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ABSTRACT

Bowling with Trump: Economic Anxiety, Racial Identification, and Well-Being in the 2016 Presidential Election*

We use well-being data from the Gallup Daily Poll and a measure of racial animus derived from Google search data to explain why racial identification became politically salient in the 2016 Presidential Election. We find that the oft-observed positive relationship between racial animus and Trump's vote share is eliminated by introducing an interaction between racial animus and a measure of the basic psychological need for relatedness. We also find that rates of worry have a strong and significant positive association with Trump's vote share, but this is offset by high levels of relatedness. Together, these two results imply that racial voting behavior in 2016 was driven by a desire for in-group affiliation as a way of buffering against economic and cultural anxiety. Such behavior is well established in laboratory studies in self-determination theory and worldview defense theory. We find no effect on Trump's performance from social capital or exposure to trade shocks. This suggests that the economic roots of Trump's success may be overstated and that the need for relatedness is a key underlying driver of contemporary political trends in the US.

JEL Classification: D72, F1, I0, I3, P16

Keywords: well-being, voting, racialized economics, nativism, Trump

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Introduction

Why did Donald Trump win the 2016 Presidential Election? Numerous reasons were canvassed in the aftermath of the result. Among them were the emergent power of social media and fake news (Allcott and Gentzkow 2017), Russian interference (Hall Jamieson 2018), the gap between low and high educated whites (Schaffner et al. 2017), lavish media attention on Trump (Sides et al. 2018), anti-incumbency (ibid.), economic anxiety (Autor et al. 2016b), sexism (Valentino et al. 2019), and racism (Hooghe and Dassonneville 2018). In a prominent recent review of the literature and the evidence, Sides et al. (ibid.) acknowledge some role for all these factors but argue that the key force behind Trump's victory was "racialized economics" and Trump's willingness and ability to leverage it. Racialized 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. (2018, 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.

We quantitatively analyze this hypothesis using a very large dataset—the Gallup Daily Poll—and explicate the psychological roots of racialized economics. We argue that there is a channel from economic shocks to nativist voting via psychological wellbeing. Self-determination theory (SDT, Ryan and Deci 2017), a school of clinical psychology, argues that psychological well-being is a function of three basic psychological needs: for autonomy, competence, and relatedness. When these are thwarted, people will try to compensate. As economic decline in America is substantially a function of exogenous forces of globalization and technological change, there is little individuals can do to bolster their feelings of autonomy and competence. They may therefore focus on relatedness. One way to bolster their feelings of relatedness is by affiliating with salient identity groups such as race and nation. Similarly, theories of so-called "worldview defense" (WDT) argue that when people feel worried they will double-down on their in-group affiliations (Holbrook et al. 2011). In laboratory studies these typically overlap with broad identity markers like race and nation. Both literatures imply that economic decline, through its pernicious effect on psychological wellbeing, could encourage in-group bias. This provides some explanation for the emergence of nativist and racial sentiment leading into the 2016 Presidential election. We argue that Trump, with his "America First" and "Build a Wall" policies and his nativist rhetoric, fueled and harnessed these sentiments to secure the Presidency.

Honing our hypothesis, a key inference of SDT and WDT is that in-group bias is more likely to manifest as identification with a broad group like race or nation when more intimate sources of group identification, like a church group or sports club, are unavailable. In such circumstances, people reach for broader but easily accessible groups like race and nation. Sociologists have long noted that small, local sources of in-group identity, like bowling leagues and trade unions, have declined precipitously across America in recent decades (Putnam 2000, 2015). 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 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". We therefore hypothesize that Trump should be successful in counties with high levels of worry and low levels of relatedness.

We test this hypothesis by combining rich individual-level well-being and socio-economic data from the Gallup Daily Poll with county-level data on economic indicators, racial animus, social capital, and election outcomes. We find that racial animus has a strong, positive association with Trump's vote share independent from worry and relatedness. However, when we interact relatedness with racial animus, the coefficient on racial animus turns negative and falls in significance. Meanwhile, the interaction term is positively and significantly associated with Trump's vote share. This suggests that people are relying on racial identification to bolster their sense of relatedness, in line with our hypothesis. In further support of our hypothesis, worry has a large and significant positive association with Trump's performance, but an interaction between worry and relatedness is negative, substantially offsetting the independent positive effects of worry and relatedness. In other words, Trump had substantial cut through in worried counties *except when* they had existing sources of relatedness. A final piece of supportive evidence is that Trump performed worse than Romney in counties with high levels of community pride. We show that our results are not driven by exposure to trade shocks using an instrumental variable for China's entry into the world trade system (Autor et al. 2013). Similarly, social capital has no statistically significant relationship with Trump's vote share.

