)***	.192 (.029)***	.094 (.054)	.100 (.055)
Male	-.016 (.010)	-.017 (.010)	-.057 (.015)***	-.058 (.015)***
Black			.166 (.028)***	.170 (.029)***
Hispanic			.093 (.024)***	.097 (.024)***
Other (LISS: Parents Foreign-Born)	.019 (.015)	.019 (.015)	-.014 (.029)	-.014 (.029)
(Intercept)	.669 (.047)***	.652 (.057)***	.401 (.077)***	.378 (.102)***
N	3077	3077	972	972
R2	.101	.102	.211	.217
Adj.R2	.097	.096	.197	.198

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C12: CES Model from Figure 4 and CES Model and Alternative Specifications

	DV: Economic Attitude Scales			
	Reduced Models		Full Models	
	(1)	(2)	(3)	(4)
Anxiety × ≤ 500 Friends	.136 (.061)*		.157 (.075)*	
Anxiety × 1-100 Friends		.122 (.067)		.156 (.082)
Anxiety × 101-250 Friends		.175 (.071)*		.209 (.084)*
Anxiety × 251-500 Friends		.103 (.075)		.089 (.091)
Anxiety	−.028 (.058)	−.029 (.058)	−.046 (.069)	−.047 (.069)
Volatility × ≤ 500 Friends			.010 (.105)	
Volatility × 1-100 Friends				−.018 (.113)
Volatility × 101-250 Friends				.057 (.119)
Volatility × 251-500 Friends				.012 (.124)
Volatility	−.051 (.035)	−.047 (.035)	−.059 (.098)	−.059 (.098)
Agreeableness × ≤ 500 Friends			.031 (.108)	
Agreeableness × 1-100 Friends				.024 (.117)
Agreeableness × 101-250 Friends				.111 (.125)
Agreeableness × 251-500 Friends				−.071 (.131)
Agreeableness	−.043 (.040)	−.043 (.040)	−.068 (.099)	−.068 (.099)
Extraversion × ≤ 500 Friends			−.013 (.075)	
Extraversion × 1-100 Friends				−.083 (.083)
Extraversion × 101-250 Friends				.041 (.089)
Extraversion × 251-500 Friends				.051 (.095)
Extraversion	−.072 (.029)*	−.075 (.029)**	−.062 (.068)	−.062 (.068)
Conscientiousness × ≤ 500 Friends			.082 (.102)	
Conscientiousness × 1-100 Friends				.100 (.113)
Conscientiousness × 101-250 Friends				.161 (.120)
Conscientiousness × 251-500 Friends				−.027 (.124)
Conscientiousness	−.120 (.038)**	−.117 (.038)**	−.188 (.093)*	−.190 (.093)*
Openness × ≤ 500 Friends			.036 (.103)	
Openness × 1-100 Friends				.093 (.114)
Openness × 101-250 Friends				−.019 (.119)
Openness × 251-500 Friends				−.009 (.127)
Openness	.240 (.038)***	.237 (.038)***	.211 (.095)*	.211 (.095)*
≤ 500 Friends	−.097 (.034)**		−.213 (.135)	
1-100 Friends		−.097 (.037)**		−.224 (.149)
101-250 Friends		−.120 (.039)**		−.358 (.157)*
251-500 Friends		−.070 (.042)		−.021 (.165)
Unemployed	.062 (.029)*	.060 (.029)*	.059 (.029)*	.054 (.030)
Uninsured	−.085 (.027)**	−.085 (.028)**	−.085 (.028)**	−.080 (.028)**
Education	.102 (.025)***	.101 (.025)***	.102 (.025)***	.100 (.026)***
Age	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Male	−.025 (.015)	−.025 (.015)	−.025 (.015)	−.025 (.015)
Black	.109 (.025)***	.110 (.025)***	.110 (.025)***	.113 (.025)***
Other (LISS = Parents Foreign-Born)	−.024 (.026) 69	−.023 (.027)	−.024 (.027)	−.026 (.027)
(Intercept)	.684 (.074)***	.685 (.074)***	.780 (.132)***	.783 (.132)***
N	1655	1655	1655	1655
−2 × Log Lik.	472.757	490.807	485.895	521.945

Note: Results are from hierarchical linear models estimated with maximum likelihood. In all models, “More than 500 Friends” is the omitted category. Unstandardized coefficients are reported with standard errors in parentheses.
 * p < 0.05, ** p < 0.01, *** p < 0.001

Table C13: Models from Figure 5 and Alternative Specifications

	DV: Economic Attitude Scales					
	LISS (OLS)		TAPS (OLS)		CES (HLM)	
	Reduced Model	Full Model	Reduced Model	Full Model	Reduced Model	Full Model
Anxiety × Exclusion	.279 (.088)**	.210 (.124)	.287 (.113)*	.302 (.140)*	.129 (.062)*	.150 (.075)*
Volatility × Exclusion		.092 (.116)		-.128 (.182)		.009 (.105)
Agreeableness × Exclusion		.003 (.174)		-.066 (.174)		.032 (.108)
Extraversion × Exclusion		.060 (.112)		.278 (.134)*		-.009 (.075)
Conscientiousness × Exclusion		-.115 (.133)		.101 (.165)		.078 (.102)
Openness × Exclusion		-.055 (.136)		-.347 (.171)*		.031 (.103)
Anxiety × Unemployed	-.202 (.165)	-.186 (.165)	.002 (.061)	-.002 (.061)	-.080 (.100)	-.076 (.100)
Anxiety × Uninsured				-.171 (.083)*	-.180 (.083)*	-.001 (.094)
Anxiety	.093 (.061)	.109 (.064)	-.056 (.079)	-.059 (.083)	-.074 (.085)	-.091 (.094)
Volatility	-.033 (.032)	-.053 (.040)	.112 (.050)*	.149 (.074)*	-.047 (.036)	-.055 (.098)
Agreeableness	.306 (.052)***	.304 (.067)***	.219 (.047)***	.236 (.068)***	-.044 (.040)	-.069 (.100)
Extraversion	-.106 (.032)***	-.121 (.041)**	.013 (.034)	-.056 (.048)	-.074 (.029)**	-.067 (.068)
Conscientiousness	-.060 (.038)	-.035 (.048)	-.152 (.045)***	-.186 (.066)**	-.119 (.038)**	-.184 (.094)*
Openness	-.027 (.041)	-.013 (.053)	.224 (.046)***	.317 (.066)***	.242 (.038)***	.217 (.095)*
Social Exclusion	-.122 (.045)**	-.046 (.149)	-.050 (.053)	.045 (.238)	-.093 (.034)**	-.204 (.136)
Income (reversed)	.129 (.038)***	.130 (.038)***	.079 (.054)	.077 (.054)	.077 (.060)	.078 (.060)
Do not own home	.081 (.028)**	.082 (.028)**	.034 (.032)	.039 (.032)	.082 (.029)**	.081 (.029)**
Unemployed	.169 (.087)	.161 (.088)	.016 (.026)	.017 (.026)	.103 (.060)	.099 (.060)
Uninsured				.041 (.038)	.043 (.038)	-.085 (.055)
Education	-.086 (.016)***	-.086 (.016)***	-.046 (.059)	-.036 (.059)	.102 (.025)***	.102 (.026)***
Age	.193 (.028)***	.191 (.029)***	.095 (.055)	.100 (.055)	.000 (.000)	.000 (.000)
Male	-.016 (.010)	-.016 (.010)	-.057 (.015)***	-.058 (.015)***	-.026 (.015)	-.025 (.015)
Black				.163 (.028)***	.166 (.029)***	.111 (.025)***
Hispanic				.091 (.024)***	.094 (.024)***	.060 (.027)*
Other (LISS = Both Parents Foreign-Born)	.019 (.015)	.019 (.015)	-.017 (.029)	-.017 (.029)	-.023 (.027)	-.024 (.027)
(Intercept)	.486 (.052)***	.469 (.060)***	.253 (.085)**	.223 (.106)*	.512 (.082)***	.604 (.137)***
N	3077	3077	972	972	1655	1655
R2	.103	.103	.216	.222		
Adj.R2	.097	.097	.198	.200		
−2 × Log Lik.					483.694	496.946

Note: HLM results are from hierarchical linear models estimated with maximum likelihood. OLS results are from linear regressions estimated with ordinary least squares regressions. In the CES models, Social Exclusion is a dummy variable indicating that respondents have fewer than or equal to 500 Facebook friends. Unstandardized coefficients are reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Table C14: CloudResearch Sample 1 (July 2022) — Economic Attitudes

