Received: 23 March 2022 | Accepted: 15 July 2022

DOI: 10.1002/ejsp.2894

EASP WILEY

RESEARCH ARTICLE

Worldview defence and self-determination theory explain the return of racial voting: Evidence from the 2016 US election

Mark Fabian[1] | Robert Breunig[2] | Jan-Emmanuel De Neve[3]

[1]Institute for Social Change, University of Tasmania, Tasmania, Australia

[2]Tax and Transfer Policy Institute, Crawford School of Public Policy, The Australian National University, Canberra, Australia

[3]Well-Being Research Centre, University of Oxford, Oxford, UK

Correspondence
Mark Fabian, Institute for Social Change, University of Tasmania, Tasmania 7005, Australia.
Email: mark.otto.fabian@gmail.com

Funding information
Australian–American Fulbright Commission

Abstract

We use self-determination (SDT) and worldview defence theories (WDT) to explicate the psychological roots of identitarian voting in recent US, UK and EU elections. We test our theory using the 2016 US election as a case study, data from a representative sample of nearly half a million Americans, and a measure of racial animus derived from Google search data. We find that worry has a strong and significant positive association with Trump's vote share, as predicted by WDT. However, this is reversed in counties with high levels of relatedness—one of the three basic psychological needs emphasised by SDT. The positive relationship between racial animus and Trump also loses significance once an interaction between racial animus and relatedness is introduced. These results imply that identitarianism is driven at least in part by a desire for in-group affiliation emerging out of worldview defence and unmet basic psychological needs.

KEYWORDS
group identity, self-determination theory, voting, well-being, worldview defence theory

1 | INTRODUCTION

The return of identitarian politics to the West is one of the defining political phenomena of our era, evinced most clearly in the way Brexit and the election of Donald Trump in 2016 rewrote the electoral landscape of the US and UK (Hooghe & Dassonneville, 2018). Moderate parties are battling similar trends in numerous European states, notably France, Austria, Greece and Italy, while explicitly identitarian parties are in power in Hungary and Poland. What explains the political revival of racial identity, a force that last commanded electoral salience at the time of World War II? Some academic studies suggest a substantial role for economic factors. Notably, Autor et al. (2020) establish a causal relationship between rising exposure to trade competition in US counties dominated by manufacturing and rising political polarisation there since the 1980s. This fits with the fact that Trump's victory was delivered in the rust belt states where deindustrialisation has decimated previously prosperous middle-class communities (Farley, 2019). Yet, in a prominent recent review of the literature and evidence, Sides et al. (2018) argue that neither individual economic circumstance nor macroeconomic conditions had much of a role to play in Trump's 2016 victory. They argue instead that the key force behind Trump's victory was 'racialised economics' and Trump's willingness and ability to leverage it. Racialised economics is the tendency among some voters to consider economic issues not through an individual lens but through a racial one instead. As Sides et al. (p. 8) explain:

> The important sentiment underlying Trump's support was not 'I might lose my job' but, in essence, 'people in my group are losing jobs to that other group'. Instead of pure economic anxiety, what mattered was racialized economics.

This conclusion raises a further, deeper question, namely: how did economic anxiety become bound up with racial identity? We provide answers using theories from social psychology and empirical evidence from a very large data set—the Gallup Daily Poll. We argue that there is a channel from economic shocks to identitarian voting via psychological well-being. Self-determination theory (SDT, Ryan & Deci, 2017) argues that psychological well-being is a function of three basic psychological needs: for autonomy, competence and relatedness. As evidenced by qualitative studies of Trump voters, economic decay threatens all three needs (Carney, 2019; Cramer, 2016; Hochschild, 2016). For example, the offshoring of factory jobs despite the industriousness of workers undermines worker autonomy. The automation of jobs undermines worker competence. And the impoverishment and hollowing out of neighbourhoods as economic opportunity disappears undermines worker relatedness. When basic needs are thwarted in this way, people will try to compensate. For example, laboratory studies suggest that individuals with a thwarted need for autonomy may seek to increase their power despite power being a poor substitute for autonomy (Lammers et al., 2016). They may therefore become politically activated. Similarly, a substandard but potentially appealing way to bolster feelings of relatedness is by affiliating with salient identity groups such as race and nation (McGregor, 2006; McGregor et al., 2001). Relatedly, theories of so-called 'worldview defence' (WDT) argue that when people feel worried they will double-down on their in-group affiliations, often through exaggerated displays of loyalty (Holbrook et al., 2011). In laboratory studies, these affiliations typically overlap with broad identity markers like race and nation. Both literatures imply that economic decline, through its pernicious effect on psychological well-being, could encourage in-group bias and political activism. Identitarian and nativist politicians fuel and harness these sentiments for political gain.

Honing our hypothesis, SDT emphasises that people will first seek to bolster feelings of relatedness through relatively intimate connections like family, friends and close groups like churches or clubs, as these are sources of high-quality, relatively close relationships (Ryan & Deci, 2017). Thus, in-group bias emerging from thwarted relatedness is unlikely to result in identification with a broad group like race or nation unless such intimate sources of relatedness are unavailable. As it turns out, small, local sources of in-group identity, like sports clubs and trade unions, have declined precipitously across America in recent decades, as noted first by Robert Putnam (2001) in *Bowling Alone*. Religious affiliation and church attendance are similarly in free-fall (Pew Research Centre, 2019). In line with the inferences of SDT and WDT, qualitative studies of Trump voters have tied this cultural decay to his success (Cramer, 2016). A central thesis of Carney's (2019) *Alienated America* is that Trump had greater cut-through in areas with low levels of so-called 'social capital' and weak social institutions. Similarly, in her study of Tea Party supporters in Louisiana, Hochschild (2016, p. 225) writes that Trump's 'supporters have been in mourning for a lost way of life'—an observation echoed in Parker and Barret's (2013) study of the Tea Party. These observations from American are echoed in Bolet's (2021) quantitative study of the UK. She finds a causal relationship between the decline of 'local socio-cultural hubs', specifically community pubs, and support for the identitarian UKIP party. We therefore hypothesise that identitarian candidates should be successful in electorates with high levels of worry and low levels of relatedness and social capital.

We use Trump's 2016 election victory as a case study to test our hypothesis empirically. Uniquely, the Gallup Daily Poll provides data on basic psychological needs and other requisite variables from a representative sample of nearly half a million Americans. We draw on government sources for social capital and demographic data. We use a measure of racial animus derived from Google searches for the N-word developed by Stephens-Davidowitz (2014) that is increasingly utilised in the social scientific study of racism (Chetty et al., 2020). The results of statistical analysis of these data support our hypothesis. Mirroring the political science literature, we find that racial animus has a strong, positive association with Trump's vote share independent from worry and relatedness. However, we find that this racial voting is driven by worry and the need for relatedness, and is non-existent when people have existing sources of relatedness and social capital. We show that our results are not driven by exposure to trade shocks using the methodology of Autor et al. (2013).

2 | CONCEPTUAL FRAMEWORK

Our conceptual framework draws on three streams of literature. We begin with the political science literature on racialised economics. We then review other political science scholarship on how status threat and aversion to change contributed to Trump's success. The second part of our conceptual framework reviews existing studies that illustrate how a subjective well-being (SWB) lens can illuminate Trump's success. While powerful, this literature struggles to explain why declining well-being engendered *identity voting* rather than merely anti-incumbent sentiment. For this, we need to bring in other literatures on well-being. We turn to these in the final part of our conceptual framework where we develop our hypotheses using SDT and WDT. These theories suggest a channel from trade shocks and other sources of anxiety to identity voting via psychological well-being and attempts to improve it.

2.1 | Racialised economics

Donald Trump's victory was underwritten by swings ('Obama defectors') in the 'rust belt' states of Iowa, Wisconsin, Michigan, Ohio and Pennsylvania (Farley, 2019). These states have experienced substantial economic decline in recent decades owing predominantly to the impact of trade and technological change on manufacturing employment (Autor et al., 2013). Given this background, a natural early suspicion among analysts was that economic anxiety was a key force behind Trump's popularity in this region. However, while not dismissing it as an important factor in the 2016 election, the political science literature has found little support for a straightforward economic anxiety interpretation of the result. It instead emphasises more nuanced explanations like racialised economics.

As Sides et al. (2018, p. 14) note, real incomes and consumer sentiment were rising rapidly for all income quintiles at the time of the election. Both unemployment and inflation were low. Moreover, in both 2012 and 2016, there was a weak statistical relationship between respondents' answers to questions about finances, job insecurity, and housing and health payments on the American National Election Survey (ANES) and their voting choices once partisanship, self-reported ideology and views of racial inequality were accounted for. Views of trade as measured in the Views of the Electorate (VOTER) survey in 2011 had no relationship with voting in 2012 and 2016. Sides et al. (p. 173) thus argue that while economic anxiety was on people's minds, it was not 'activated' in the sense that it did not influence vote choice. More salient were changing attitudes on race and immigration among white Obama voters, the focus on identity-inflected issues throughout the election campaign, and Clinton and Trump's sharply divergent positions and rhetoric on these matters. These racial and nativist issues became 'activated' and gave rise to racialised economics.

Sides et al. (p. 175) define racialised economics as 'the belief that undeserving groups are getting ahead while your group is left behind'. These themes are stark in qualitative studies of Trump voters in Wisconsin and Louisiana (Cramer, 2016; Hochschild, 2016). Sides et al. review statistical evidence that preference for Trump among the white voters who defected from Obama in the rust belt was weakly related to their own job security but strongly related to their views regarding whether minorities were taking jobs from whites (Morgan & Lee, 2018). They also provide evidence from two experimental studies (Tessler, 2016; Luttig et al., 2017) that Trump voters had racially inflected attitudes to policy, in contrast to Clinton voters. These findings dovetail with other evidence that race and ethnicity were more strongly related to vote choice in 2016 than in previous elections. Trends in responses to racially inflected questions in the ANES and VOTER survey show growing polarisation in voter perceptions of Democrats and Republicans on race and immigration issues (Sides et al., 2018, pp. 168–171). The power of these questions to predict vote choice rose between 2008 and 2016, suggesting that racial resentment became an electoral issue in 2016.

Sides et al.'s evidence is corroborated by Schaffner et al. (2018), who analyse data from surveys taken in October 2016 immediately before the election. They find a positive and significant relationship between dissatisfaction with one's economic situation and Trump voting, but the impact of racism is three times as strong in their data, as is that of sexism.

Two other bodies of political science literature are important to our analysis herein. The first is work on status threat. Using panel data from 2012 to 2016, Mutz (2018) finds only weak support for the economic hardship theory of Trump voting, and instead observes a strong role for perceptions of declining position among traditionally high-status Americans, notably whites, males and Christians, and among those who perceive America's global dominance as threatened. Similarly, Gest et al. (2018) report a strong association between subjective perceptions of declining social, political and economic status among American whites ('nostalgic deprivation') and support for radical right candidates.

The second is studies of aversion to change. Grossman and Thaler (2018) measure aversion to change using two questions: 'our country is changing too fast, undermining traditional American values', and 'by accepting diverse cultures and lifestyles, our country is steadily improving'. These questions correspond intuitively to the feelings of cultural decay and a 'lost of way of life' identified by qualitative studies of Trump supporters (Carney, 2019; Cramer, 2016; Hochschild, 2016). Grossman and Thaler find that the public is markedly more averse to social change than elites, and that aversion to change strongly predicts Trump support, outstripping the effect of economic attitudes, racial resentment, authoritarianism and college education. Only partisan identification and ethnocentrism had more predictive power.