Conceptual Framework

Our conceptual framework draws on three streams of literature. We begin with the political science literature on racialized 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 well-being 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 literatures on wellbeing from the eudaimonic tradition (Fabian 2019). We turn to these in the final part of our conceptual framework where we develop our hypothesis using SDT and WDT. These theories suggest a channel from trade shocks and other sources of anxiety to identity voting via psychological wellbeing and attempts to improve it.

Racialized Economics

Donald's Trump's victory was underwritten by swings ("Obama defectors") in the "rust belt" states of Iowa, Wisconsin, Michigan, Ohio, and Pennsylvania (Farley 2019). Any explanation of Trump's win must explain this shift. These states have experienced substantial economic declines in recent decades owing predominantly to the impact of trade and technological change on manufacturing employment (Teaford 1993, McClelland 2013, 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 2016 Presidential election result. It instead emphasizes more nuanced explanations like racialized 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 racialized economics.

Sides et al. (p. 175) define racialized 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 and but strongly related to their views regarding whether minorities were taking jobs from whites (Morgan and Lee 2018). Furthermore, a survey experiment in December of 2016 randomly allocated respondents to one of two questions: "Over the past few years, Blacks have gotten less than they deserve" and "Over the past few years, average Americans have gotten less than they deserve". There is a literature showing that "average American" is synonymous with "white" (Devos and Banaji 2016). 57 per cent of Clinton voters agreed with either statement. In contrast, while 64 per cent of Trump voters agreed that average American's had gotten less than they deserve, only 12 percent agreed that Blacks had gotten less than they deserve (Tessler 2016). In a similar experiment using 746 white respondents, Luttig et al. (2017) found that respondents favorably disposed to Trump were more opposed to a mortgage relief program when primed with a picture of a Black man standing next to a foreclosure sign than the same picture featuring a white man. In contrast, the priming had no statistically significant effect among Clinton supporters.

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 racial inflected questions in the ANES and VOTER survey show growing polarization in voter perceptions of Democrats and Republicans on race and immigration issues (Sides et al. 2018, pp. 168–171). White respondents to the surveys increasingly see Democrats as espousing the view that Black disadvantage is a function of inadequate state support whereas Republicans see it as a function of inadequate effort. Similarly, they see Democrats as believing that "illegal immigrants" contribute to the country while Republicans believe they are a net drain on the economy. The power of these questions to predict vote choice rose between 2008–2016, suggesting that racial resentment became an electoral issue in 2016. The same effect is observed for voters' feeling about Muslims and their perception of discrimination against whites—these items became more strongly predictive of vote choice in 2016. Sides et al.'s

evidence is corroborated by Schaffner et al. (2018), who analyze 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 papers from the political science literature are important to our analysis herein. The first is Mutz's (2018) study of status threat. Using panel data from 2012 and 2016, she 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 white, male, Christians, and among those who perceive America's global dominance as threatened.

The second is Grossman and Thaler's (2018) study of aversion to change among elites versus members of the general public in Michigan. They 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 2018, Hochschild 2016, Cramer 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) emphasize 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 racialized economics isn't specifically about race but rather in-groups and cultural identity.

Well-Being and Voting

There is a nascent literature studying the power of subjective well-being measures to predict voting behavior. Early works in this field include Liberini et al. (2017, 2019) and Ward (2019a, 2019b). This workstream has recently turned its attention to the 2016 US Presidential election (Herrin et al. 2018), inspired in part by Graham's (2017) analysis of subjective well-being (SWB) trends in America. She documented poor and declining SWB in US regions now associated with Trump support. The rust belt, for example, has high levels of anger, worry, and depression and low rates of enjoyment, smiling, and optimism compared to coastal regions. Life satisfaction as measured on 0–10 scales is also markedly lower across the rust belt states, and health outcomes are worse. These findings align with the literature on "deaths of despair" (Case and Deaton 2015), which documents worsening life expectancy in

rust belt regions owing to opioid addiction, obesity, smoking, depression, and stress. In more recent work, Graham and co-authors (Pinto et al. 2019) explore the heterogenous effect of Trump's win on the subjective well-being of Republican and Democrat voters. More relevant to our analysis here is a paper by Obschonka et al. (2018) that finds Trump performed better in counties with high levels of neuroticism, especially anxiety and depression.