	DV: Economic Attitude Scales					
	Full Sample		Politically Engaged		3-Way Interaction	
	Reduced Model	Full Model	Reduced Model	Full Model	Reduced Model	Full Model
Anxiety × Exclusion × Engagement					.894 (.378)*	.838 (.387)*
Anxiety × Exclusion	.053 (.099)	.002 (.152)	.571 (.198)**	.518 (.310)	-.488 (.256)	-.518 (.294)
Anxiety × Engagement					-.253 (.290)	-.209 (.297)
Engagement × Exclusion					-.492 (.182)**	-.440 (.190)*
Volatility × Exclusion		-.125 (.157)		-.135 (.338)		-.070 (.157)
Income × Exclusion		-.266 (.120)*		-.304 (.243)		-.239 (.121)*
Education × Exclusion		.057 (.097)		.208 (.214)		.065 (.097)
Age × Exclusion		-.001 (.003)		.002 (.005)		.000 (.003)
Male × Exclusion		-.102 (.060)		-.068 (.135)		-.084 (.060)
Black × Exclusion		.040 (.107)		.150 (.313)		.010 (.108)
Other × Exclusion		.032 (.076)		-.079 (.157)		.023 (.076)
Anxiety	.121 (.094)	.138 (.112)	-.032 (.181)	.012 (.227)	.253 (.210)	.255 (.225)
Volatility	-.059 (.077)	.017 (.117)	-.117 (.155)	-.017 (.272)	-.041 (.077)	.001 (.117)
Social Exclusion	-.018 (.048)	.164 (.150)	-.301 (.095)**	-.302 (.328)	.283 (.124)*	.362 (.176)*
Political Engagement					.271 (.133)*	.217 (.139)
Income	-.096 (.060)	.046 (.085)	-.141 (.114)	.018 (.166)	-.122 (.060)*	.008 (.087)
Education	-.014 (.048)	-.046 (.071)	.100 (.100)	-.009 (.152)	-.002 (.048)	-.037 (.071)
Age	-.005 (.001)***	-.004 (.002)*	-.007 (.002)**	-.008 (.004)*	-.005 (.001)***	-.005 (.002)**
Male	-.028 (.030)	.028 (.042)	-.052 (.065)	.002 (.095)	-.032 (.030)	.015 (.043)
Black	.011 (.053)	-.022 (.080)	.036 (.142)	-.118 (.252)	.015 (.053)	-.002 (.081)
Other	.084 (.038)*	.069 (.054)	.115 (.075)	.167 (.121)	.072 (.038)	.062 (.054)
(Intercept)	.809 (.080)***	.714 (.109)***	1.027 (.167)***	.991 (.250)***	.672 (.109)***	.639 (.128)***
N	378	378	120	120	378	378
R2	.096	.120	.249	.277	.127	.144
Adj.R2	.072	.078	.180	.157	.094	.093

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C15: CloudResearch Sample 2 (January 2023) — Economic Attitudes

	DV: Economic Attitude Scales					
	Full Sample		Politically Engaged		3-Way Interaction	
	Reduced Model	Full Model	Reduced Model	Full Model	Reduced Model	Full Model
Anxiety × Exclusion × Engagement					.196 (.237)	.164 (.238)
Anxiety × Exclusion	.171 (.065)**	.295 (.092)**	.144 (.131)	.401 (.184)*	.049 (.154)	.189 (.172)
Anxiety × Engagement					.076 (.164)	.088 (.165)
Engagement × Exclusion					-.090 (.108)	-.100 (.110)
Volatility × Exclusion		-.193 (.104)		-.472 (.223)*		-.187 (.104)
Income × Exclusion		.013 (.060)		-.035 (.129)		.012 (.060)
Education × Exclusion		-.005 (.057)		.088 (.127)		.002 (.057)
Age × Exclusion		.000 (.001)		.000 (.003)		.001 (.001)
Male × Exclusion		.004 (.034)		.054 (.071)		.007 (.035)
Black × Exclusion		.015 (.058)		.146 (.163)		.021 (.058)
Other × Exclusion		-.082 (.051)		-.208 (.116)		-.071 (.050)
Anxiety	.120 (.055)*	.057 (.064)	.230 (.110)*	.112 (.121)	.077 (.114)	.009 (.120)
Volatility	-.063 (.052)	.033 (.074)	.019 (.109)	.219 (.145)	-.038 (.052)	.054 (.074)
Social Exclusion	-.046 (.028)	-.030 (.085)	-.021 (.052)	-.050 (.176)	.013 (.074)	.009 (.104)
Political Engagement					.117 (.080)	.122 (.081)
Income	-.126 (.030)***	-.128 (.041)**	-.023 (.063)	.011 (.084)	-.124 (.030)***	-.126 (.040)**
Education	.024 (.028)	.025 (.040)	.011 (.064)	-.037 (.091)	.008 (.028)	.006 (.040)
Age	-.002 (.001)***	-.002 (.001)*	-.001 (.001)	-.002 (.002)	-.003 (.001)***	-.003 (.001)**
Male	-.050 (.017)**	-.052 (.024)*	-.075 (.035)*	-.101 (.049)*	-.062 (.017)***	-.065 (.024)**
Black	.084 (.029)**	.077 (.040)	.052 (.078)	-.023 (.099)	.091 (.029)**	.079 (.040)*
Other	.040 (.025)	.077 (.035)*	.058 (.057)	.134 (.073)	.043 (.025)	.075 (.035)*
(Intercept)	.718 (.045)***	.712 (.060)***	.632 (.093)***	.672 (.125)***	.667 (.066)***	.672 (.075)***
N	913	913	280	280	913	913
R2	.101	.107	.125	.158	.119	.125
Adj.R2	.091	.090	.093	.104	.105	.104

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C16: CloudResearch Combined Samples — Economic Attitudes

	DV: Economic Attitude Scales					
	Full Sample		Politically Engaged		3-Way Interaction	
	Reduced Model	Full Model	Reduced Model	Full Model	Reduced Model	Full Model
Anxiety × Exclusion × Engagement					.399 (.198)*	.366 (.200)
Anxiety × Exclusion	.128 (.054)*	.232 (.078)**	.243 (.107)*	.496 (.154)**	-.117 (.131)	.004 (.147)
Anxiety × Engagement					-.019 (.142)	-.002 (.143)
Engagement × Exclusion					-.211 (.092)*	-.208 (.094)*
Volatility × Exclusion		-.193 (.086)*		-.449 (.176)*		-.177 (.086)*
Income × Exclusion		-.037 (.052)		-.077 (.111)		-.029 (.052)
Education × Exclusion		.006 (.049)		.105 (.107)		.013 (.049)
Age × Exclusion		.000 (.001)		.000 (.002)		.000 (.001)
Male × Exclusion		-.027 (.030)		.022 (.062)		-.017 (.030)
Black × Exclusion		.010 (.051)		.128 (.139)		.010 (.050)
Other × Exclusion		-.047 (.042)		-.175 (.088)*		-.045 (.041)
Anxiety	.116 (.048)*	.062 (.055)	.178 (.093)	.051 (.105)	.127 (.100)	.064 (.105)
Volatility	-.061 (.043)	.039 (.062)	-.041 (.088)	.197 (.125)	-.042 (.043)	.049 (.062)
Social Exclusion	-.036 (.024)	.024 (.074)	-.089 (.045)	-.093 (.153)	.096 (.063)	.115 (.088)
Political Engagement					.161 (.068)*	.157 (.069)*
Income	-.115 (.026)***	-.094 (.036)**	-.049 (.055)	.001 (.073)	-.116 (.026)***	-.099 (.035)**
Education	.011 (.024)	.006 (.035)	.022 (.053)	-.046 (.076)	.000 (.024)	-.008 (.035)
Age	-.003 (.001)***	-.003 (.001)**	-.003 (.001)*	-.003 (.002)	-.003 (.001)***	-.003 (.001)***
Male	-.042 (.015)**	-.028 (.021)	-.067 (.031)*	-.073 (.043)	-.051 (.015)***	-.042 (.021)*
Black	.066 (.025)**	.060 (.036)	.035 (.069)	-.043 (.093)	.071 (.025)**	.064 (.036)
Other	.056 (.021)**	.078 (.029)**	.082 (.044)	.164 (.061)**	.054 (.021)**	.075 (.029)**
(Intercept)	.741 (.039)***	.711 (.052)***	.739 (.082)***	.748 (.111)***	.664 (.056)***	.656 (.064)***
N	1291	1291	400	400	1291	1291
-2 × Log Lik.	206.531	235.097	176.495	189.185	193.872	223.630

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C17: CloudResearch Combined Samples — Social Attitudes