In summary, the political science literature points to identitarian sentiments around race, nation and cultural change as being more important than economic anxiety in determining Trump's success. A question that follows naturally from this observation is why identitarian sentiment became so powerful in 2016 when racism and sexism have been trending downwards for decades (Pinker, 2011). Sides et al. (2018) emphasise Trump's willingness to activate these issues with his rhetoric and policy positions, but this leaves unexplained why these issues were heating up in the first place. This is especially puzzling given that the most important demographic in Trump's victory was voters defecting from Obama, the first Black President. In the following sections, we draw on literature from the study of well-being to find answers. We argue that racialised economics is not specifically about race but rather social support and in-groups.

2.2 | Well-being and voting

There is a nascent literature studying the power of SWB measures to predict voting behaviour (Liberini et al., 2017, 2019; Ward, 2019). This workstream has recently turned its attention to the 2016 US Presidential election (Herrin et al., 2018; Pinto et al., 2019; Ward et al., 2020), inspired in part by Graham's (2017) analysis of SWB trends in America. She documented poor and worsening levels of stress, depression, life satisfaction and optimism in US regions now associated with Trump support. Another relevant paper taking a more clinical perspective is Obschonka et al. (2018). They find that Trump performed better in counties with high levels of neuroticism, anxiety and depression.

We augment this emerging literature using ideas about psychological well-being from SDT and WDT. While the SWB lens is powerful, it struggles to get beyond anti-incumbent sentiment to explain why poor SWB led to the election of an *identitarian* President. It is intuitive that people who are unhappy with life and pessimistic about the future would seek a change of government—it is a straightforward way to put your life on a different track. What is surprising is why dissatisfied voters thought that a nativist candidate with racist and sexist rhetoric offered the best new track in 2016. SDT and WDT can provide answers here.

2.3 | Self-determination and worldview defence theories

SDT is a theory of human motivation that is influential in clinical, personality and social psychology (Ryan & Deci, 2017). It argues that humans have three basic psychological needs that underpin their motivations. These are the needs for autonomy, relatedness and competence. Autonomy is the sense that one's behaviour is volitional, that one is not controlled by external forces and that one is free to pursue activities that align with and serve one's personal goals. Competence is the sense that one is skilful at activities that are necessary for one to flourish. And relatedness is the sense that one has nourishing, supportive and reliable social connections, and that one is loved and cared for.

Several large sample cross-cultural studies have found that nourishing basic psychological needs improves indicators of well-being like positive affect, life satisfaction, ease of motivation, vitality, self-esteem and the absence of psychopathology, depression, anxiety, compartmentalisation, defensiveness and personality rigidity (Chen et al., 2015; Church et al., 2013; Sheldon et al., 2004, 2009). These results have been extended to specific domains including the workplace (Baard et al., 2004; Deci et al., 2001; Ilardi et al., 1993) and schools (Jang et al., 2009). Variation in the degree to which basic needs are nourished predicts differences in objective and subjective indicators of well-being between individuals, and variation in the degree to which each need is nourished predicts changes in well-being within individuals (La Guardia et al., 2000; Lynch et al., 2009; Reis et al., 2000; Sheldon et al., 1996).

SDT is linked to our analysis in the following manner. As discussed earlier, qualitative studies have documented that sites of ongoing deindustrialisation in America have experienced long-term declines in economic vitality, population, quality of public services and urban amenities, civic organisations and hope, and commensurate increases in deaths of despair, family disintegration, out-migration and opioid addiction (Cramer, 2016; Graham, 2017; Hochschild, 2016; Putnam, 2001, 2015). These forces undermine basic needs for autonomy, competence and relatedness. SDT predicts that people whose needs are so threatened will seek to remedy their circumstances. They may become politically active in a search for power that can compensate their thwarted autonomy. And they may vote for identitarian candidates who give them a sense of belonging and compensate their thwarted relatedness. SDT here explains the link from neuroticism and unhappiness to identity voting observed by Obschonka et al. (2018). We find some support for this hypothesis from Australia. According to data from *Australia Talks*, a representative survey of more than 50,000 Australians, 9 out of 10 supporters of Australia's far right nativist party, One Nation, report being lonely 'all the time'. In comparison, only around 2 out of 10 supporters of other parties report similar levels of loneliness (Haslam et al., 2019).

WDT explains why relatedness and identarian issues are bound together, especially when people feel threatened by external forces. There are four separate theories in social psychology that engage with the notion of 'worldview defence': terror-management (Greenberg et al., 1997), uncertainty management (McGregor et al., 2001), coalition threat (Navarrete, 2005) and unconscious vigilance (Holbrook et al., 2011). All of them posit that certain negative stimuli will provoke exaggerated, typically subconscious, affirmations of in-group identity and defensiveness against critiques of those groups. This response is worldview defence. It would incline people to vote for candidates who appeal to in-group markers. Indeed, this is the observation of Perrin and Ifatunji (2020), who find an association between Trump support and perceptions of group threat in data from the 2018 North Carolina elections. However, we would expect the desire for identitarian voting to be weaker among people whose in-groups are relatively micro, like churches or neighbourhood alliances. These people would not associate national politicians speaking to broad identities like race and nation with their local, personal in-groups.

2.4 | Hypotheses

Our conceptual framework brings together many streams of research but produces relatively succinct hypotheses. We posit that, owing to the heterogenous distribution of their impacts, negative economic shocks and cultural change have undermined basic needs in some communities of America. This gives rise to *worry*, which provokes worldview defence. We further posit that communities so affected will seek to bolster their sense of relatedness to buffer themselves against the negative well-being effects associated with thwarted needs. Following both SDT and WDT, we posit that this reach for relatedness will involve deepening affiliations with in-groups. Where no such in-groups are ready to hand, because of community decline, for example, individuals will seek to deepen their affiliation with more macro-level in-groups, namely race and nation. One way they can do this is through political allegiance to nativist candidates like Trump. His rhetoric plugs directly into the psychology of such voters with his emphasis on 'Make America Great Again', which speaks to identity and to rewinding change. We therefore hypothesise that:

Trump's vote share will be positively predicted by county rates of worry.

But this relationship will weaken when counties also have high levels of relatedness.

This is because voters with strong sources of relatedness ready to hand do not need Trump's nativist rhetoric to give them a sense of in-group support. This hypothesis is summarised graphically in Figure 1. Note that we make no claims about populism or authoritarianism, only identitarianism.

3 | DATA

To test our hypothesis, we need four kinds of data: well-being data, including on worry and basic psychological needs, racial animus, socio-economic and demographic controls including social capital, and vote choice. This is very difficult collection of variables to assemble. In particular, psychometric data sets with information about worry and basic needs, which rarely involve a representative sample of American voters, do not contain vote choice, and data sets with individual vote choice, such as the ANES, do not measure basic needs. This

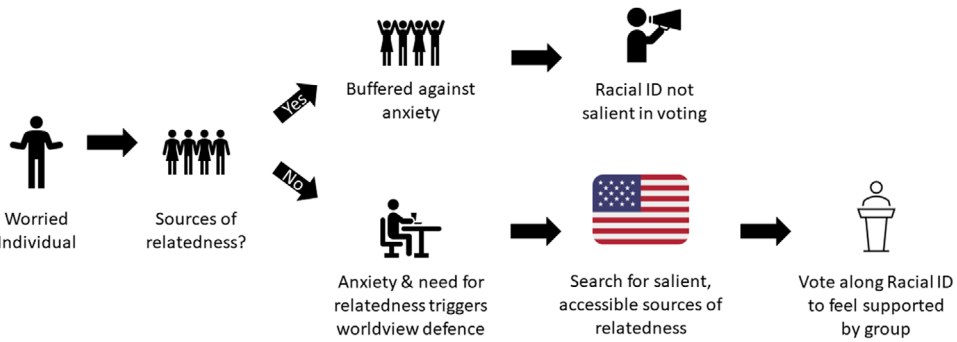

FIGURE 1 The channel from worry and low relatedness to racial identification in voting

necessitates the use of county level election data combined with a nationally representative sample of basic needs and worry aggregated up to the county level. For election results (including the Republican party primaries), we use data from Leip's (2016) Atlas of US Presidential elections. For basic needs, the only feasible data set is the Gallup Daily Poll.

Combining individual and county level measures in this way raises concerns about the ecological fallacy. We address these below as best we can. While more ideal data would be desirable, it does not exist, and will not until there is evidence that psychological well-being can meaningfully influence voting behaviour. We provide this proof of concept—ours is the first paper to apply SDT and WDT at sociological scale—using an exceptionally large survey of the American population. Utilising Daily Poll data from 2014 until election day 2016 gives us a sample of over 470,000 observations in our main analysis. The Poll is a highly reputable, random sample of 500 American adults taken daily by landline (40%) and mobile phone (60%). It is representative on age, race, gender, income and location. We hope that our efforts to demonstrate the power of SDT and WDT to illuminate political, economic, sociological and policy issues will undergird efforts to collect psychological data as part of general social surveys and voter sentiment studies. This will allow future efforts to be more precise than what we can muster here. In the meantime, county level analysis using the Daily Poll is the only way to test our hypothesis, which we believe provides critical insights into how and why racial identification rises to electoral salience.

The Daily Poll contains a rich set of well-being questions including whether respondents experienced worry, stress or pain yesterday, whether they have been treated for depression in the past month, their life satisfaction on a scale from 0 to −10, and what they expect their life satisfaction to be in five years' time. The Poll also includes a full battery of socio-economic, demographic, health and political allegiance questions. There remains some controversy about our ability to measure emotions, notably worry, in social surveys. However, in a prominent review, Kahneman et al. (2004) concluded that 'day reconstruction' methods, as employed by the Daily Poll, are as accurate as gold standard (though perhaps still imprecise) experience sampling methods, which use pagers to elicit reports of what emotions respondents are feeling at that moment.

While the Gallup data does not include questions drawn directly from SDT's basic psychological needs (BPN) survey (Deci & Ryan, 2000; Gagné, 2003), several questions in the Gallup survey are suitable proxies. Table 1 lays out questions from the basic psychological needs survey with the analogous questions from the Gallup survey in column 2. We have only poor proxies for the autonomy items and thus exclude this need from our analysis. However, we have arguably close analogues for four out of six of the competence questions and seven relatedness questions that, while far from identical, sufficiently parallel items in the BPN questionnaire for a proof-of-concept exercise. The individual questions all ask for a response on a 1–5 Likert scale where higher numbers indicate greater agreement with the associated statement. We conducted a factor analysis of each set of variables. In both cases, the Kaiser criterion (i.e., keep factors with eigenvalues >1) suggested a single factor structure. For relatedness, the first factor had an eigenvalue of 2.35 while the second factor fell sharply to 0.5. For competence, the eigenvalue of the first factor was 1.7 whereas for the second it was −0.09. We extract the first factors in each case and use them as measures of relatedness and competence in our regressions.

To track racism, we follow Stephens-Davidowitz (2014) and use the intensity of Google searches for the *n*-word at the designated market area (DMA) level for 2013–2016. Google search histories are an appealing means of capturing racial animus because they are unlikely to suffer from social censoring and can aggregate data over a large area. Stephens-Davidowitz (2014) found that racial animus cost Obama roughly 4% points of the national popular vote in 2008 and 2012. This estimate is 1.5–3 times larger than survey-based estimates. Our 4-year window matches the electoral cycle and provides us with sufficient search volume to obtain data for 204 out of 210 DMAs (the missing DMAs are all small and low-population). Narrower windows result in a large number of missing values. Stephens-Davidowitz overcame this issue for the 2004–2007 period using a fairly complex algorithmic approach to impute missing DMAs. By the time of our window, Google search use is more widespread and so we can rely on raw data. We crosswalk DMA's to counties using Sood (2016). We investigated whether it was possible to include other racial slurs to capture negative sentiment towards other racial/ethnic groups besides Blacks, but search volume for these slurs was insufficient.