We augment this emerging literature using ideas from eudaimonic perspectives on well-being (Ryan et al. 2008). While the subjective well-being 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's 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. Eudaimonic perspectives on well-being are built on richer accounts of human motivation that are helpful in this context.

Self-Determination and Worldview Defense Theories

SDT is a theory of human motivation that is highly influential in clinical, personality, and social psychology (Deci and Ryan 2000). It argues that humans have three basic psychological needs that underpin their motivations. These are for autonomy, relatedness and competence. Autonomy is the sense that one's behavior 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 skillful at activities that are necessary for one to flourish. And relatedness is the sense that one has nourishing, supportive, and reliable social connections.

Several large sample cross-cultural studies have found that nourishing the basic psychological needs improves wellbeing in terms of 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 wellbeing between individuals, and variation in the degree to which each need is nourished predicts changes in wellbeing within individuals (Sheldon et al. 1996, Reis et al. 2000, La Guardia et al. 2000, Lynch et al. 2009).

SDT is linked to our analysis in the following manner. As discussed earlier, sociological studies have documented that sites of ongoing deindustrialization in America have experienced long term declines in economic vitality, population, quality of public services and urban amenities, civic organizations, and hope, and commensurate increases in deaths of despair, family disintegration, out-migration, and opioid addiction (Putnam 2000, 2015; Graham 2017; Hochschild 2016; Cramer 2016). 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. The drivers of decline in America—

technological change and globalization—are largely exogenous to affected communities so they have little power over them (Moretti 2012). As such, we expect affected individuals to focus on improving relatedness as it is one of the few levers available to them. One associated behavioral change is to vote for identitarian candidates that give them a sense of belonging. SDT here explains the link from neuroticism and unhappiness to identity voting observed by Obschonka et al. (2018).

Theories of "worldview defense" explain 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 defense": 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 termed "worldview defense". Worldview defense would incline people to vote for candidates who appeal to in-group markers. However, we would expect this desire to be weaker among people whose in-groups are relatively micro, like churches or neighborhood alliances. These people would not associate national politicians speaking to broad identities like race and nation with their local, personal in-groups.

Hypotheses

Our conceptual framework brings together many streams of research but produces a relatively succinct hypothesis. We posit that, owing to the heterogenous distribution of their impacts, negative economic shocks have harmed basic needs in some communities of America even as they have helped basic needs in others. This gives rise to *worry*, which provokes worldview defense. 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 worldview defense theories, 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 dramatic 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 hypothesize that *Trump's vote share will be positively predicted by county rates of worry but that 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. We further hypothesize that racial voting in 2016 was an attempt to bolster feelings of relatedness. Therefore, the effect of an interaction between racial animus and relatedness should swamp the effect of racial animus on its own.

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). We turn now to look for evidence from America.

Data

To test our hypothesis, we need four kinds of data: well-being data at the individual level, some measure of racial animus, sociological and economic data at the individual and county level, and election results at the county level (see appendix A1 for summary statistics). For election results, we use data from Dave Leip's (2016) Atlas of US Presidential Elections.

For well-being and socio-economic data at the individual level, we use the Gallup Daily Poll from 2014 until election day 2016. This survey is a random, representative sample of 500 American adults taken daily by landline (40%) and mobile phone (60%), providing a large and high-quality sample. At a minimum, our individual level variables are drawn from a sample of over 470 000 observations.

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 0-10, and what they expect their life satisfaction to be in 5 years' time. We follow Graham (2017) and use this last question as a measure of optimism. The Poll also includes a full battery of socio-economic, demographic, health, and political allegiance questions.

While the Gallup data does not include questions drawn directly from SDT's basic psychological needs (BPN) survey (Deci and Ryan 2000, Gagné 2003), several questions in the Gallup survey are close analogues. Table 1 lays out the 14 questions that make up the basic psychological needs survey for competence and autonomy. We report the analogous question 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 close analogues for 4 out of 6 of the competence questions and 7 relatedness questions that effectively parallel questions in the BPN questionnaire. 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 create variables for "competence" and "relatedness" by summing the responses to the individual questions. As there are only 4 competence questions this variable runs from 4–20 while the relatedness variable runs from 7–35.