	DV: Social Attitudes Scale				
	Full Sample		Politically Engaged		3-Way Interaction
Anxiety × Exclusion × Engagement					−.034 (.196) −.061 (.198)
Anxiety × Exclusion	.166 (.053)**	.248 (.077)**	.088 (.103)	.177 (.150)	.187 (.130) .285 (.145)*
Anxiety × Engagement					.062 (.141) .074 (.142)
Engagement × Exclusion					.005 (.091) .015 (.093)
Volatility × Exclusion		−.137 (.085)		−.193 (.171)	−.135 (.085)
Income × Exclusion		.025 (.051)		−.041 (.108)	.030 (.051)
Education × Exclusion		.008 (.048)		.118 (.104)	.009 (.049)
Age × Exclusion		−.001 (.001)		.000 (.002)	−.001 (.001)
Male × Exclusion		−.010 (.029)		−.040 (.060)	−.007 (.030)
Black × Exclusion		.027 (.050)		−.021 (.135)	.033 (.050)
Other × Exclusion		−.054 (.041)		−.132 (.086)	−.048 (.041)
Anxiety	.057 (.047)	.016 (.054)	.240 (.089)**	.188 (.102)	.018 (.099) −.031 (.105)
Volatility	−.056 (.042)	.016 (.061)	−.099 (.084)	.009 (.121)	−.044 (.042) .025 (.061)
Social Exclusion	−.078 (.024)**	−.029 (.073)	−.046 (.044)	−.019 (.148)	−.081 (.062) −.051 (.088)
Political Engagement					.081 (.068) .075 (.068)
Income	−.046 (.026)	−.055 (.035)	.013 (.053)	.037 (.071)	−.048 (.026) −.059 (.035)
Education	.060 (.024)*	.053 (.034)	.096 (.051)	.030 (.074)	.051 (.024)* .043 (.034)
Age	−.003 (.001)***	−.002 (.001)*	−.001 (.001)	−.001 (.002)	−.003 (.001)*** −.002 (.001)**
Male	−.007 (.015)	−.002 (.021)	.016 (.030)	.039 (.042)	−.015 (.015) −.011 (.021)
Black	−.038 (.025)	−.051 (.035)	−.003 (.066)	−.003 (.090)	−.034 (.025) −.051 (.035)
Other	.029 (.021)	.054 (.029)	.056 (.043)	.121 (.059)*	.030 (.020) .052 (.029)
(Intercept)	.763 (.040)***	.738 (.052)***	.626 (.078)***	.613 (.108)***	.735 (.056)*** .719 (.064)***
N	1291	1291	400	400	1291 −2 × Log Lik. 168.505 200.153 146.891 167.699 169.563 201.454

Note: Results are from hierarchical linear models estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C18: CloudResearch Sample 1 (July 2022) — Ideological Conformity

	DV: Ideological Conformity				
	Full Sample		Politically Engaged		3-Way Interaction
Anxiety × Exclusion × Engagement				-.031 (.201)	-.047 (.206)
Anxiety × Exclusion	-.006 (.052)	-.013 (.080)	-.063 (.088)	-.185 (.137)	.005 (.136) .003 (.156)
Anxiety × Engagement					-.087 (.155) .094 (.158)
Engagement × Exclusion					.069 (.097) .100 (.101)
Volatility × Exclusion		.023 (.083)		.136 (.149)	.015 (.084)
Income × Exclusion		.118 (.064)		.100 (.107)	.105 (.065)
Education × Exclusion		-.038 (.051)		-.021 (.094)	-.042 (.052)
Age × Exclusion		-.002 (.001)		-.001 (.002)	-.002 (.001)
Male × Exclusion		-.028 (.032)		-.072 (.060)	-.038 (.032)
Black × Exclusion		.004 (.057)		.118 (.138)	.006 (.057)
Other × Exclusion		-.011 (.040)		.054 (.070)	-.013 (.040)
Anxiety	.048 (.049)	.051 (.059)	.062 (.080)	.131 (.100)	.115 (.112) .125 (.120)
Volatility	.038 (.041)	.030 (.062)	.017 (.069)	-.060 (.120)	.032 (.041) .029 (.062)
Social Exclusion	.045 (.025)	.118 (.080)	.076 (.042)	.144 (.145)	.005 (.066) .093 (.094)
Political Engagement					-.042 (.071) .046 (.074)
Income	.012 (.032)	-.046 (.045)	-.057 (.051)	-.085 (.074)	.019 (.032) -.031 (.046)
Education	-.028 (.025)	-.010 (.038)	.023 (.044)	.021 (.067)	-.029 (.026) -.010 (.038)
Age	-.001 (.001)	.000 (.001)	-.001 (.001)	.000 (.002)	.000 (.001) .001 (.001)
Male	-.029 (.016)	-.018 (.022)	-.033 (.029)	-.005 (.042)	-.026 (.016) -.009 (.023)
Black	-.055 (.028)*	-.055 (.042)	-.080 (.063)	-.149 (.111)	-.054 (.028) -.055 (.043)
Other	-.019 (.020)	-.014 (.028)	-.018 (.034)	-.050 (.054)	-.014 (.020) -.008 (.029)
(Intercept)	.222 (.042)***	.187 (.058)**	.197 (.074)**	.176 (.111)	.232 (.058)*** .182 (.068)**
N	378	378	120	120	378
R2	.071	.086	.102	.150	.082
Adj.R2	.046	.043	.020	.009	.047

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C19: CloudResearch Combined Samples Including Respondents Who Failed Attention Checks

DV: Economic Attitudes Scale					
	Full Sample		Politically Engaged		3-Way Interaction
Anxiety × Exclusion × Engagement					.294 (.186) .266 (.188)
Anxiety × Exclusion	.099 (.051)	.189 (.073)**	.157 (.096)	.356 (.138)*	−.092 (.126) .018 (.141)
Anxiety × Engagement					−.060 (.136) −.045 (.137)
Engagement × Exclusion					−.205 (.089)* −.207 (.091)*
Volatility × Exclusion		−.172 (.082)*		−.378 (.164)*	−.165 (.082)*
Income × Exclusion		−.044 (.049)		−.115 (.101)	−.038 (.049)
Education × Exclusion		.011 (.046)		.100 (.099)	.021 (.047)
Age × Exclusion		.000 (.001)		.000 (.002)	.000 (.001)
Male × Exclusion		−.018 (.028)		.015 (.056)	−.009 (.028)
Black × Exclusion		−.004 (.045)		.031 (.111)	−.009 (.045)
Other × Exclusion		−.047 (.040)		−.180 (.085)*	−.046 (.040)
Anxiety	.115 (.045)*	.068 (.052)	.140 (.084)	.041 (.096)	.152 (.097) .095 (.102)
Volatility	−.071 (.041)	.018 (.059)	−.034 (.082)	.165 (.118)	−.059 (.041) .026 (.059)
Social Exclusion	−.027 (.023)	.029 (.070)	−.073 (.043)	−.037 (.141)	.104 (.061) .126 (.085)
Political Engagement					.170 (.066)** .168 (.066)*
Income	−.109 (.025)***	−.086 (.034)*	−.042 (.050)	.017 (.068)	−.113 (.025)*** .−.093 (.034)**
Education	−.004 (.023)	−.011 (.033)	−.001 (.049)	−.060 (.070)	−.015 (.023) −.026 (.033)
Age	−.003 (.001)***	−.003 (.001)***	−.003 (.001)**	−.003 (.002)	−.003 (.001)*** −.003 (.001)***
Male	−.038 (.014)**	−.028 (.020)	−.058 (.028)*	−.058 (.039)	−.045 (.014)** −.040 (.020)*
Black	.049 (.023)*	.049 (.032)	−.010 (.055)	−.041 (.083)	.050 (.022)* .053 (.032)
Other	.059 (.020)**	.081 (.028)**	.089 (.043)*	.176 (.059)**	.059 (.020)** .081 (.028)**
(Intercept)	.748 (.037)***	.719 (.050)***	.753 (.075)***	.738 (.103)***	.663 (.054)*** .653 (.062)***
N	1400	1400	450	450	1400
−2 × Log Lik.	168.504	198.928	175.912	191.158	162.891
					193.801

Note: Results are from hierarchical linear models estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C20: Pre-Registered Analyses for CloudResearch Sample 1 (July 2022)