We utilise a range of sources for county-level socio-economic data. We use US Bureau of Labour Statistics (BLS, 2019) data for county-level unemployment and Bureau of Economic Analysis (BEA, 2019)

TABLE 1 Comparison between basic psychological needs questionnaire and Gallup survey

Basic psychological need questionnaire	Gallup Daily Poll
Competence	*Competence (4–20)*
Often, I do not feel very competent	N/A
People I know tell me that I am good at what I do	N/A
I have been able to learn interesting new skills recently	1–5 Scale: I learn or do something interesting every day
Most days I feel a sense of accomplishment from what I do	1–5 Scale: I felt active and productive in the last week
In my life I do not get much of a chance to show how capable I am	1–5 Scale: I get to use my strengths to do what I do best everyday
I often do not feel very capable	1–5 Scale: In the last 12 months, I have reached most of my goals
Relatedness	*Relatedness (7–35)*
I really like the people I interact with	1–5 Scale: I cannot imagine living in a better community 1–5 Scale: Community pride
I get along well with people I come into contact with	1–5 Scale: The city/area where I live is perfect for me
I pretty much keep to myself and don't have a lot of social contacts	1–5 Scale: Always make time for vacations with family and friends
I consider the people I regularly interact with to be my friends	1–5 Scale: My relationship with my partner is stronger than ever
People in my life care about me	1–5 Scale: My friends and family give me energy every day
There are not many people that I am close to	N/A
The people I interact with regularly do not seem to like me much	N/A
People are generally pretty friendly towards me	1–5 Scale: I have been given recognition for improvements I have made to the neighbourhood

data for county-level GDP growth rates. Our county type data (large, medium, and small metropolitan, micropolitan, rural metro-adjacent and rural) come from the National Centre for Health Statistics (NCHS, 2019). County-level poverty rates are drawn from the American Community Survey via the US Census Bureau website (CB, 2019).

Our county-level social capital data comes from the Joint Economic Committee's Social Capital Project (JEC, 2018). This index is composed of the following variables: registered non-profits, religious congregations, an informal civil-society sub-index, voter turnout rates, mail-back responses to the 2010 census, a confidence in institutions sub-index, violent crime rates, marriage rates, out of wedlock births and children in single parent homes. The JEC index follows Putnam's (2001) measures of social capital, which have been criticised. However, we are aware of no other nationally representative or government-endorsed social capital index for the United States. Social capital is similar but distinct from relatedness. Succinctly, where relatedness concerns immediate interpersonal relationships at the individual level, social capital concerns community cohesion. It is entirely possible for an individual to have a low-level of relatedness despite living in a high social capital neighbourhood, and vice versa. For example, a homosexual might find themselves ostracised (low relatedness) from an evangelical community that is otherwise characterised by high rates of volunteering, community organising and collective action (high social capital). Conversely, a community activist in a disadvantaged neighbourhood might have several strong personal connections with residents there (relatedness), even though the neighbourhood is otherwise characterised by crime, distrust and little charity (low social capital). Relatedness is also measured subjectively whereas social capital is measured objectively. We would expect social capital to facilitate relatedness by making local identity and social support more readily available to individuals at sites like churches, unions or community centres. However, in our data the two variables have only a modest correlation of 0.33. We utilise social capital as a control variable in the first instance but are interested in how its effects differ from or complement those of relatedness.

We obtain data on trade shocks at the commuting zone (CZ) level, including industrial heritage control variables, from Dorn (2019). These data were developed for Autor et al. (2013), a study of the impact of China's entry into the world trading system on US labour markets. There are 722 CZs in the United States, typically composed of several counties. CZs are designed to reflect a local labour market based on where people in a region transit to on a regular basis for employment. Our election analysis takes place at the county level, so we crosswalk CZs to counties using US Department of Agriculture codes (USDA, 2019). Autor et al.'s data includes industrial heritage variables for the education level of the labour force in each CZ in 1990, the share of jobs there that could be easily outsourced or automated, the share of workers who were female, the share who were foreign born and the share of the labour force employed in manufacturing. We outline the instrumental variable they develop that we use to control for trade shocks in Appendix A9. Table 2 and Figures 2–6 provide summary information on key variables in our analysis.

4 | EMPIRICAL STRATEGY

We create county-level averages using individual-level responses in the Daily Poll and estimate OLS models at the county level of the following

TABLE 2 Summary statistics for key variables

Variable	Obs	Mean	SD	Min	Max
Worry	3092	0.29	0.11	0	0.87
Relatedness (normalised)	3092	0.66	0.07	0	1
Racial animus (normalised)	3077	0.41	0.18	0	1
Social capital (normalised)	2957	0.59	0.14	0	1
Can't imagine living in a better community (1–5)	3092	3.54	0.39	1	5
Community pride (1–5)	3092	3.85	0.37	1	5
The city/area where I live is perfect for me (1–5)	3092	3.84	0.37	1	5
My relationship with my partner is strong (1–5)	3092	4.18	0.29	2	5
Make time for vacations with family/friends (1–5)	3092	3.26	0.39	1	5
Recognition for improvements to neighbourhood (1–5)	3092	2.22	0.40	1	5
My friends and family give me energy (1–5)	3092	4.14	0.27	2	5
Competence (1st factor)	3091	−0.38	0.23	−2.65	0.96

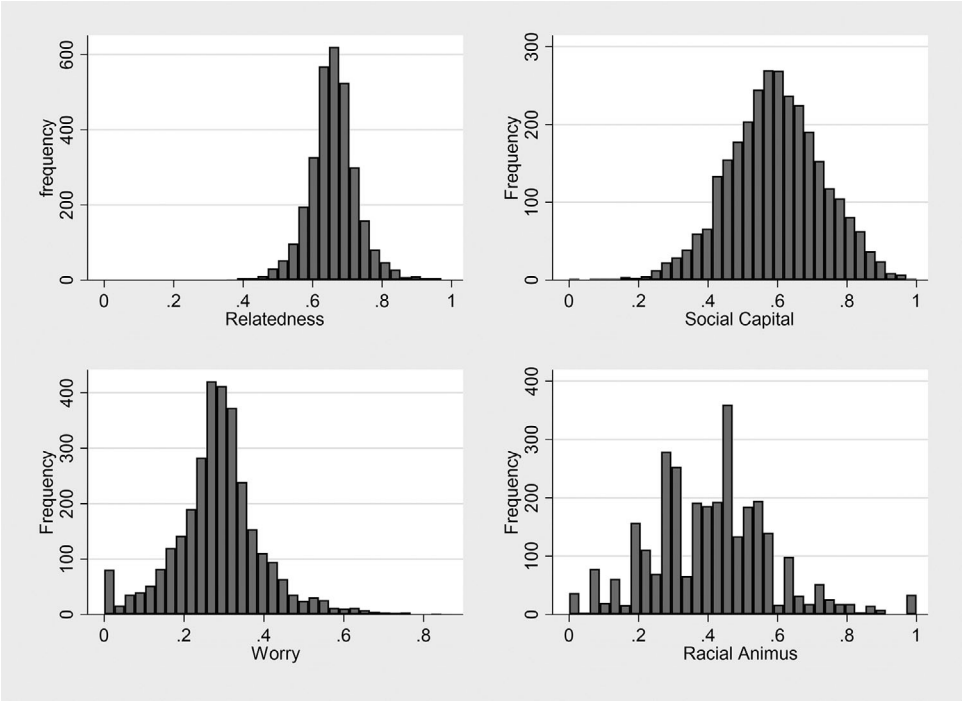

FIGURE 2 Histograms of key variables

form:

$$EO_c = (KI_c \times R_c) + R_c + C_c + KI_c + X_c + Z_c + W_c + e_c$$

EO_c is an election outcome at the county level, typically Trump's vote share. KI_c is a vector of 2 key indicator variables. The first is the average level of worry in a county, which runs from 0– to 1. The second is racial animus at the county level, normalised[1] to run from 0 to −1. R_c is the average level of relatedness in county c. We again normalise this variable to run from 0 to −1 instead of 7– to 35. C_c is the average level of competence in county c, also normalised to run from 0 to −1. Having all the key variables run from 0– to 1 aids comparability.

X_c, Z_c and W_c are vectors of control variables. X_c and Z_c correspond to county-level socio-economic and industrial heritage items that we have already discussed, and state dummies.W_c includes controls derived from individual level data for the following variables (see Appendix A1 for a full specification): life satisfaction, expected life satisfaction in five years' time, depression, pain, stress, inequality sensitivity, income, unemployment, underemployment, out of labour force status, race, union membership, age, gender, marital status,

[1] This is not a z-score. The normalization formula is: $X_{\text{normalized}} = \frac{(X - X_{\text{minimum}})}{(X_{\text{maximum}} - X_{\text{minimum}})}$

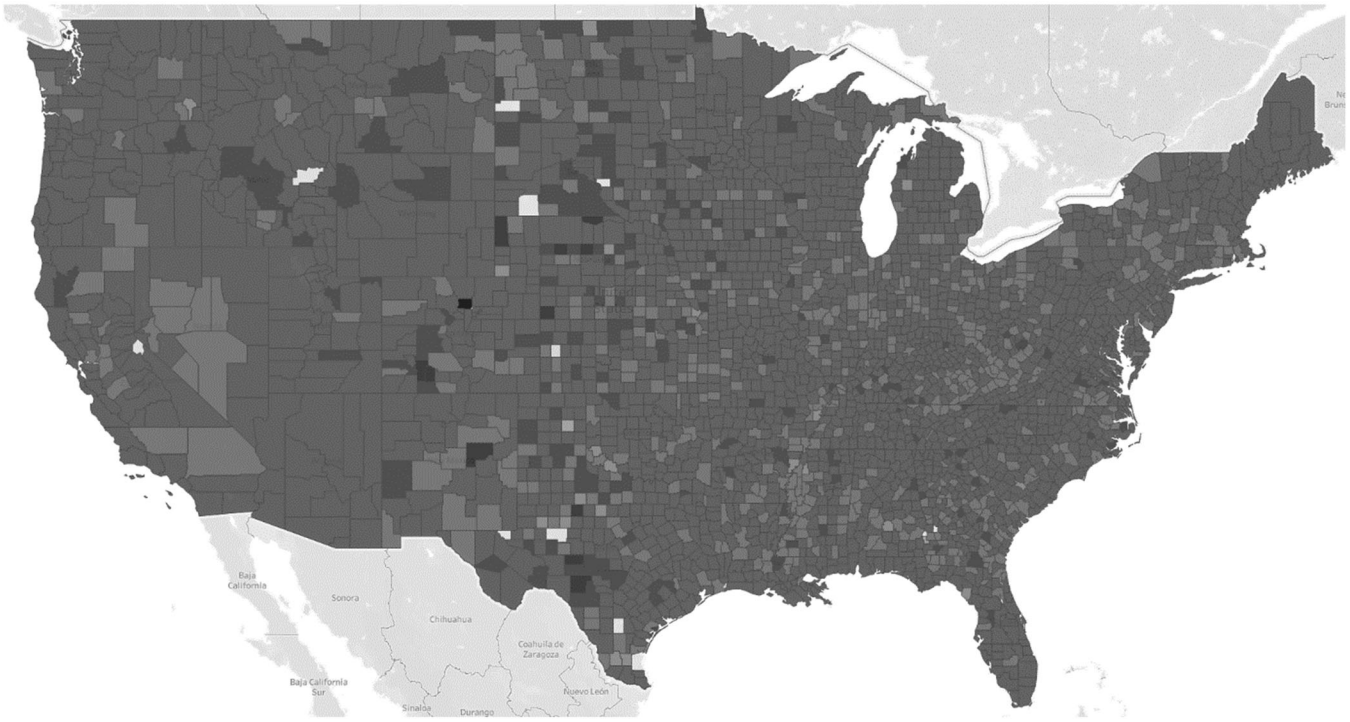

FIGURE 3 Relatedness by county. Notes: Based on Gallup Daily Poll data 2014–2016. Darker colours represent higher levels of relatedness. White represents missing values