To track racism, we use Stephens-Davidowitz's (2014) measure of racial animus. This is drawn from Google searches for the n-word between 2004 and 2007 measured at the Designated Market Area (DMA) level. We crosswalk DMA's to counties using Sood (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. Using data from 2004–2007 prevents the measure from being confounded by rising dislike for Obama during his Presidency. Stephens-Davidowitz (2014) found that racial animus cost Obama roughly 4 percentage points of the national popular vote in 2008 and 2012. This estimate is 1.5 to 3 times larger than survey-based estimates.

We utilize 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) 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).

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 al.ong 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 neighborhood

We draw our data on social capital at the county level from the Joint Economic Committee's Social Capital Project (JEC 2018). This index is composed of the following variables: marriage rates, out of wedlock births, children in single parent homes, 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, and violent crime rates.

We obtain data on industrial heritage and trade shocks at the commuting zone (CZ) level 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 labor markets. There are 722 CZs in the United States, typically comprised of several counties. CZs are designed to reflect a local labor market based on where people in a region transit to on a regular basis for employment. Autor et al.'s data includes industrial heritage variables for the education level of the labor

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 labor force employed in manufacturing. Autor et al. also use UN Commtrade data to develop a variable capturing rising exposure to import competition from China per worker in commuting zones from 1990–2007, where imports are apportioned to the commuting zone according to its share of national industrial employment. It is important to note that this variable is not imports to a commuting zone. The variable instead captures rising competitive pressure on industries in commuting zones that produce goods that are increasingly imported cheaper from China over the 1990–2007 period. Formally:

$$\Delta IPW_{ui1990-2007} = \sum_{j} \frac{L_{ij1990}}{L_{uj1990}} \frac{\Delta M_{ucj1990-2007}}{L_{i1990}}$$

Where ΔIPW is the change in imports per worker in US (subscript *u*) commuting zone *i* over the period 1990–2007, L_{ij} is the start of period employment in 1990 in commuting zone *i* and industry *j*, and ΔM_{ucjt} is the observed change in US (subscript *u*) imports from China (subscript *c*) in industry *j* between the start and end of the period 1990–2007. L_{uj1990} is the start of period employment in 1990 at the national level. The difference in ΔIPW_{uit} across commuting zones thus stems from variation in local industrial structure at the start of period *t*. Intuitively, commuting zones with more manufacturing industries will be more affected by rising competition from imports, especially if they themselves do not utilize imported components. To overcome issues of endogeneity, Autor et al. (2013, p. 2129) employ an instrumental variables strategy. They instrument for growth in Chinese imports to the United States using the contemporaneous composition and growth of Chinese imports in eight other developed countries. We make use of this same instrument in our analysis.

Autor et al. (2013) measure the impact of pressure from imports on the level of wages and employment across commuting zones. In contrast, our election analysis takes place at the county level. We therefore crosswalk commuting zones to counties using US Department of Agriculture codes (USDA 2019) and cluster standard errors at the commuting zone level.

Empirical Strategy

We create county-level averages using individual-level responses in the Gallup poll and estimate OLS models at the county level of the following 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: Trump's vote share or the change in Republican vote share. KI_c is a vector of 2 key indicator variables. The first is the average level of worry in a county. The second is racial animus at the county level. R_c is the average level of relatedness from 7–35 among respondents in county *c*, measured using the sum of the 7 individual 1–5 scale relatedness sub-variables. r_c is a vector of the 7 relatedness sub-variables. We include each variable separately rather than relatedness on its own to see whether they have heterogenous relationships with our outcome variables of interest. C_c is the average level of competence from 4–20 among respondents in county *c*, measured using the sum of the 4 individual 1–5 scale competence sub-variables.

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 dummy variables for census region. W_c includes controls derived from individual level data for the following variables (see appendix table A2 for a full specification): life satisfaction, optimism, depression, pain, stress, inequality sensitivity, income, unemployment, underemployment, out of labor force status, race, union membership, age, gender, marital status, educational attainment, church attendance, and party identification. We cluster standard errors at the commuting zone level and apply sampling weights supplied by the Gallup organization.

An alternative estimation strategy would be to estimate this equation at the level of the individual, 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.

If our hypothesis is correct, then we should see two sets of results. First, the interaction between racial animus and relatedness should be a more powerful predictor of Trump's success than racial animus on its own. This is because Trump's victory was driven by more people trying to get their relatedness from racial identification. Second, the coefficient on worry should be positive and significant, whereas the interaction between worry and relatedness should be negative. This would suggest that high levels of relatedness work against the tendency of worried individuals to vote for Trump to bolster their feelings of in-group identification.