	DV: Economic Attitudes				DV: Social Attitudes				DV: Conformity			
Withdrawal × Exclusion	.054 (.104)	.192 (.167)	.093 (.095)	.248 (.153)	.005 (.055)	.005 (.055)	.005 (.055)	.005 (.055)	.005 (.055)	.005 (.055)	.005 (.055)	-.019 (.088)
Volatility × Exclusion	-.039 (.109)	-.190 (.175)	-.012 (.100)	-.210 (.160)	.014 (.057)	.014 (.057)	.014 (.057)	.014 (.057)	.014 (.057)	.014 (.057)	.014 (.057)	.033 (.092)
Social Exclusion	.003 (.028)	-.019 (.052)	.016 (.048)	-.008 (.052)	-.021 (.025)	-.060 (.048)	-.018 (.044)	-.049 (.048)	.043** (.015)	.041 (.027)	.037 (.025)	.040 (.028)
Withdrawal	.099 (.079)	.112 (.128)	.053 (.072)	.015 (.118)	.015 (.041)	.085* (.041)	.085* (.041)	.085* (.041)	.085* (.041)	.085* (.041)	.093 (.068)	
Volatility	.067 (.082)	-.010 (.133)	.054 (.075)	.054 (.122)	.054 (.043)	.062 (.043)	.062 (.043)	.062 (.043)	.062 (.043)	.062 (.043)	-.010 (.070)	
Income	-.132* (.058)	-.093 (.060)	-.124* (.059)	-.085 (.060)	-.030 (.053)	.002 (.055)	-.021 (.054)	.008 (.055)	-.008 (.030)	.018 (.031)	.004 (.031)	.017 (.032)
Education	-.003 (.048)	-.010 (.048)	-.006 (.048)	-.011 (.044)	.003 (.044)	-.001 (.044)	.000 (.044)	-.002 (.044)	-.021 (.044)	-.027 (.025)	-.024 (.025)	-.027 (.025)
Age	-.005*** (.001)	.004** (.001)	.004*** (.001)	.004** (.001)	-.004** (.001)	-.003** (.001)	-.003** (.001)	-.003** (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)
Male	-.047 (.029)	-.031 (.029)	-.044 (.029)	-.026 (.029)	-.026 (.026)	-.013 (.027)	-.023 (.026)	-.009 (.027)	-.039* (.015)	-.028 (.015)	-.035* (.015)	-.029 (.016)
Black	.010 (.053)	.012 (.053)	.010 (.053)	.014 (.053)	-.037 (.048)	-.036 (.048)	-.037 (.049)	-.034 (.048)	-.055* (.028)	-.054 (.028)	-.056* (.028)	-.054 (.028)
Other	.087* (.038)	.085* (.038)	.088* (.038)	.084* (.038)	.067 (.035)	.064 (.035)	.068 (.035)	.064 (.035)	-.018 (.020)	-.019 (.020)	-.018 (.020)	-.019 (.020)
(Intercept)	.861*** (.067)	.779*** (.083)	.825*** (.080)	.768*** (.083)	.867*** (.061)	.813*** (.076)	.836*** (.073)	.801*** (.076)	.276*** (.035)	.212*** (.043)	.238*** (.042)	.214*** (.044)
N	378	378	378	378	378	378	378	378	378	378	378	378
R ²	.084	.097	.086	.105	.050	.062	.052	.068	.054	.076	.068	.076
Adj.R ²	.067	.075	.064	.078	.032	.039	.029	.040	.036	.053	.045	.048

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients are reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Table C21: Pre-Registered Analyses for CloudResearch Sample 2 (July 2022)

	DV: Economic Attitudes Scale	DV: Social Attitudes Scale
Withdrawal × Exclusion × Engagement	.192 (.250)	−.055 (.256)
Volatility × Exclusion × Engagement	.099 (.274)	−.272 (.279)
Withdrawal × Exclusion	.005 (.165)	.201 (.169)
Volatility × Exclusion	−.036 (.172)	.245 (.175)
Withdrawal × Engagement	.122 (.174)	.144 (.178)
Volatility × Engagement	.120 (.193)	.128 (.196)
Social Exclusion	.031 (.081)	−.096 (.083)
Withdrawal	.076 (.118)	−.025 (.121)
Volatility	.036 (.125)	−.052 (.127)
Political Engagement	.106 (.088)	.041 (.090)
Income	−.118 (.030)***	−.054 (.030)
Education	.013 (.028)	.080 (.029)**
Age	−.002 (.001)***	−.002 (.001)**
Male	−.065 (.017)***	−.020 (.018)
Black	.091 (.029)**	−.034 (.029)
Other	.042 (.025)	.010 (.026)
(Intercept)	.635 (.072)***	.694 (.074)***
N	913	913
R2	.119	.060
Adj.R2	.107	.047
		.030

Note: Results are from linear regressions estimated using ordinary least squares. Unstandardized coefficients reported with standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001.

D Does Political Engagement Moderate the Effects of Anxiety?

Did political engagement also matter in our representative samples? As shown in section (A) of Figure D1, engagement was very important in LISS ($b = .20$, $p = .028$) and our CloudResearch samples, but did not make a difference in the ANES, CES, or TAPS (p 's $> .05$). Note that we found moderating effects of engagement only in the two models that used multi-item anxiety scales (LISS and CloudResearch); there were no significant effects in the three models that used a single item to measure anxiety. This suggests that these null results may be due to a lack of statistical precision (Bakker and Lelkes 2018; Credé et al. 2012).

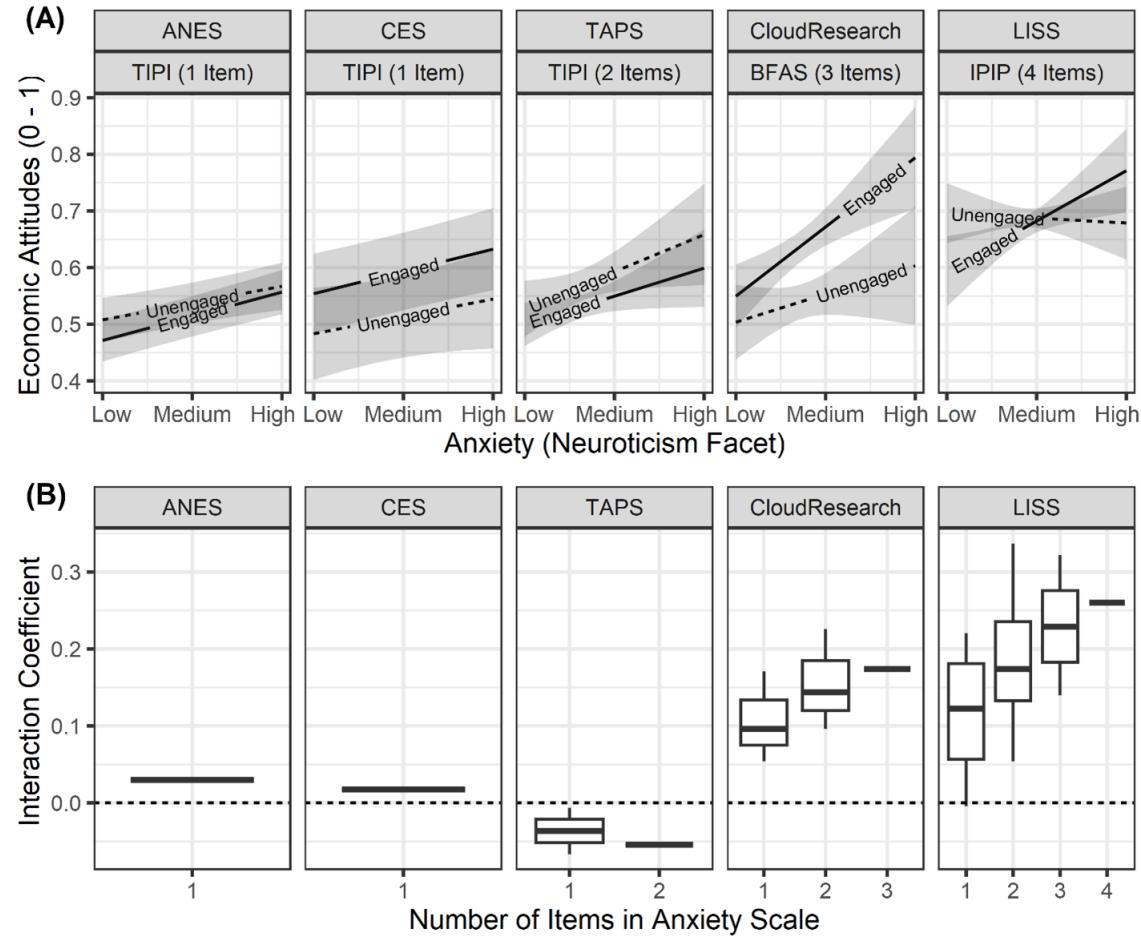
To probe this possibility, we re-estimated the TAPS, LISS, and CloudResearch models using different numbers and combinations of items to construct the anxiety scales. (TAPS had only a single item, but it was asked once each in two waves. In our main analyses, we used an average of the two. Here, we treat them as separate items.) We present these results in section (B) of Figure D1. The median interaction coefficient when using a single item to measure anxiety is $-.03$ in TAPS, $.12$ in LISS, and $.10$ in CloudResearch; when using all items, the comparable coefficients are $-.05$, $.26$, and $.17$. Thus, while the number of items does not seem to matter in TAPS, it makes a major difference in LISS and CloudResearch. For example, if we were relying solely on the “am easily disturbed” item in LISS, we would conclude incorrectly that there is no moderating effect of engagement ($b = .00$, $p = .964$). Combined with existing theory which argues that people are more likely to connect their psychological motivations to policies when they follow politics (Federico and Malka 2018), these results suggest that engagement does plausibly moderate the relationship between anxiety and economic attitudes, but that the effect is small and most likely seen when using reliable measures.