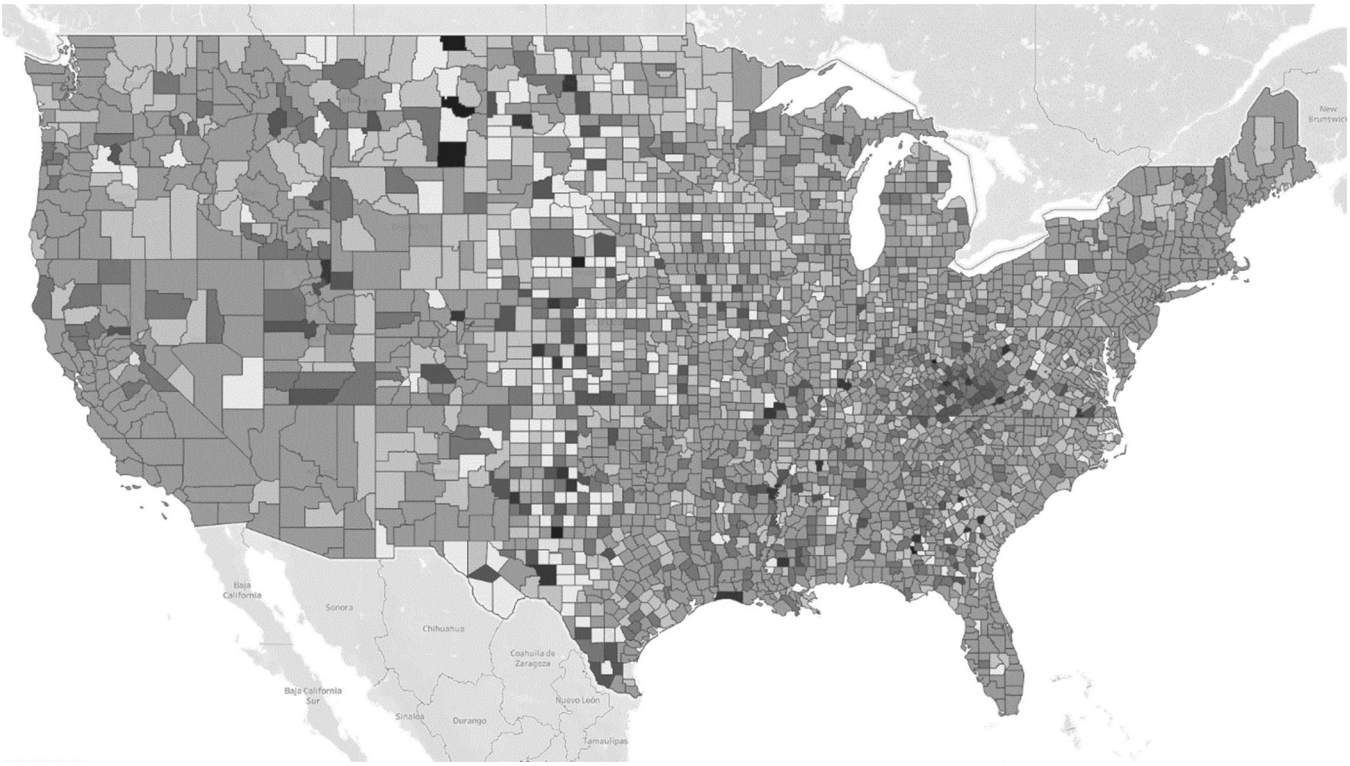

FIGURE 4 Worry by county. Notes: Based on Gallup Daily Poll data 2014–2016. Darker colours represent higher levels of worry. White represents missing values

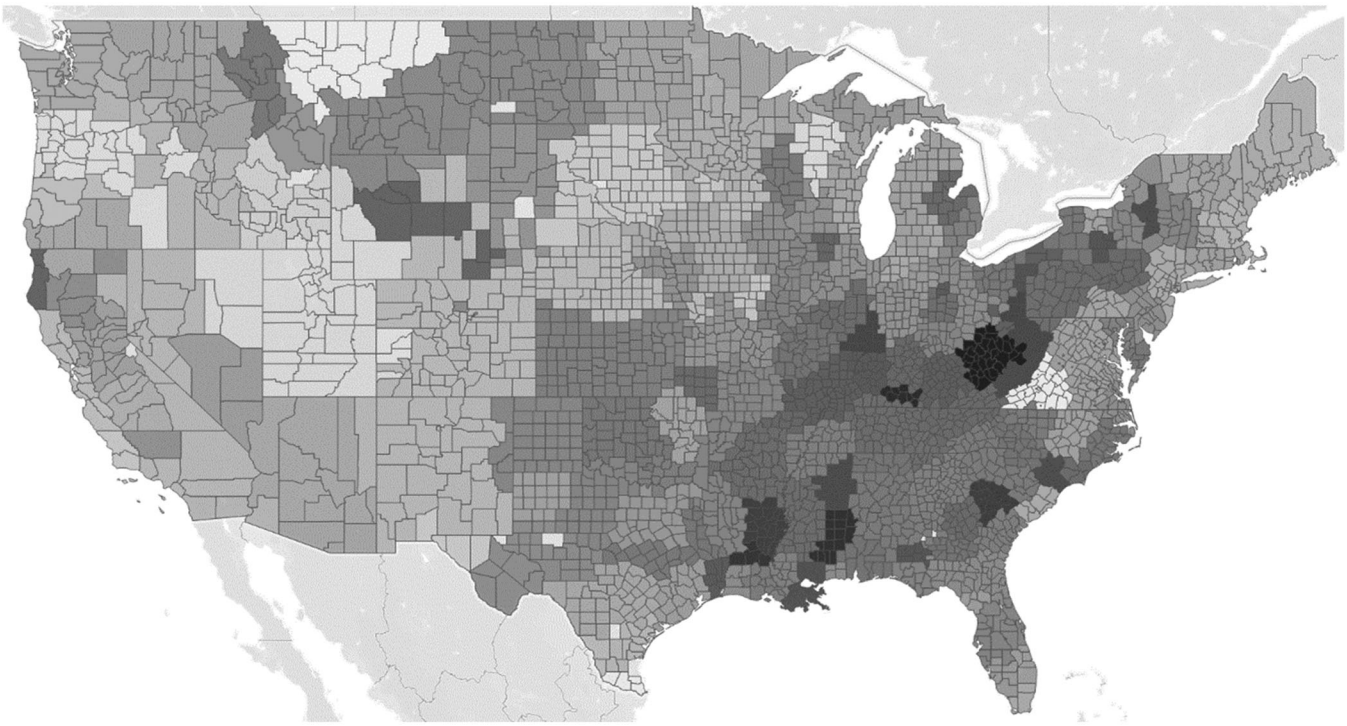

FIGURE 5 Racial animus by designated media area. Notes: Based on Google Trends data on intensity of searches for the N-word 2013–2016. Darker colours represent higher levels of racial animus. White represents missing values

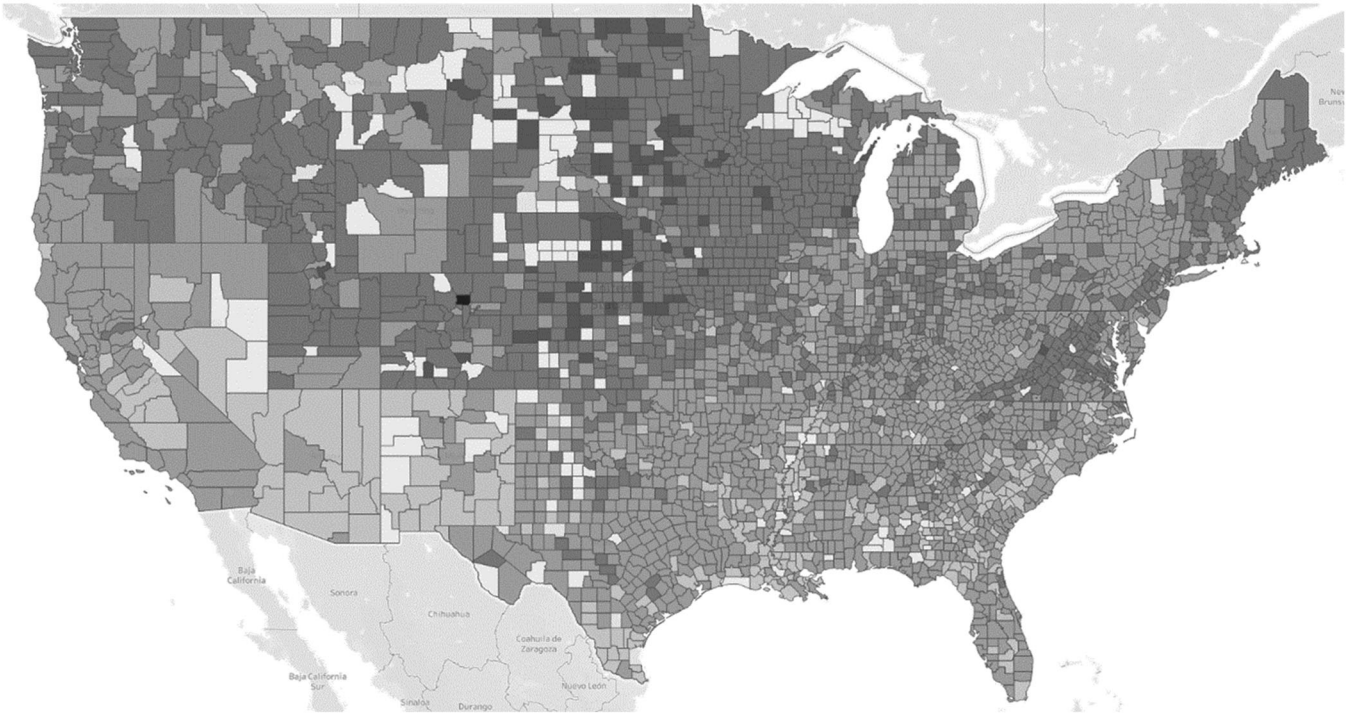

FIGURE 6 Social capital by county. Notes: Based on Joint Economic Committee data for 2016. Darker colours represent higher levels of social capital. White represents missing values

TABLE 3 Well-being and Trump's vote share in 2016

Variable/model	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1419***	0.1497**	0.1265*	0.0747
	(0.0537)	(0.0713)	(0.0747)	(0.0960)
Experienced WORRY yesterday	0.2964***	0.2926***	0.2499**	0.2224
	(0.1044)	(0.1070)	(0.1122)	(0.1478)
Worry* Relatedness	−0.4698***	−0.4640***	−0.5083***	−0.4546**
	(0.1559)	(0.1597)	(0.1647)	(0.1998)
Racial Animus	0.0777***	0.0922	0.1688*	0.0906
	(0.0137)	(0.0888)	(0.0928)	(0.1246)
Social Capital	0.1561***	0.1560***	0.2206***	0.2118***
	(0.0239)	(0.0239)	(0.0518)	(0.0529)
Racial_Animus* Relatedness		−0.0225	0.0682	0.1097
		(0.1355)	(0.1417)	(0.1894)
Social_Capital* Worry			0.1128	0.1013
			(0.0970)	(0.1151)
Social_Capital* Racial_Animus			−0.2345***	−0.1900*
			(0.0898)	(0.1083)
Trade Exposure				−0.0023
				(0.0078)
Trade_Exposure* Relatedness				0.0032
				(0.0118)
R^2	0.760	0.760	0.761	0.775
N	2851	2851	2851	2851

*Sig. 10%, **Sig 5%, ***Sig. 1%. See Appendix A1 for the full specification and results.

educational attainment, church attendance and party identification. We apply sampling weights supplied by the Gallup organisation.