Table D1: Political engagement inconsistently moderates the relationship between anxiety and left-wing economic attitudes

	DV: Economic Attitude Scales				
	ANES	CES	TAPS	LISS	CloudResearch
Anxiety x Engagement	-.010 (.035)	.026 (.043)	.099 (.098)	.197 (.090)*	.195 (.099)*
Anxiety	.072 (.025)**	.065 (.036)	.043 (.073)	-.046 (.059)	.032 (.066)
Political Engagement	-.016 (.018)	.078 (.024)**	-.075 (.043)	-.113 (.045)*	.049 (.047)
Income	-.112 (.009)***	-.159 (.020)***	-.177 (.031)***	-.059 (.012)***	-.115 (.026)***
Education	.016 (.018)	.113 (.015)***	.064 (.059)	-.077 (.012)***	.001 (.024)
Age	-.020 (.011)	-.002 (.000)***	.077 (.047)	.190 (.023)***	-.003 (.001)***
Male	-.035 (.005)***	-.033 (.008)***	-.044 (.014)**	-.024 (.007)**	-.053 (.015)***
Black	.158 (.008)***	.155 (.014)***	.194 (.027)***		.068 (.025)**
Hispanic	.082 (.008)***	.050 (.015)**	.098 (.024)***		
Other (LISS: Parents Foreign-Born)	.054 (.010)***	-.004 (.015)	-.020 (.030)	.030 (.012)*	.052 (.021)*
(Intercept)	.565 (.031)***	.564 (.042)***	.520 (.054)***	.593 (.031)***	.712 (.044)***
N	6675	5041	917	3105	1291
R ²			.150	.068	
Adj.R ²			.140	.065	
-2 × Log Lik.	-2312.651	1466.952	144.958	637.307	186.032

Note: Results are from hierarchical linear models estimated with maximum likelihood. Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

Figure D1: Political engagement moderates the relationship between anxiety and left-wing economic attitudes, but only when anxiety is measured with multiple items



Note: (A) predicted economic attitudes as a function of anxiety at the 5th percentile of political engagement (“Unengaged”) and the 95th percentile of political engagement (“Engaged”). Shaded areas are 95% confidence intervals. The full regression output for each model is presented in appendix C.7. (B) Box and whisker plots representing the range of possible interaction coefficients between anxiety and engagement using 1, 2, 3, or 4 item scales to measure anxiety. The thick horizontal line inside the box is the median coefficient. The top and bottom of the box represent the 75th and 25th percentile, respectively, bounding the interquartile range. The top and bottom of the lines extending away from the box represent the maximum and minimum coefficients, respectively.

Table D2: Three-way Interactions Between Engagement, Exclusion, and Personality

	DV: Economic Attitude Scales							
	CES		TAPS		LISS		CloudResearch	
Anxiety x Exclusion x Engagement	.518 (.186)**	.657 (.234)**	-.317 (.433)	-.448 (.522)	.709 (.458)	1.163 (.695)	.402 (.198)*	.436 (.305)
Volatility x Exclusion x Engagement		-.084 (.314)		.323 (.650)		-.415 (.647)		-.116 (.336)
Agreeableness x Exclusion x Engagement		-.109 (.337)		.233 (.676)		-1.50 (.931)		
Extraversion x Exclusion x Engagement		.149 (.252)		.115 (.519)		.184 (.563)		
Conscientiousness x Exclusion x Engagement		.372 (.349)		-.369 (.586)		.738 (.716)		
Openness x Exclusion x Engagement		.019 (.325)		-.125 (.639)		-.185 (.670)		
Anxiety x Exclusion	-.264 (.150)	-.337 (.189)	.575 (.347)	.584 (.397)	-.182 (.257)	-.545 (.394)	-.119 (.131)	-.028 (.207)
Volatility x Exclusion		.015 (.244)		-.305 (.498)		.408 (.366)		-.116 (.224)
Agreeableness x Exclusion		.081 (.271)		-.237 (.529)		.782 (.522)		
Extraversion x Exclusion		-.136 (.203)		.127 (.417)		-.042 (.302)		
Conscientiousness x Exclusion		-.217 (.285)		.390 (.477)		-.503 (.405)		
Openness x Exclusion		.054 (.263)		-.216 (.523)		.037 (.382)		
Anxiety x Engagement	-.371 (.168)*	-.503 (.215)*	.179 (.162)	.164 (.204)	.095 (.161)	.229 (.236)	-.011 (.142)	-.050 (.212)
Volatility x Engagement		.179 (.292)		.052 (.277)		-.190 (.221)		.076 (.240)
Agreeableness x Engagement		-.026 (.310)		.034 (.253)		.513 (.338)		
Extraversion x Engagement		-.170 (.230)		-.249 (.187)		-.170 (.219)		
Conscientiousness x Engagement		-.322 (.317)		-.084 (.240)		-.044 (.242)		
Openness x Engagement		.104 (.295)		.404 (.246)		.274 (.259)		
Anxiety	.242 (.134)	.324 (.173)	-.152 (.129)	-.093 (.160)	-.034 (.092)	-.094 (.135)	.096 (.095)	.089 (.144)
Volatility			-.128 (.225)	.087 (.215)		.044 (.124)		.008 (.159)
Agreeableness			-.019 (.248)	.196 (.204)		.004 (.195)		
Extraversion			.070 (.183)	.156 (.154)		-.028 (.122)		
Conscientiousness			.072 (.259)	-.120 (.190)		.027 (.139)		
Openness			.096 (.237)	.017 (.200)		-.169 (.147)		
Social Exclusion	.195 (.088)*	.356 (.399)	-.180 (.153)	-.108 (.721)	.190 (.138)	.002 (.428)	.096 (.063)	.106 (.065)
Political Engagement	.375 (.095)***	.645 (.445)	-.101 (.064)	-.236 (.352)	-.044 (.077)	-.428 (.268)	.160 (.068)*	.151 (.071)*
Income	-.166 (.036)***	-.145 (.037)***	-.157 (.034)***	-.130 (.034)***	-.075 (.015)***	-.076 (.015)***	-.116 (.026)***	-.114 (.026)***
Own Home		-.074 (.016)***	-.070 (.016)***	-.048 (.019)*	-.042 (.019)*	-.080 (.011)***	-.078 (.011)***	
Unemployed		.067 (.030)*	.061 (.030)*	.020 (.016)	.020 (.016)	.052 (.035)	.053 (.035)	
Uninsured		-.083 (.028)**	-.085 (.028)**	-.021 (.024)	-.021 (.024)			
Education	.110 (.026)***	.090 (.026)***	.012 (.059)	-.015 (.060)	-.098 (.016)***	-.096 (.017)***	.001 (.024)	-.002 (.024)
Age		-.001 (.000)	.000 (.001)	.131 (.055)*	.110 (.056)*	.215 (.030)***	.183 (.032)***	-.003 (.001)***
Male		-.030 (.014)*	-.037 (.015)*	-.070 (.014)***	-.053 (.015)***	-.034 (.010)***	-.018 (.011)	-.051 (.015)***
Black		.114 (.025)***	.119 (.026)***	.188 (.028)***	.172 (.029)***		.071 (.025)**	.070 (.025)**
Hispanic		.075 (.028)**	.069 (.028)*	.096 (.024)***	.093 (.025)***			
Other (LISS: Parents Foreign-Born)		-.011 (.027)	-.021 (.027)	-.007 (.029)	-.016 (.029)	.007 (.016)	.006 (.016)	.053 (.021)**
(Intercept)		.453 (.089)***	.309 (.373)	.698 (.067)***	.520 (.289)	.782 (.047)***	.894 (.154)***	.659 (.056)***
N	1661	1619	1058	972	2669	2669	1291	1291
$-\frac{1}{2} \times \text{Log Lik.}$			107.949	144.658	5.987	28.518		

Note: Unstandardized coefficients reported with standard errors in parentheses. * p < .05, ** p < .01, *** p < .001

E Experimental Stimuli

Welcome to the discussion portal!