An alternative estimation strategy would be to estimate this equation at the level of the individual (subscript *i*), but there is no variation in the dependent variable across individuals within county. An individual-level regression will thus misrepresent the true variation in the data, giving standard errors that are overly precise. It will also be (approximately) equivalent to the above county-level regression weighted by within-county sample sizes. Neither of these outcomes seems desirable. We return to these issues below in a discussion of the ecological fallacy.

5 | MAIN RESULTS

Table 3 reports selected coefficient estimates from our regression analyses (see Appendix A1 for the full results) for Trump's vote share in 2016. Column 1 reports results from an OLS model featuring only worry, relatedness and the worry–relatedness interaction, with social capital as a control variable. Each of these variables is highly significant. Worry is strongly and positively related to Trump's vote share, while the relatedness–worry interaction is negative. This result supports our hypothesis of worldview defence and unmet needs for relatedness undergirding Trump's success. Relatedness and social capital are positively associated with Trump's vote share, which seems counterintuitive; more on this in a moment. We find no effect for competence in any of our regressions.

Column 2 adds an interaction for relatedness and racial animus. As a result, racial animus becomes insignificant, even at the 10% level.[2] This implies that a need for relatedness is one underlying driver of rising racial identification in the 2016 election. However, racial animus is again positive and significant at the 10% level in column 3, where we introduce interaction effects involving social capital. We do this to test two hypotheses. The first is that placating worry requires relatedness rather than social capital. People need close connections at the immediate interpersonal level to address anxiety. The second is that people will not need to identify with a *racial* group if their community has other groups available. This

[2] Note that we use an 0.1 significance cut-off when reporting all our results, rather than the more conventional 0.05 level. This is not to make our results appear stronger than they are. Instead, it is to make the results that are less convenient for our theory stronger. For example, the key variables for our hypothesis in Table 3 are worry and the worry–relatedness interaction, and we argue that racial animus is merely standing in for unmet needs for relatedness. If we used an 0.05 cut-off, the significance of racial animus would disappear from column 2 onwards whereas worry and worry–relatedness would remain significant, supporting our case. We think this would be somewhat misleading. The significance of racial animus does not disappear entirely—it merely grows weaker. We feel our cut-offs are a more honest presentation of the competing hypotheses in this literature.

availability is measured by social capital. In support of this hypothesis, the worry–social capital interaction is insignificant. In contrast, we find a strong and significant *negative* relationship between the social capital and racial animus interaction and Trump's vote share. This brings us back to our main hypothesis: *where individuals are able to find relatedness in their local community, they do not resort to racial political identification*.

A puzzle remains, however, namely why social capital and relatedness independently are positively associated with Trump voting. Our literature review suggested that cohesive communities should be less inclined to vote for a nativist candidate. Our suspicion is that rural and religious communities tend to be more cohesive *and tend to vote Republican*. We thus need to test whether Trump has two separate sources of popularity: nativism and Republican partisanship. We do this in several ways below.

Our other results, reported in Appendix A1, are broadly in line with the literature. We find that Trump's vote share is positively associated with low and lower-middle class incomes and underemployment, non-Hispanic whites, less educated voters and Republican partisans. In some contrast to Ward et al. (2020), we find a significant negative relationship between life satisfaction and Trump's vote share, but no effect for expected life satisfaction in 5 years. As reported in column 4, we find no significant result for trade exposure, in some contrast to Autor et al. (2020).

We report further robustness checks in Appendices A2 and A3. Our results do not appear to be driven by the application of Gallup's sampling weights or the inclusion of party affiliation as control variables. In Appendix A10, we report results from models identical to Table 2 but with relatedness drawn from a factor analysis of only the variables in the Gallup data with little relationship to social capital. The results are almost identical.

We were concerned that our results were driven by under-sampled counties, especially in heartland states. However, if we drop all counties with fewer than 20 individuals sampled our results only grow starker and our estimates more precise, as depicted in Table 4. The most noteworthy difference from our main results is that the racism–relatedness interaction is large and highly significant, and its introduction into the model eliminates the independent significance of relatedness and sees the independent effect of racial animus turn *negative*. This is in line with the results of Grimmer and Marble (2019), who find that Trump actually performed worse than Romney among the most racist whites. His success stems from rising racial identification among moderate whites. Our results suggest that this is driven by worldview defence and unmet needs for relatedness.

5.1 | Effect sizes

The interaction terms in the regression model make it difficult to interpret the coefficients in isolation, as many of the marginal effects reported in the regression tables will vary depending on the level of the variables with which they interact. As shown in Figures 7–9, the marginal effects of racial animus and worry clearly switch sign

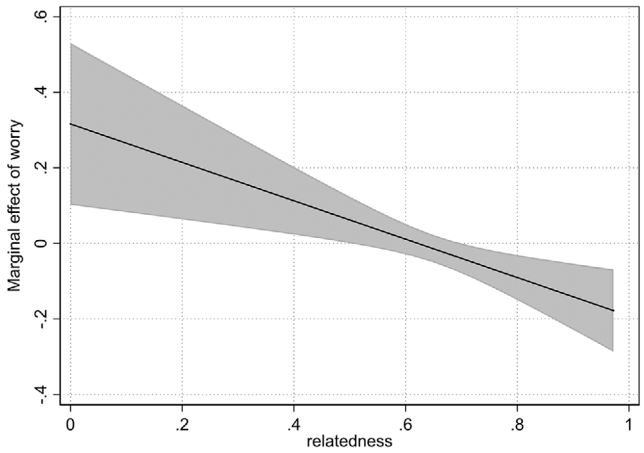

FIGURE 7 Marginal effect of worry on Trump vote share by relatedness (0–1). Notes: Figure based on results in Table 3, column 3; 95% confidence interval shown in grey

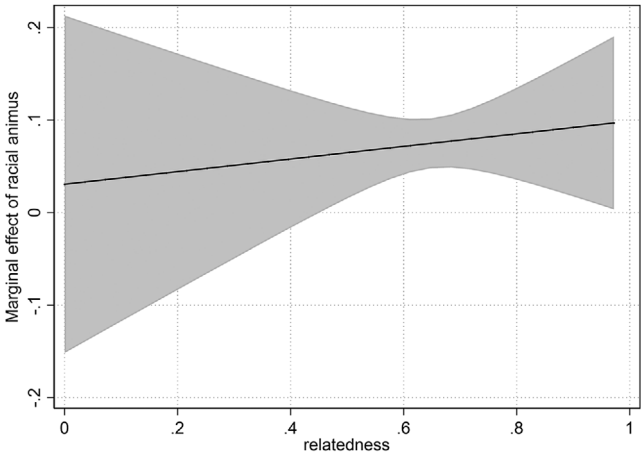

FIGURE 8 Marginal effect of racial animus on Trump vote share by relatedness (0–1). Notes: Figure based on results in Table 3, column 3; 95% confidence interval shown in grey

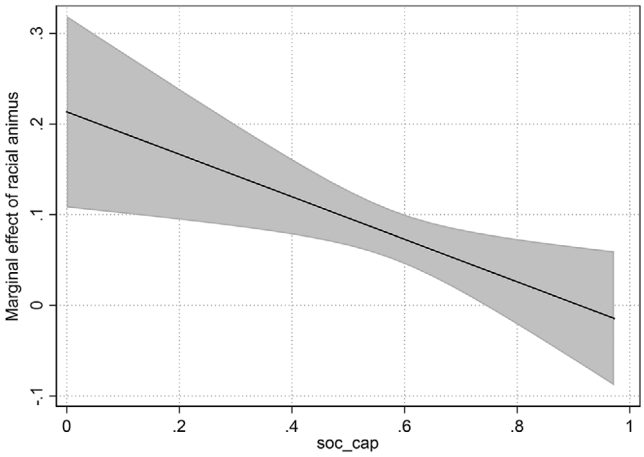

FIGURE 9 Marginal effect of racial animus on Trump vote share by social capital (0–1). Notes: Figure based on results in Table 3, column 3; 95% confidence interval shown in grey

TABLE 4 Trump's vote share in 2016 with under-sampled counties dropped

Variable/model	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1947**	0.0195	−0.0658	−0.1037
	(0.0906)	(0.1056)	(0.1157)	(0.1213)
Experienced WORRY yesterday	0.6692***	0.7715***	0.7792***	0.7541***
	(0.1832)	(0.1855)	(0.1865)	(0.1771)
Worry* Relatedness	−1.0686***	−1.2174***	−1.1836***	−1.1290***
	(0.2767)	(0.2799)	(0.3026)	(0.2938)
Racial Animus	0.0501***	−0.2786***	−0.2328**	−0.2239*
	(0.0135)	(0.1032)	(0.1049)	(0.1223)
Social Capital	0.1280***	0.1271***	0.2677***	0.2621***
	(0.0271)	(0.0271)	(0.0706)	(0.0704)
Racial_Animus* Relatedness		0.5078***	0.6892***	0.6242***
		(0.1581)	(0.1700)	(0.1822)
Social_Capital* Worry			−0.0512	−0.0617
			(0.1661)	(0.1688)
Social_Capital* Racial_Animus			−0.2879***	−0.2607**
			(0.1008)	(0.1102)
Trade Exposure				−0.0096
				(0.0066)
Trade_Exposure* Relatedness				0.0145
				(0.0103)
R^2	0.812	0.813	0.814	0.822
N	2319	2319	2319	2319

*Sig. 10%, **Sig. 5%, ***Sig. 1%.

depending on the value of relatedness or social capital. To illustrate, consider two counties, one with a relatedness of 0.58 and the other with relatedness of 0.74. These scores are, respectively, the cut-offs for the bottom and top deciles of relatedness across counties. The average marginal effect of worry in the bottom decile county is to *increase* Trump's vote share by 3.65% points. In contrast, the average marginal effect of worry in the top decile county is to *decrease* Trump's vote share by 4% points. It is worth noting in this context that relatedness is short tailed, sitting largely between 0.4 and 0.8 with a strong central tendency (see Figure 2). This makes Figures 7 and 8 slightly misleading. Notably, the marginal effect of racial animus is almost always positive because negative coefficients only begin when relatedness is less than 0.4, which is rare, and these are statistically insignificant in any case. Nonetheless, our sample size appears sufficiently large to obtain consistent estimates within the top and bottom deciles of relatedness and where social capital is moderate to high.

Table 5 attempts to aid interpretation by summarising the marginal and total effects of worry and racial animus at different levels of relatedness and social capital. The marginal effect row reports the average marginal effect of the corresponding variable, while the total effect row reports the average marginal effect multiplied by the mean level of the corresponding variable.

Given the imprecision of estimates in extreme cases and the substantial role of interaction effects in our model, these calculations should not be understood as substantive interpretations of marginal effects, but only as an aid to interpreting the effect sizes and pattern of results. However, they make broad conclusions clear enough. Worry switches from positively associated with Trump's vote share at low levels of relatedness and social capital to negative at high levels. This switch in sign is driven by relatedness and only partially offset by the Republican partisan effect of high social capital. The story is more complicated for racial animus. In alienated counties with low relatedness and social capital, it has a strong positive effect on Trump's vote share of 7% points. This rises slightly with relatedness, suggesting that some people rely on racial identification for their relatedness. However, social capital has a strong dampening effect on racial animus, pushing its effect close to zero when social capital is high, regardless of relatedness.

6 | REPUBLICAN PARTY PRIMARIES

To further tease apart Trump's nativist appeal from his appeal to Republican partisans in the general election we follow Carney (2019) and analyse Trump's performance in the Republican party primaries. In

TABLE 5 Effects at top and bottom deciles of relatedness and social capital

Variable	Effect type	*R* = bottom *SC* = bottom	*R* = bottom *SC* = top	*R* = top *SC* = bottom	*R* = top *SC* = top
Worry	Marginal	0.002	0.04	−0.08	−0.04
	Total	0.0007	0.01	−0.02	−0.01
Racial animus	Marginal	0.1	0.03	0.1	0.04
	Total	0.04	0.01	0.05	0.02

Total effects are calculated at the mean of worry (0.29) and racial animus (0.41); rounded to two decimal places.

those contests, Trump was competing against other Republican party politicians for the votes of only Republican partisans. As such, if worry, relatedness and racial animus but not social capital predict Trump's performance in the primaries then it suggests that these variables are associated specifically with *Trump's* success rather than that of any Republican Presidential candidate.

One challenge that we face in this analysis is that the Gallup data contain few individuals who self-identify as Republicans (perhaps because of the 'shy conservative' phenomenon) and thus could effectively proxy for primary voters. Appendix A4 reports results from regressions using a sub-sample of only these individuals. While estimates mirror those in Table 2, they are all highly imprecise. To garner a bigger sample while preserving a focus on people who vote Republican, we estimate regressions on a sub-sample that excludes people who say that they vote or lean Democrat. The results are reported in Table 6.

The results unambiguously support our hypotheses. Worry has a large and significant positive relationship with Trump's primary performance while the worry–relatedness interaction has an even larger negative relationship. Social capital, meanwhile, has a statistically significant *negative* relationship. Racial animus is positively and significantly related to Trump's vote share in column 1, but loses significance once an interaction with relatedness is introduced. These results suggest that Trump's success is driven by worried and alienated individuals seeking to boost their relatedness and worldview defence through racial identification. Cohesive rural and religious communities high in social capital may have voted for him in the general election because he was the Republican candidate, but they did not vote for him in the primaries. They do not need his nativist rhetoric to feel a sense of belonging.

7 | CHANGE IN REPUBLICAN VOTE SHARE

In a further effort to assess whether Trump's popularity came from relatedness rather than Republican loyalty, we use our model to analyse the change in Republican vote share between the 2012 and 2016 Presidential elections. If our hypothesis is correct, then we would expect to see significant effects in the relatedness, worry and racial animus nexus, but not for social capital. This would imply that our significant results for social capital in Table 2 reflect Republican party loyalty that was present for Romney, while the worry, relatedness and racial animus effects reflect a new phenomenon unique to Trump. It would also imply that these effects underwrote the phenomenon of 'Obama Defectors' in the rust belt states who were critical to Trump's success.

The results are reported in Table 7 and lend support to these theories. Social capital and its interactions have no statistically significant effects in columns 1 and 2, and the coefficient in column 3 is half the size of that reported in Table 2. In contrast, the results for worry and the worry–relatedness interaction remain as large and significant as they are in Table 2. Furthermore, the interaction between racial animus and relatedness not only eliminates the significance of racial animus independently but is itself significant in column 3. These results again suggest that Trump's success is a function of rising racial identification among moderate whites driven by worry and relatedness.

8 | COMPARISON WITH THE 2012 ELECTION

It is possible that worry and relatedness are predictive of elections *in general* and not associated in some special way with Trump's electoral appeal. To this test hypothesis, we replicate our analysis for the 2012 election contest between Mitt Romney and Barack Obama. We use Obama's vote share and the change in Democratic vote share as outcome variables. We face tighter data limitations in this exercise than in our main analysis as the relatedness variables do not appear in the Gallup data until after the election in 2013 and half of them arrive in 2014.

Despite these concerns, the results, summarised in Table 8, are encouraging for our theory. The effect signs are all reversed from our main analysis, as Democrat vote share is now the dependent variable. We see significant effects for worry and the worry–relatedness interaction. However, these coefficients are only a third the size of those in our main analysis and these differences are statistically significant. Social capital retains its strong negative relationship with Obama's vote share, as we would expect if it reflects cohesive rural and religious counties that tend to vote conservative. The interaction between social capital and racial animus is positive and significant. This is an odd result because it suggests that places with a high degree of racism and social capital voted for a black President. However, the coefficient must be interpreted in the context of the independent effects of racial animus and social capital. Against that background, the large positive coefficient on the social capital and racial animus interactions implies that partisan Republican counties are generally not prejudicially racist.

TABLE 6 Trump's vote share in the 2016 Republican party primaries (Democrats excluded)

Variable/model	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1138***	0.0797	0.0905*	0.0461
	(0.0352)	(0.0487)	(0.0510)	(0.0609)
Experienced WORRY yesterday	0.2850***	0.2999***	0.3019***	0.2737***
	(0.0663)	(0.0679)	(0.0703)	(0.0906)
Worry* Relatedness	−0.4256***	−0.4481***	−0.4464***	−0.3913***
	(0.0990)	(0.1015)	(0.1070)	(0.1396)
Racial Animus	0.0343***	−0.0269	−0.0490	−0.0695
	(0.0096)	(0.0613)	(0.0646)	(0.0799)
Social Capital	−0.0413**	−0.0408**	−0.0690*	−0.0665
	(0.0171)	(0.0171)	(0.0362)	(0.0411)
Racial_Animus* Relatedness		0.0940	0.0661	0.1261
		(0.0931)	(0.0966)	(0.1146)
Social_Capital* Worry			−0.0046	−0.0140
			(0.0663)	(0.0749)
Social_Capital* Racial_Animus			0.0704	0.0410
			(0.0635)	(0.0761)
Trade Exposure				0.0007
				(0.0052)
Trade_Exposure* Relatedness				−0.0013
				(0.0074)
R^2	0.888	0.888	0.888	0.893
N	2689	2689	2689	2689

*Sig. 10%, **Sig 5%, ***Sig. 1%.

Our interpretation of these results is that voter dynamics were somewhat similar but meaningfully different in the 2016 election compared to 2012. Worry was weaker, triggering less worldview defence.[3] Sources of relatedness other than racial identification also appear to have been stronger and better able to placate worry than in 2016. The seeds of racialised economics were ready for further economic and cultural decay and Trump's candidacy to germinate them. We provide further supportive evidence for this conclusion in Appendix A5 table, which reports results for the change in Democrat vote share between 2008 and 2012. Only social capital and racial animus are significant, and racial animus always hurts Obama. This suggests that the power of worry and relatedness only emerges leading into the 2016 election.

9 | ADDRESSING THE ECOLOGICAL FALLACY

A concern for our methodology is the 'ecologically fallacy'. This is where inferences about individuals are drawn from characteristics of the groups to which they belong. In our case, our conceptual framework is founded on the psychology of individuals, but our outcome variable of interest is voting at the county level. More generally, our models combine items measured at the individual level, like relatedness and worry, with items measured at different scales, notably social capital and racial animus. Unfortunately, while Gallup conducts surveys of voting intention, these do not include the relatedness questions.

We undertake two robustness checks on the potential role of the ecological fallacy in biasing our results. First, we use our model to predict whether someone says that they are a Republican or lean Republican between 2014 and 2016 in the Gallup data. The pattern of results, reported in Appendix A6, mirrors those of our main analysis. However, the coefficients do not attain statistical significance. In any case, this model is not ideal because we are interested in understanding the motivations of swing voters rather than Republicans. Second, we estimate our model using variables measured either at the individual *or* county level. The results from the individual level regressions mirror our main results, but this is because the models are very similar (see Appendix A7).

The quasi county-level analysis is more valuable. If one wanted to obtain a measure of relatedness and worry at the county level, one would take a representative sample of voters from each county and measure their worry and relatedness. One would then aggregate these to arrive at a county-level measure. This is effectively what the Gallup

[3] Note that here (Table 8) the 0.1 significance cut-off again works in favour of our competitors and against our hypotheses. If we used 0.05 then the variables we think explain 2016 would not be significant at all, more strongly supporting our case.

TABLE 7 Well-being and the change in Republican vote share 2012–2016

Variable/model	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1379**	0.0741	0.0220	−0.0073
	(0.0617)	(0.0808)	(0.0847)	(0.1027)
Experienced WORRY yesterday	0.2853**	0.3176***	0.3207**	0.2993*
	(0.1200)	(0.1228)	(0.1292)	(0.1807)
Worry* Relatedness	−0.4630***	−0.5106***	−0.4961***	−0.4577**
	(0.1795)	(0.1837)	(0.1892)	(0.2274)
Racial Animus	0.0623***	−0.0594	0.0192	−0.0174
	(0.0159)	(0.1008)	(0.1057)	(0.1425)
Social Capital	0.0073	0.0078	0.1283**	0.1255**
	(0.0274)	(0.0274)	(0.0592)	(0.0638)
Racial_Animus* Relatedness		0.1879	0.3130*	0.2998
		(0.1538)	(0.1607)	(0.1976)
Social_Capital* Worry			−0.0217	−0.0242
			(0.1118)	(0.1282)
Social_Capital* Racial_Animus			−0.2770***	−0.2381*
			(0.1031)	(0.1250)
Trade Exposure				−0.0032
				(0.0082)
Trade_Exposure* Relatedness				0.0058
				(0.0124)
R^2	0.606	0.607	0.608	0.622
N	2908	2908	2908	2908

*Sig. 10%, **Sig 5%, ***Sig. 1%.

Daily Poll does. We replace the control variables for age, race, education and income derived from the Gallup data in our main regressions with county-level measures from the US Census Bureau (CB, 2018) and US Department of Agriculture (USDA, 2018a, 2018b). Other control-variables derived from the Gallup Data are dropped (see Appendix A8 for the full specification). We follow our specification in Table 3 and drop under-sampled counties. The results, summarised in Table 9, again mirror those from our primary analysis.

An additional point worth raising in the context of the ecological fallacy is that our hypothesis can only be tested at the county level. We are trying to explain why racial identification rose to *electoral relevance* in 2016. If we showed a relationship at the individual level between worry, relatedness, racial identification and Trump support this would not demonstrate that these issues were decisive in getting Trump elected. Ideally, we would show that our theory holds at both the individual and county level. This would evidence the individual-level psycho-dynamics and the county-level political consequences. Alas, data only exists to test our hypothesis at the county level and cannot be retroactively created. We feel that our insights are sufficiently important to warrant taking our results seriously despite concerns about the ecological fallacy, with an eye to testing our theories at the individual level at the next available opportunity.