This part of the study is about likeability.
Do people learn better when the information comes from a likeable source?
Let's find out!

To help the members of your group remember who's who, you will each select personal avatars and write short biographies to introduce yourselves.

Figure E1: Experiment (page 1)

Please enter your first name

Figure E2: Experiment (page 2)

Please select an avatar.

These are not real faces. They were created by a computer program.
Your choice of avatar will not be recorded or analyzed



Figure E3: Experiment (page 3)

Please introduce yourself

Write a short paragraph introducing yourself to the rest of the group.

biography appears here. Subject biography appears here.

Characters left: 16

Figure E4: Experiment (page 4)

Group Introduction

You will have just over three minutes to evaluate your group.

After you read each profile, think about whether you would want to interact with this person in real life. **Do they seem likeable?**

If so, you can indicate your feelings by clicking the "like" button.

Please be attentive, without switching pages, or doing unrelated tasks.

Questions about the other people in your discussion group might follow.

If these instructions are clear, you can proceed to log in.

Figure E5: Experiment (page 5)

Establishing connection

Please wait while you are being connected to the other participants in your group.



Figure E6: Experiment (page 6)

Establishing connection

Please wait while you are being connected to the other participants in your group.

All participants are now connected and you are ready to proceed.

[Continue](#)

Figure E7: Experiment (page 7)

 **Subject**

Subject biography appears here.
Subject biography appears here.

Likes 0 Like

 **George**

My names George. I'm originally from New York, moved to the Philadelphia area for work almost fifteen years ago. I'm in the food packaging industry. We make cartons for things like juiceboxes and soup broth. I'm a golfer. When we're not working my wife and I spend most of our time shuttling our boys between school and football practice.

Likes 1 Like

 **Anca**

Hello my name is Anca. I'm a registered nurse but my passions are cooking and soccer. My dad is english and my mom is bengali. Dad is the biggest Man Utd fan in the world so that definitely rubbed off on me. Besides my hobbies my friends and wine are the most important thing in my life.

Likes 0 Like

 **John**

I'm 38 years old, married with four kids. I've been in construction for 20 years. Tryna make some extra cash. Not much else to know about me. I barbecue every weekend. My wife says I eat too much red meat but I tell her its steak or cigars and shes lucky its steak

Likes 0 Like

 **Kimberly**

Hey, guys. I'm 19, native Georgian. I consider myself pretty nice, but not a total angel :) I just like being friendly to people I meet. In my spare time, I like making all kinds of friends, having conversations about whatever, looking at paintings, reading, singing (show choir represent!), making jewelry, and eating delicious food. Enjoy your day, stay out of trouble. <3

Likes 1 Like

 **Jane**

Dear all, my name is Jane. I am the proud mother of two talented children. My youngest enjoys drawing and painting. His big sister is a soccer prodigy. We moved recently to allow them to attend a better school and they are absolutely thriving here. My husband runs a very successful landscaping company. I was a florist before meeting my husband. Now I'm a full time mother. I enjoy reading and gardening in my spare time.

Likes 0 Like

 **George**

My names George. I'm originally from New York, moved to the Philadelphia area for work almost fifteen years ago. I'm in the food packaging industry. We make cartons for things like juiceboxes and soup broth. I'm a golfer. When we're not working my wife and I spend most of our time shuttling our boys between school and football practice.

Likes 1 Like

 **Sarah**

Hello! Nice to meet you all. I'm Sarah, married, and mother of two wonderful (grown up) children. My career has been a bit peculiar. Starting off as a graduate historian, I switched to an entirely different discipline: occupational assessor trying to help young people with disabilities to get a job. I've just retired and started spending more time on my hobbies, such as singing, reading, and playing volleyball.

Likes 1 Like

 **Niki**

Hii I'm Niki! I run a cute little boutique at my local mall. My passion is beauty and cosmetics so I'm pretty much living the dream! If anyone wants some free samples come visit me at the Charleston Town Center!!!!

Likes 1 Like

 **Ryan**

33 yrs old with 1 little monster and another on the way. Real estate agent for 9 years, little league coach, school board member.

Likes 0 Like

 **Harry**

I own a True Value hardware and I do some carpentry work on the side. I'm a lifelong Patriots fan.....

Likes 0 Like

 **Kevin**

Hello, nice to meet you. My name is Kevin. I'm a second year college student studying engineering. I like to read and play the piano. I did track and field in high school, but I haven't had much time to practice since starting college.

Likes 0 Like

 **Heather**

Hi yall my name is Heather. I'm a gymnastics instructor with a passion for sports and theater. I've been doing gymnastics since middle school and I believe that it's the best way to improve confidence and self control. My favorite shows are Wicked and Cats. I think I've seen both like 20 times. If our discussion topic is showtunes you better hope we're not paired up!

Likes 2 Like

You can click "Like" if you have enjoyed somebody's description
Time left: 03:21

Figure E8: Experiment (page 8)

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F Pre-Registration



Ostracism and Economic Attitudes

Public registration

Updates



Metadata

Study Information



Hypotheses

Hypothesis One: If a lack of social connections motivates the adoption of egalitarian attitudes, then support for left-wing economic (but not social) policies should be higher among subjects who are ostracized in a simulated social media paradigm than among subjects who are not ostracized.

Hypothesis Two: People high on the Withdrawal aspect of Neuroticism (with captures dispositional sensitivity to social approval) will be most strongly affected by the manipulation of ostracism. In other words, Withdrawal will moderate the effect of ostracism such that the effect predicted in Hypothesis one should be larger for people high in Withdrawal. This should only occur for economic (not social) policies. And it should not occur for the Volatility aspect of Neuroticism, which is not as closely related to social approval.

Hypothesis Three: If the desire for social approval motivates the adoption of the prevailing attitudes among one's family, friends, and peers, then the absolute value of the difference between the subject's attitudes and the attitudes that they attribute to their social groups should be lower among subjects who are ostracized in a simulated social media paradigm than among subjects who are not ostracized. This would reflect subjects "going along to get along" and should apply to both economic and social attitudes.

Hypothesis Four: The effect described in Hypothesis Three will be especially large for people high on the Withdrawal (but not Volatility) aspect of Neuroticism. In other words, the effect described in Hypothesis Three will be moderated by Withdrawal.

Design Plan

Study type

Experiment - A researcher randomly assigns treatments to study subjects, this includes field or lab experiments. This is also known as an intervention experiment and includes randomized controlled trials.

Blinding

For studies that involve human subjects, they will not know the treatment group to which they have been assigned.

Is there any additional blinding in this study?

No response

Study design

Between subjects design with 2 groups (treatment and control: ostracism versus no ostracism) and one continuous personality moderator (Neuroticism-Withdrawal).

No files selected

Randomization

We will use simple randomization, where each participant will be randomly assigned to either a treatment group (ostracism) or a control group (no ostracism). Our Qualtrics survey will automatically perform the randomization such that an equal number of participants will be assigned to each group.

Sampling Plan

Existing Data

Registration prior to creation of data

Explanation of existing data

No response

Data collection procedures

Participants will be recruited through advertisements on the Amazon Mechanical Turk online platform. Participants will be paid \$1.50 for completing the Qualtrics survey. Participants must be at least 18 years old.

No files selected

Sample size

Our target sample size is 400 participants.

Sample size rationale

Research examining the interactive effects of social exclusion and neuroticism on emotional states has yielded effects of approximately medium size ($f^2=0.15$). However, given the greater stability of political attitudes compared to transient emotional states, we conservatively theorize that the interaction effect will be small-to-medium ($f^2=0.08$). Given this expectation, we will require approximately 200 subjects to achieve 95% power. Because it is generally difficult to estimate the statistical power necessary to observe interaction effects in multiple regression analyses, we err on the side of caution and aim to recruit 400 participants.

Stopping rule

No response

Variables

Manipulated variables

Participants will engage in what they believe is an online discussion group. In fact, there is no group; all other people are fictional. They begin by reading profiles supposedly provided by the other people, each one paired with a computer generated avatar chosen by the other people. Participants can "like" profiles they find engaging and the other people are apparently able to do the same. We will manipulate the number of likes that the subjects receive in this simulated social media setting so that subjects in the control group receive the average number of likes received by other profiles while subjects in the treatment group receive the lowest number of likes of any of the profiles. The two levels of this categorical variable are 1 like (Treatment) and 6 likes (Control).

No files selected

Measured variables

We will measure the following demographic covariates: age, gender (Male, Female, Other), race/ethnicity (White, Black or African American, Hispanic or Latino, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, Other), annual pre-tax income, wealth including savings, properties, vehicles, and investments, education (less than high school, high school graduate, some college, 2 year degree, 4 year degree, professional degree, doctorate).

We will measure three psychological predictor variables: (1) the Withdrawal aspect of Neuroticism, measured as an additive composite of the following ten items measured on 5 point scales where 1 corresponds to "Does not describe me at all" and 5 corresponds to "Describes me extremely well" (Items will be recoded so that higher values correspond to greater Withdrawal)

Am filled with doubts about things.

Feel threatened easily.

Worry about things.

Am easily discouraged.

Become overwhelmed by events.

Am afraid of many things.

Seldom feel sad.

Feel comfortable with myself.

Rarely feel depressed.

Am not embarrassed easily.

(2) the Volatility aspect of Neuroticism, measured as an additive composite of the following ten items measured on 5 point scales where 1 corresponds to "Does not describe me at all" and 5 corresponds to "Describes me extremely well" (Items will be recoded so that higher values correspond to greater Withdrawal)

Get angry easily.

Get upset easily.

Change my mood a lot.

Am a person whose moods go up and down easily.

Get easily agitated.

Can be stirred up easily.

Rarely get irritated.

Keep my emotions under control.

Rarely lose my composure.

Am not easily annoyed.

(3) loneliness, measured as an additive composite of three items measured on three-point scales (1. Hardly Ever, 2. Some of the Time, 3. Often).

How often do you feel that you lack companionship?

How often do you feel left out?

How often do you feel isolated from others?

We will measure three outcome variables: (1) economic policy attitudes, measured as an additive composite of the following four items measured on 7-point scales, where answers are scored such that higher values correspond to more conservative/right-wing responses (Response directions are mixed across items to avoid acquiescence bias).

"Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own.

Where would you place yourself on this scale?

1. Government should see to jobs and standard of living
7. Government should let each person get ahead on own

Some people feel that all medical expenses should be paid by individuals through private insurance plans. Others feel there should be a government insurance plan which would cover all medical and hospital expenses for everyone.

Where would you place yourself on this scale?

1. Private insurance plan
7. Government insurance plan

Some people feel that the government should take measures to ensure that everybody earns the same amount of money. Others feel that the government should let people make whatever amount of money they can earn with their skills.

Where would you place yourself on this scale?

1. Equalize income
7. Allow differences in income

Some people think the government should make it illegal to pay workers less than a certain amount.

Other people think that businesses should be allowed to offer whatever wage they choose.

Where would you place yourself on this scale?

1. Businesses should be able to pay what they choose
7. Businesses should have to pay a minimum wage

(2) social policy attitudes, measured as an additive composite of the following four items measured on 7-point scales, where answers are scored such that higher values correspond to more conservative/right-wing responses (Response directions are mixed across items to avoid acquiescence bias).

Some people feel that women should always be able to obtain abortions as a matter of personal choice. Others feel that abortion is never justifiable and should be illegal. Still others fall somewhere in between, arguing that abortion should be legal when the mother's life is in danger or in cases of rape or incest.

Where would you place yourself on this scale?

1. By law, a woman should always be able to obtain an abortion as a matter of personal choice.
7. By law, abortion should never be permitted.

Some people feel that gay and lesbian couples should be legally permitted to adopt children. Others feel that children should only be adopted into traditional households with one mother and one father.

Where would you place yourself on this scale?

1. Gay and lesbian couples should be able to adopt children.
7. It should be illegal for gay and lesbian couples to adopt children.

Some people think that marijuana should be legal for adults to purchase and use recreationally. Others think that marijuana should remain illegal. Still others fall somewhere in between, arguing that doctors should be allowed to prescribe marijuana for certain conditions.

Where would you place yourself on this scale?

1. Marijuana should remain illegal under all circumstances.
7. Marijuana should be completely legalized.

Some people feel that we should allow more immigrants into the United States. Others feel that we already accept too many immigrants and should turn more away.

Where would you place yourself on this scale?

1. The US should not accept any more immigrants
7. The US should accept any and all immigrants who request entry

(3) policy attitude distance, measured by subtracting the subject's response to each policy item from their response to the same item with the prompt "Where would you place the average person in your social circle on this scale?", taking the absolute value of the resulting difference scores, and summing them across all eight policy items.

No files selected

Indices

The construction of indices is described in the Measured Variables section

No files selected

Analysis Plan

Statistical models

We will use multiple regression to test each hypothesis.

To test hypothesis one, we will conduct two regressions. (1) We will regress economic policy attitudes on age, gender, race/ethnicity, income, wealth, education, and a binary treatment indicator. (2) We will regress social policy attitudes on age, gender, race/ethnicity, income, wealth, education, and a binary treatment indicator.

To test hypothesis two, we will conduct six regressions. (1) We will regress economic policy attitudes on age, gender, race/ethnicity, income, wealth, education, Withdrawal, a binary treatment indicator, and a Withdrawal X Treatment interaction term. (2) We will regress social policy attitudes on age, gender, race/ethnicity, income, wealth, education, Withdrawal, a binary treatment indicator, and a Withdrawal X Treatment interaction term. (3) We will regress economic policy attitudes on age, gender, race/ethnicity, income, wealth, education, Volatility, a binary treatment indicator, and a Volatility X Treatment interaction term. (4) We will regress social policy attitudes on age, gender, race/ethnicity, income, wealth, education, Volatility, a binary treatment indicator, and a Volatility X Treatment interaction term. (5) We will regress economic policy attitudes on age, gender, race/ethnicity, income, wealth, education, Withdrawal, Volatility, a binary treatment indicator, a Withdrawal X Treatment interaction term, and a Volatility X Treatment interaction term. (6) We will regress social policy attitudes on age, gender, race/ethnicity, income, wealth, education, Withdrawal, Volatility, a binary treatment indicator, a Withdrawal X Treatment interaction term, and a Volatility X Treatment interaction term.

To test hypothesis three, we will regress the aggregate policy attitude difference score on age, gender, race/ethnicity, income, wealth, education, and a binary treatment indicator.

To test hypothesis four, we will conduct three regressions. (1) We will regress the attitude difference score on age, gender, race/ethnicity, income, wealth, education, Withdrawal, a binary treatment indicator, and a Withdrawal X Treatment interaction term. (2) We will regress the attitude difference score on age, gender, race/ethnicity, income, wealth, education, Volatility, a binary treatment indicator, and a Volatility X Treatment interaction term. (3) We will regress the aggregate policy attitude difference score on age, gender, race/ethnicity, income, wealth, education, Withdrawal, Volatility, a binary treatment indicator, a Withdrawal X Treatment interaction term, and a Withdrawal X Volatility interaction term.

We will also calculate the bivariate correlation between loneliness and Withdrawal in order to ensure the criterion validity of the Withdrawal measure in our sample.

No files selected

Transformations

All scales will be computed by taking the original scale items, recoding reverse coded items, and then averaging.

All continuous variables will be recoded to range from 0 to 1.

Inference criteria

We will use p-value < 0.05 as our criterion for judging whether regression coefficients are statistically significant.

Data exclusion

We will include an attention check asking respondents to list three details from the profiles in the simulated social media paradigm. Respondents who fail the attention check will have their data excluded from the analyses. Outliers will be included in the analysis and we will include separate analyses excluding outliers in our supplementary materials.

Missing data

We will exclude subjects with incomplete or missing data from the analyses.

Exploratory analysis

No response

Other

Other

No response

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Social Exclusion and Economic Attitudes Replication

[Public registration](#)[Updates](#)[Metadata](#)

Study Information



Hypotheses

Hypothesis 1: If social exclusion activates a desire to recruit additional support among people high on the withdrawal aspect of neuroticism, then withdrawal (but not volatility) should be a stronger predictor of support for left-wing economic (but not social) policies among subjects who are excluded in a simulated social media paradigm than among subjects who are not excluded. If political engagement helps people to draw connections between their psychological needs and policies, then social exclusion should increase the magnitude of the relationship between withdrawal and support for left-wing economic policies more among politically engaged respondents than among politically unengaged respondents.

In summary, we predict a positive three-way interaction between our social exclusion treatment, withdrawal, and political engagement, and we expect this interaction to obtain for our economic attitudes composite but not for our social/cultural attitudes composite.

Design Plan

Study type

Experiment - A researcher randomly assigns treatments to study subjects, this includes field or lab experiments. This is also known as an intervention experiment and includes randomized controlled trials.

Blinding

For studies that involve human subjects, they will not know the treatment group to which they have been assigned.