10 | GENERAL DISCUSSION

Our empirical methods do not provide causal identification, but our research question is highly resistant to causal analysis. While it is possible to manipulate worry, racial animus or relatedness in a laboratory, it is arguably impossible to do so at the sociological scale of our analysis. The 2016 election also only occurred once, which rules out most causal identification methods. However, our conceptual framework is grounded in extensive experimental evidence from SDT and WDT studies. We have good data on individual well-being and a large sample size, and we employ an extensive suite of control variables. Our findings parallel themes from qualitative studies of voters in districts associated with support for Trump. Our study can thus be thought of as a quantitative falsification test for these studies—one that they pass. We feel that our results call for greater quantitative inquiry into the effect of worldview defence and basic psychological needs on political behaviour. We have revealed a suite of psycho-social factors that underpin the rise of racial identification to political salience. This is a major insight.

There are multiple lines of research that could complement our analysis, but they all face data challenges. To support the view that the decline of relatedness lies behind the rise of identity politics, it would be helpful to study the popularity of identitarian candidates over

TABLE 8 Well-being and Obama's vote share in the 2012 Presidential election

Variable/model	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	−0.0944***	−0.0586	−0.0394	−0.0513
	(0.0323)	(0.0544)	(0.0553)	(0.0539)
Experienced WORRY yesterday	−0.0890*	−0.0907*	−0.1078*	−0.1263**
	(0.0520)	(0.0520)	(0.0596)	(0.0599)
Worry* Relatedness	0.1318*	0.1344*	0.1249	0.1633**
	(0.0762)	(0.0763)	(0.0776)	(0.0796)
Racial Animus	−0.0571***	−0.0015	−0.0990	−0.0082
	(0.0147)	(0.0696)	(0.0833)	(0.0908)
Social Capital	−0.2756***	−0.2765***	−0.3736***	−0.3359***
	(0.0249)	(0.0249)	(0.0504)	(0.0654)
Racial_Animus* Relatedness		−0.0853	−0.1180	−0.1301
		(0.1046)	(0.1057)	(0.1062)
Social_Capital* Worry			0.0370	0.0293
			(0.0614)	(0.0642)
Social_Capital* Racial_Animus			0.2046**	0.1212
			(0.0926)	(0.1130)
Trade Exposure				−0.0009
				(0.0039)
Trade_Exposure* Relatedness				0.0022
				(0.0060)
R^2	0.671	0.672	0.672	0.697
N	2871	2871	2871	2871

*Sig. 10%, **Sig 5%, ***Sig. 1%.

time in counties with higher and lower levels of relatedness. For this, researchers would need data on relatedness going back earlier than 2013. Alternatively, researchers could examine elections to offices other than President in the years since 2013. It would also be helpful to examine identity voting trends on the political left.

Our results suggest that subjective measures of relatedness might be a useful complement to objective measures of social capital. Scepticism remains around whether things that are commonly included in social capital indexes, such as voter turnout rates and NGO numbers, capture networks of reciprocity and other forms of social capital. While subjective, questions about community pride, time with friends and family, and the like could capture whether people themselves feel part of a social network. It would be ideal to have the basic psychological needs questionnaire integrated into large-scale surveys of social capital, such as alongside the generalised trust questions of the World Values Survey.

The discussion above points to the need to incorporate more psychological variables into general social surveys (Martela & Ryan, 2021). This would facilitate the study of how psychological forces at the individual level interact with aggregate phenomena and explain events of societal and policy significance. At present, interdisciplinary studies like this one must rely on proxy variables to demonstrate the power of psychological insights, which can be unconvincing. Efforts to adapt psychological variables to social surveys are sometimes held back by the length of psychometric questionnaires. Space is at a premium in social surveys, and a 21-item questionnaire like that used to measure basic psychological needs is simply too long in many cases. This issue compounds the more psychological variables are included. Greater effort to develop short-form questionnaires with sufficient accuracy to track psychological phenomena at sociological scale, assisted by the large sample sizes of social surveys, would be valuable. The Mid-Life in the United States (MIDUS—see ICPSR, 2022) panel provides a useful template for how to do this. While waiting for such large social surveys to incorporate more psychological variables, researchers could implement smaller-scale, purposive surveys through platforms like MTurk or Qualtrics to study contemporary phenomena where the psychological variables we highlight are salient.

One last point to raise concerns the implications of our results. We wonder whether deep structural issues affecting worry and relatedness drive politicians or vice versa. Pundits have repeatedly noted that Trump made his campaign team listen to hundreds of hours of talk-back radio to get a sense for the electorate (Sides et al., 2018). This suggests that he is responding to realities on the ground. Yet much has also been made of fake news, social media and Russian attempts to ferment polarisation and anxiety during the 2016 campaign (Allcott & Gentzkow, 2017; Hall Jamieson, 2018). Even greater volumes

TABLE 9 Well-being and Trump's vote share 2016, county-level variables only

Variable/model	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.0570*	0.0540	0.0033	−0.0096
	(0.0331)	(0.0397)	(0.0431)	(0.0496)
Experienced WORRY yesterday	0.1257**	0.1269**	0.1657**	0.1379*
	(0.0597)	(0.0603)	(0.0760)	(0.0736)
Worry* Relatedness	−0.2839***	−0.2859***	−0.2483**	−0.2079*
	(0.1023)	(0.1033)	(0.1113)	(0.1175)
Racial Animus	0.0210*	0.0165	0.1305***	0.0920
	(0.0116)	(0.0345)	(0.0455)	(0.0610)
Social Capital	0.0564***	0.0564***	0.2114***	0.2004***
	(0.0209)	(0.0209)	(0.0518)	(0.0510)
Racial_Animus* Relatedness		0.0082	0.0995	0.1322*
		(0.0592)	(0.0632)	(0.0749)
Social_Capital* Worry			−0.0987	−0.0947
			(0.1180)	(0.1262)
Social_Capital* Racial_Animus			−0.2819***	−0.2709***
			(0.0725)	(0.0950)
Trade Exposure				0.0004
				(0.0022)
Trade_Exposure* Relatedness				−0.0030
				(0.0040)
R^2	0.859	0.859	0.860	0.867
N	2319	2319	2319	2319

*Sig. 10%, **Sig 5%, ***Sig. 1%.

of ink have been spilled lamenting the influence of Fox News, MSNBC and talkback radio in engendering similar feelings (Rosenwald, 2019). Political actors might be creating these feelings of anxiety and promoting racial identification rather than responding to cultural shifts. The source of these feelings determines how one should act if one wants to restore civic norms in America.

11 | CONCLUSION

This article explicated the psychological channel from economic decay to racial voting. WDT argues that a natural, often subconscious response to anxiety is to bolster feelings of in-group affiliation. SDT similarly predicts that threats to autonomy, competence and relatedness from economic decay will motivate people to try to improve their sense of autonomy through political power, and their sense of relatedness through identitarian voting. People with local, ready-to-hand sources of relatedness will be buffered against these motivations. However, those without immediate access to in-groups that can provide relatedness may reach for salient and accessible but broader in-groups, such as racial and national identity. Trump appealed to such individuals with his America First, pro-white, and anti-immigrant rhetoric and policy positions. We therefore hypothesised that Trump would be more electorally successful in counties with high rates of worry and low rates of relatedness.

Our results supported this hypothesis and evidenced distinct roles for relatedness and social capital. We found a strong, positive relationship between rates of worry and Trump's vote share, and a negative relationship between an interaction of worry with relatedness and Trump's vote share. Furthermore, introducing an interaction between relatedness and racial animus reduced the significance of racial animus and even reversed its sign in some regressions. This supports the view that Trump's success was driven by rising racial identification among moderate white voters looking for relatedness. Challenging our claims about cohesive communities rejecting Trump, we found that social capital had a strong, positive relationship with Trump's vote share. We hypothesised that this was because rural and religious communities tend to be more cohesive and traditionally vote Republican. In support of this, we found that Trump's vote share in the Republican party primaries was only associated with relatedness and worry, not social capital. We also found that growth in Republican vote share between 2012 and 2016 was largely a function of worry and relatedness rather than social capital. In further support of our central claims, we found that an interaction between social capital and racial animus was strongly negative. While cohesive communities might tend to vote Republican, voters there have no need for racial identification to feel

part of a group. We found no effect for trade shocks as a driver of Trump's success, but economic decline is a clear antecedent of the psychological phenomena we observe.

While our methods do not allow for causal identification, our results provide suggestive evidence for the importance of worldview defence and relatedness in Trump's victory. Racialised economics among previously moderate whites might be less about outright prejudice—a charge that struggles to stick to Obama defectors—and more about meeting needs for relatedness to support psychological well-being.

ACKNOWLEDGEMENTS

The authors would like to thank Ryan Edwards, Katherine Cramer, Jonathan Rothwell, Varun Gauri, Carol Graham, Kennon Sheldon, John Sides, Sam Gilbert, Richard Ryan, Frank Martela, anonymous reviewers, participants at seminars at the Brookings Institution, London School of Economics, Society for Personality and Social Psychology Conference, American Psychological Association Conference and Association for Psychological Science Conference, for helpful comments, Laura Mooney for research assistance, and David Dorn, Sergio Pinto and Seth Stephens-Davidowitz for maintaining excellent replication resources. Fabian acknowledges funding from the Australian-American Fulbright commission and hosting by the Brookings Institution in Washington DC.

CONFLICT OF INTEREST

The authors have no competing interests to declare

DATA AVAILABILITY STATEMENT

The primary data source used in this work is the Gallup Daily Poll, which is proprietary. As such, we cannot share this data publicly. However, all the other data and do-files employed in the statistical analysis are publicly available on Mark Fabian's personal website and can also be obtained by emailing him directly. He is happy to assist with any replication efforts, especially if they are part of university courses. Feel free to contact him directly with any queries.

ETHICS STATEMENT

This research adheres to ethical guidelines specified in the APA Code of Conduct as well as the ethical review agencies of Australia and the United Kingdom. No data used in this study was collected directly by the researchers themselves. The research in this article was conducted ethically, the results are reported honestly, the submitted work is original and not (self-)plagiarised, and authorship reflects individuals' contributions.

ORCID

Mark Fabian https://orcid.org/0000-0003-4675-2526

REFERENCES

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, *31*(2), 211–36.

Autor, D., Dorn, D., & Hanson, G. (2013). The China syndrome: Local labour market effects of import competition in the United States. *American Economic Review*, *103*(6), 2121–2168.

Autor, D., Dorn, D., Hanson, G., & Majlesi, K. (2020). Importing political polarization? The electoral consequences of rising trade exposure. *American Economic Review*, *110*(10), 3139–3183.

Baard, P., Deci, E., & Ryan, R. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*(10), 2045–2068.

BEA. (2019). *Prototype Gross Domestic Product by County*, 2012–2015. United States Bureau of Economic Analysis. Retrieved November 19, 2019, from https://www.bea.gov/data/gdp/gdp-county

BLS. (2019). *Local Area Unemployment Statistics*. United States Department of Labor. Retrieved November 19, 2019, from https://www.bls.gov/lau/

Bolet, D. (2021). Drinking alone: Local socio-cultural degradation and radical right support—the case of British Pub Closures. *Comparative Political Studies*, *54*(9), 1653–1692.

CB. (2018). *Race and Age composition of Population by County*. US Census Bureau. Retrieved April 12, 2020, from https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-detail.html

CB. (2019). *Poverty Rates by County* 2013–2016 Based on American Community Surveys. US Census Bureau. Retrieved November 19, 2019, from https://www.census.gov/topics/income-poverty/poverty/data/data-tools.html

Carney, T. (2019). *Alienated America: Why some places thrive while others collapse*. Harper Press.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, *39*(2), 216–236.