Is there any additional blinding in this study?

No response

Study design

Between subjects design with 2 groups (an exclusion treatment group and inclusion control group) and two continuous moderators (withdrawal; political engagement)

No files selected

Randomization

We will use simple randomization, where each participant will be randomly assigned to either a treatment group (exclusion) or a control group (inclusion). Our Qualtrics survey will automatically perform the randomization such that an equal number of participants will be assigned to each group.

Sampling Plan

Existing Data

Registration prior to creation of data

Explanation of existing data

No response

Data collection procedures

Participants will be recruited through advertisements on the Amazon Mechanical Turk online platform. Participants will be paid \$1.50 for completing the Qualtrics survey. Participants must be at least 18 years old.

No files selected

Sample size

Our target sample size is 1000 participants.

Sample size rationale

Our pilot study yielded an f^2 of 0.019 for our three-way interaction effect. A GPower analysis demonstrates that we will require a sample of 664 to achieve 95% power to replicate this effect. Because it is generally difficult to estimate the statistical power necessary to observe interaction effects in multiple regression analyses (Perugini, Gallucci, & Costantini 2018), we err on the side of caution and aim to recruit 1000 participants.

Perugini, M., Gallucci, M., & Costantini, G. (2018). A practical primer to power analysis for simple experimental designs. International Review of Social Psychology, 31(1).

Stopping rule

No response

Variables

Manipulated variables

Participants will engage in what they believe is an online discussion group. In fact, there is no group; all other people are fictional. Participants begin by creating personal profiles--entering their first names, writing short biographies, and picking computer-generated profile pictures. They will then read biographies supposedly provided by the other participants, each one paired with a name and computer generated avatar. Participants can "like" profiles they find engaging and the other people are apparently able to do the same. We will manipulate the number of likes that the subjects receive in this simulated social media setting so that subjects in the control group receive the average number of likes received by other profiles while subjects in the treatment group receive the lowest number of likes of any of the profiles. The two levels of this categorical variable are 1 like (Treatment) and 6 likes (Control).

No files selected

Measured variables

We will measure the following demographic covariates: age, gender (Male, Female, Other), race/ethnicity (White or Caucasian, Black or African American, American Indian/Native American or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Other), annual pre-tax household income, and education (less than high school, high school graduate, some college, 2 year degree, 4 year degree, professional degree/doctorate).

We will measure three psychological predictor variables:

(1) Political Engagement, measured by asking respondents to place themselves on a seven-point likert scale anchored by "Not at all interested in politics" and "Extremely interested in politics".

(2) the Withdrawal aspect of Neuroticism, measured as an additive composite of the following ten items measured on 5-point scales where 1 corresponds to "Does not describe me at all" and 5 corresponds to "Describes me extremely well" (Items will be recoded so that higher values correspond to greater Withdrawal):

Am filled with doubts about things.
Feel threatened easily.
Worry about things.
Am easily discouraged.
Become overwhelmed by events.
Am afraid of many things.
Seldom feel sad.
Feel comfortable with myself.
Rarely feel depressed.
Am not embarrassed easily.

(3) the Volatility aspect of Neuroticism, measured as an additive composite of the following ten items measured on 5-point scales where 1 corresponds to "Does not describe me at all" and 5 corresponds to "Describes me extremely well" (Items will be recoded so that higher values correspond to greater Withdrawal):

Get angry easily.
Get upset easily.
Change my mood a lot.
Am a person whose moods go up and down easily.

Get easily agitated.
Can be stirred up easily.
Rarely get irritated.
Keep my emotions under control.
Rarely lose my composure.
Am not easily annoyed.

We will measure two outcome variables, operationalized by aggregating sets of related policy items:

(1) economic policy attitudes, measured as an additive composite of the following four items measured on 7-point scales, where answers are scored such that higher values correspond to more liberal/left-wing responses (Response directions are varied across items to avoid acquiescence bias):

"Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. Where would you place yourself on this scale?"

1. Government should see to jobs and standard of living
7. Government should let each person get ahead on own

"Some people feel that all medical expenses should be paid by individuals through private insurance plans. Others feel there should be a government insurance plan which would cover all medical and hospital expenses for everyone. Where would you place yourself on this scale?"

1. Private insurance plan
7. Government insurance plan

"Some people feel that the government should take measures to ensure that everybody earns the same amount of money. Others feel that the government should let people make whatever amount of money they can earn with their skills. Where would you place yourself on this scale?"

1. Equalize income
7. Allow differences in income

"Some people think the government should make it illegal to pay workers less than a certain amount. Other people think that businesses should be allowed to pay as little as they want. Where would you place yourself on this scale?"

1. Businesses should be able to pay as little as they want
7. Businesses should have to pay a minimum wage

(2) Social policy attitudes, measured as an additive composite of the following four items measured on 7-point scales, where answers are scored such that higher values correspond to more liberal/left-wing responses (Response directions are varied across items to avoid acquiescence bias):

"Some people feel that women should always be able to obtain abortions as a matter of personal choice. Others feel that abortion is never justifiable and should be illegal. Still others fall somewhere in between, arguing that abortion should be legal when the mother's life is in danger or in cases of rape or incest. Where would you place yourself on this scale?"

1. By law, a woman should always be able to obtain an abortion as a matter of personal choice.
7. By law, abortion should never be permitted.

"Some people feel that gay and lesbian couples should be legally permitted to adopt children. Others feel that children should only be adopted into traditional households with one mother and one father. Where would you place yourself on this scale?"

1. Gay and lesbian couples should be able to adopt children.
7. It should be illegal for gay and lesbian couples to adopt children.

"Some people think that marijuana should be legal for adults to purchase and use recreationally. Others think that marijuana should remain illegal. Still others fall somewhere in between, arguing that doctors should be allowed to prescribe marijuana for certain conditions. Where would you place yourself on this scale?"

1. Marijuana should remain illegal under all circumstances.
7. Marijuana should be completely legalized.

"Some people feel that we should allow more immigrants into the United States. Others feel that we already accept too many immigrants and should turn more away. Where would you place yourself on this scale?"

1. The US should accept fewer immigrants
7. The US should accept more immigrants

Finally, we will also include an attention check and a manipulation check.

The attention check will ask respondents to list two facts shared by profiles in the discussion portal. This check will function to catch bots, who tend to give incoherent answers to open-ended questions. We do not expect respondents to have perfect recall, merely to give intelligible answers.

The manipulation check will ask respondents whether they received fewer likes than the other profiles, about the average number of likes, or more likes than the other profiles. We will use responses to this item to check whether respondents received the treatment on average.

No files selected

Indices

Withdrawal, volatility, economic attitudes, and social attitudes will each be calculated by summing the responses to their respective items, listed above. For economic and social policy attitudes, we will construct two different versions--one set without minimum wage and immigration items, and one set with these items included. We explain the reason for this in the following section. Each of these composites will be recoded to range between 0 and 1.

No files selected

Analysis Plan

Statistical models

We will use multiple regression to test our hypotheses. Our focal hypothesis test will take the following form: Economic Policy will be regressed on Age, Gender, Race, Education, Income, Withdrawal, a Treatment dummy variable, Political Engagement, pairwise interaction terms for Withdrawal, Treatment, and Engagement, and a three-way Withdrawal/Treatment/Engagement interaction term.

We will regress our social policy variable on this same set of variables, which we expect to produce a null result.

We will also run these same models with social and economic policy composites without the immigration and minimum wage items, respectively, and with the immigration and minimum wage items separately. In our previous study and in multiple nationally representative surveys, we have found that support for immigration is sometimes positively related to withdrawal and sometimes negatively related. We believe that this may be due to neurotic people being cross-pressured by their identification with the plight of vulnerable outgroups and their fear of being victimized by members of groups that they associate with crime and violence. Therefore, we plan to analyze immigration attitudes separately.

Similarly, our previous study and nationally representative survey data indicate that minimum wage attitudes are less related to withdrawal than other economic policy attitudes. We believe that this may be because minimum wage is not a direct financial transfer and is contingent upon an individual having a job, which they could lose. Thus, it does not provide the same level of support as other policy items offering unconditional transfers. Therefore, we plan to analyze minimum wage attitudes separately.

No files selected

Transformations

No response

Inference criteria

We will use the standard $p < 0.05$ criteria for determining if the regression coefficient for the three-way interaction is significantly different from that expected if the null hypothesis were correct.

Data exclusion

We will drop respondents who failed our open-ended attention check before running our analyses.

Missing data

All items will be forced choice, preventing missingness. Respondents who do not complete the survey will be dropped

Exploratory analysis

No response

Other

Other

No response

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