Chetty, R., Hendren, N., Jones, M. R., & Porter, S. R. (2020). Race and economic opportunity in the United States: An intergenerational perspective. *Quarterly Journal of Economics*, *135*(2), 711–783.

Church, A., Katigbak, M., Locke, K., Zhang, H., Shen, J., de Jesús Vargas-Flores, J., Ibáñez-Reyes, J., Tanaka-Matsumi, J., Curtis, G. J., Cabrera, H. F., Mastor, K. A., Alvarez, J. M., Ortiz, F. A., Simon, J.-Y. R., & Ching, C. M. (2013). Need satisfaction and well-being: Testing self-determination theory in eight cultures. *Journal of Cross-Cultural Psychology*, *44*(4), 507–534.

Cramer, K. (2016). *The politics of resentment: Rural consciousness in Wisconsin and the rise of Scott Walker*. University of Chicago Press.

Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268.

Deci, E., Ryan, R., Gagné, M., Leone, D., Usonov, J., & Kornazheva, B. (2001). Need satisfaction, motivation, and well-being in the work organization of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, *27*(9), 930–942.

Dorn, D. (2019). *David Dorn's data page*. University of Zurich. https://www.ddorn.net/data.htm

Farley, J. (2019). Five decisive states: Examining how and why Donald Trump won the 2016 election. *The Sociological Quarterly*, *60*(3), 337–353.

Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion*, *27*(3), 199–223.

Gest, J., Reny, T., & Mayer, J. (2018). Roots of the radical right: Nostalgic deprivation in the United States and Britain. *Comparative Political Studies*, *51*(13), 1694–1719.

Graham, C. (2017). *Happiness for all? Unequal hopes and lives in pursuit of the American Dream*. Princeton University Press.

Greenberg, J., Solomon, S., & Pyszcynski, T. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 61–139). Academic Press.

Grimmer, J., & Marble, W. (2019). *Who put Trump in the White House? Explaining the contribution of voting blocks to Trump's victory*. Stanford University

Working Paper. https://stanforddpl.org/papers/grimmer_marble_2019_trump/

Grossman, M., & Thaler, D. (2018). Mass–Elite divides in aversion to social change and support for Donald Trump. *American Politics Research*, *46*(5), 753–784.

Hall Jamieson, K. (2018). *Cyber-war: How Russian hackers and trolls helped elect a President—what we don't, can't, and do know*. Oxford University Press.

Haslam, A., Haslam, C., & Cruwys, T. (2019). Loneliness is a social cancer, every bit as alarming as cancer itself. *The Conversation*. Retrieved November 25, 2019, from http://theconversation.com/loneliness-is-a-social-cancer-every-bit-as-alarming-as-cancer-itself-126741

Herrin, J., Witters, D., Roy, B., Riley, C., Liu, D., & Krumholz, H. (2018). Population well-being and electoral shifts. *PLoS ONE*, *13*(3), 1–6.

Hochschild, A. (2016). *Strangers in their own land: Anger and mourning on the American right*. The New Press.

Hooghe, M., & Dassonneville, R. (2018). Explaining the Trump vote: The effect of racist resentment and anti-immigrant sentiments. *Political Science and Politics*, *51*(3), pp. 528–534.

Holbrook, C., Hahn-Holbrook, J., & Sousa, P. (2011). Unconscious vigilance: Worldview defense without adaptations for terror, coalition, or uncertainty management. *Journal of Personality and Social Psychology*, *101*(3), 451–466.

ICPSR. (2022). Midlife in the United States (MIDUS) Series. https://www.icpsr.umich.edu/web/ICPSR/series/203

Ilardi, B., Leone, D., Kasser, T., & Ryan, R. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, *23*(21), 1789–1805.

Jang, H., Reeve, J., Ryan, R., & Kim, A. (2009). Can self-determination theory explain what underlies the productive, satisfying learning experiences of collectivistically oriented Korean students? *Journal of Educational Psychology*, *101*(3), 644–661.

JEC. (2018). The geography of social capital in America: Social Capital Project Report no. 1–18. *United States Congress*. Retrieved January 28, 2020, from https://www.lee.senate.gov/public/index.cfm/scp-index

Kahneman, D., Krueger, A. B., Schkade, D. A., Schwarz, N., & Stone, A. (2004). A survey method for characterizing daily life experiences: The day reconstruction method. *Science*, *306*(5702), 1776–1780.

La Guardia, J., Ryan, R., Couchman, C., & Deci, E. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfilment and well-being. *Journal of Personality and Social Psychology*, *79*(3), 367–384.

Lammers, J., Stoker, J., Rink, F., & Galinsky, A. (2016). To have control or to be free from others? The desire for power reflects a need for autonomy. *Personality and Social Psychology Bulletin*, *42*(4), 498–512.

Leip, D. (2016). *Dave Leip U.S. Presidential General County Election Results*. Havard Dataverse, V5. Retrieved November 2, 2019, from https://doi.org/10.7910/DVN/SUCQ52

Liberini, F., Redoano, M., & Proto, E. (2017). Happy voters. *Journal of Public Economics*, *146*(1), 41–57.

Liberini, F., Oswald, A., Proto, E., & Redoano, M. (2019). Was Brexit triggered by the old and unhappy? Or by financial feelings? *Journal of Economic Behavior and Organization*, *161*(1), 287–302.

Luttig, M., Federico, C., & Lavine, H. (2017). Supporters and opponents of Donald Trump respond differently to racial cues: An experimental analysis. *Research and Politics*, *4*(4), 1–8.

Lynch, M., La Guardia, J., & Ryan, R. (2009). On being yourself in different cultures: Ideal and actual self-concept, autonomy support, and well-being in China, Russia, and the United States. *Journal of Positive Psychology*, *4*(4), 290–304.

Martela, F., & Ryan, R. (2021). In selecting measures for a comprehensive assessment of well-being, it is essential to include indicators of psychological need satisfaction. *Preventative Medicine Reports*, *23*(2), 101474.

McGregor, I. (2006). Offensive defensiveness: Towards an integrative neuroscience of compensatory zeal after mortality salience, personal uncertainty, and other poignant self-threats. *Psychological Inquiry*, *17*(4), 299–308.

McGregor, I., Zanna, M., Holmes, J., & Spencer, S. (2001). Compensatory conviction in the face of personal uncertainty: Going to extremes and being oneself. *Journal of Personality and Social Psychology*, *80*(3), 472–488.

Morgan, S., & Lee, J. (2018). Trump voters and the White Working Class. *Sociological Science*, *5*(4), 234–245.

Mutz, D. (2018). Status threat, not economic hardship, explains the 2016 Presidential Vote. *Proceedings of the National Academy of Sciences USA*, *115*(19), E4330–E4339.

Navarrete, C. (2005). Death concerns and other adaptive challenges; the effects of coalition-relevant challenges on worldview defense in the US and Costa Rica. *Group Processes and Intergroup Relations*, *8*(4), 411–427.

NCHS. (2019). *Urban–Rural Classification Scheme for Counties*. US National Centre for Health Statistics. Retrieved November 19, 2019, from https://www.cdc.gov/nchs/data_access/urban_rural.htm#Data_Files_and_Documentation

Obschonka, M., Stuetzer, M., Rentfrow, J., Lee, N., Potter, J., & Gosling, S. (2018). Fear, populism, and the geopolitical landscape: The "Sleeper Effect" of neurotic personality traits on regional voting behavior in the 2016 Brexit and Trump Votes. *Social Psychological and Personality Science*, *9*(3), 285–298.

Parker, C., & Barretto, M. (2013). *Change they can't believe in: The tea party and reactionary politics in America*. Princeton University Press.

Perrin, A. J., & Ifatunji, M. A. (2020). Race, immigration, and support for Donald Trump: Evidence from the 2018 North Carolina Election. *Sociological Forum*, *35*(1), 941–953.

Pew Research Centre. (2019). *In US, decline of Christianity continues at rapid pace*. Pew Research Centre: Religion and Public Life.

Pinker, S. (2011). *The better angels of our nature: Why violence has declined*. Penguin.

Pinto, S., Bencsik, P., Chuluun, T., & Graham, C. (2019). Presidential elections, divided politics, and happiness in the US. *Economica*, *88*(349), 189–207.

Putnam, R. (2001). *Bowling alone: The collapse of American community*. Touchstone Books by Simon and Schuster.

Putnam, R. (2015). *Our kids: The American dream in crisis*. Simon and Schuster.

Rosenwald, B. (2019). *Talk Radio's America: How an industry took over a political party that took over the United States*. Harvard University Press.

Reis, H., Sheldon, K., Gable, S., Roscoe, J., & Ryan, R. (2000). Daily well-being: The role of autonomy, competence and relatedness. *Personality and Social Psychology Bulletin*, *26*(4), 419–435.

Ryan, R., & Deci, E. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press.

Schaffner, B., MacWilliams, M., & Nteta, T. (2018). Understanding White polarization in the 2016 vote for President: The sobering role of racism and sexism. *Political Science Quarterly*, *133*(1), 9–34.

Sheldon, K., Ryan, R., & Reis, H. (1996). What makes for a good day? Competence and autonomy in the day and in the person. *Personality and Social Psychology Bulletin*, *22*(12), 1270–1279.

Sheldon, K., Elliot, A., Ryan, R., Chirkov, V., Kim, Y., Wu, C., Demir, M., & Sun, Z. (2004). Self-concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology*, *35*(2), 209–223.

Sheldon, L., Abad, N., Ferguson, Y., Gunz, A., Houser-Marko, L., Nichols, C. P., & Lyubomirsky, S. (2009). Persistent pursuit of need satisfying goals leads to increased happiness: A 6-month experimental longitudinal study. *Motivation and Emotions*, *34*(1), 39–48.

Sides, J., Tesler, M., & Vavreck, L. (2018). *Identity crisis: The 2016 presidential campaign and the battle for the meaning of America*. Princeton University Press.

Sood, G. (2016). *Geographic Information on Designated Media Markets*. Harvard Dataverse, V7. Retrieved December 17, 2019, from https://doi.org/10.7910/DVN/IVXEHT

Stephens-Davidowitz, S. (2014). The cost of racial animus on a Black candidate: Evidence using Google searches. *Journal of Public Economics*, *118*(1), 26–40.

Tessler, M. (2016). Trump voters think African Americans are much less deserving than "Average Americans". Huffpost. Retrieved September 27, 2019, from https://www.huffpost.com/entry/trump-voters-think-africa_b_13732500?

USDA. (2018a). *Education by county*. United States Department of Agriculture Economic Research Service. Retrieved April 12, 2020, from https://www.ers.usda.gov/data-products/county-level-data-sets/

USDA. (2018b). Median household income by county. United States Department of Agriculture Economic Research Service. Retrieved April 12, 2020, from https://www.ers.usda.gov/data-products/county-level-data-sets/

USDA. (2019). Commuting Zones and Labor Market Areas. United States Department of Agriculture Economic Research Service. Retrieved November 19, 2019, from https://www.ers.usda.gov/data-products/commuting-zones-and-labor-market-areas/

Ward, G. (2019). Happiness and voting: Evidence from four decades of elections in Europe. *American Journal of Political Science*, *64*(3), 504–518.

Ward, G., De Neve, J., Ungar, L. H., & Eichstaedt, J. C. (2020). (Un)Happiness and voting in US Presidential elections. *Journal of Personality and Social Psychology*, *120*(2), 370–383.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Fabian, M., Breunig, R., & De Neve, J.-E. (2023). Worldview defence and self-determination theory explain the return of racial voting: Evidence from the 2016 US election. *European Journal of Social Psychology*, *53*, 147–166. https://doi.org/10.1002/ejsp.2894