Results

Tables 2 and 3 report selected coefficient estimates from our regression analyses (see appendix tables A2.1 and A2.2 for full results) for Trump's vote share in 2016 and the change in Republican vote share between 2012 and 2016, respectively. We examine the change in Republican vote share because Trump seems to have activated different voters to those traditionally associated with the Republican party (Sides et al. 2018). It is useful to see who turned out for Trump but not Romney.

Columns 1 and 2 report results from OLS regressions. They corroborate our hypothesis. Column 1 reports results from a regression featuring worry, worry interacted with relatedness, and racial animus. As predicted, worry is positively associated with Trump's vote share but the interaction between worry and relatedness has a negative association. Racial animus is positively associated with Trump's vote share, as is standard. However, when we introduce an interaction between racial animus and relatedness in column 2, the coefficient on racial animus turns negative and falls in significance. The new interaction term meanwhile is positive and highly significant. The results for worry and the interaction between worry and relatedness also increase in size and significance once the interaction between racism and relatedness is introduced.

The switch in the sign of racial animus might seem counterintuitive at first, but it accords with the analysis of Grimmer and Marble (2019). They find that Trump received fewer votes than Romney from whites with the highest levels of racial resentment. Trump's success

stemmed from rising racial identification among more moderate white voters. Our results suggest that this trend is driven by psychological well-being, specifically the need for relatedness in the face of economic and cultural decay, rather than prejudice.

Table 2: Well-Being and Trump's Vote Share in 2016 (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			-0.0150	-0.0038
			(0.0145)	(0.0152)
Trade_Exposure*Relatedness			0.0006	0.0001
			(0.0006)	(0.0006)
Experienced WORRY yesterday	0.4534*	0.6062**	0.4432	0.5798*
	(0.1851)	(0.1917)	(0.2331)	(0.2439)
Worry*Relatedness	-0.0192**	-0.0253***	-0.0188*	-0.0242*
	(0.0074)	(0.0076)	(0.0092)	(0.0097)
Racial Animus	0.0008***	-0.0036*	0.0005**	-0.0046**
	(0.0001)	(0.0015)	(0.0002)	(0.0017)
Racial_Animus*Relatedness		0.0002**		0.0002**
		(0.0001)		(0.0001)
Social Capital	0.0018	0.0020	0.0019	0.0021
	(0.0030)	(0.0030)	(0.0039)	(0.0039)
I can't imagine living in a better community	0.0056	-0.0026	0.0021	-0.0062
	(0.0074)	(0.0079)	(0.0089)	(0.0091)
Community pride	0.0053	-0.0042	0.0025	-0.0071
	(0.0088)	(0.0093)	(0.0108)	(0.0109)
The city/area where I live is perfect for me	0.0069	-0.0023	0.0032	-0.0057
	(0.0083)	(0.0088)	(0.0100)	(0.0107)
Make time for vacations with family and friends	-0.0117	-0.0205**	-0.0146	-0.0234**
	(0.0060)	(0.0067)	(0.0076)	(0.0081)
My relationship with my partner is stronger than ever	0.0287***	0.0186*	0.0276**	0.0175
	(0.0077)	(0.0084)	(0.0085)	(0.0090)
My friends and family give me energy	0.0116	0.0041	0.0092	0.0013
	(0.0083)	(0.0086)	(0.0099)	(0.0101)
Recognition for improvements to the neighborhood	0.0147**	0.0058	0.0116	0.0023
	(0.0057)	(0.0064)	(0.0071)	(0.0078)
Competence	-0.0024	-0.0027	-0.0015	-0.0018
	(0.0028)	(0.0028)	(0.0034)	(0.0034)
Optimism	0.0014	0.0024	0.0020	0.0028
	(0.0038)	(0.0039)	(0.0041)	(0.0042)
Life Satisfaction	0.0006	0.0005	0.0003	0.0005
	(0.0046)	(0.0046)	(0.0049)	(0.0050)

*: Significant at the 5% level **: Significant at the 1% level ***: Significant at the 0.1% level
Note: Columns 1 & 2 are identical models except model 2 contains the racial_animus*relatedness interaction. This pattern is repeated in columns 3 & 4, which report results from the IV model containing trade exposure.

While we cannot tease them apart with our data, our suspicion is that the worry–relatedness and relatedness–racism effects reflect two different but associated phenomena. There are

counties with high relatedness based on local sources like church groups. They are buffered against worldview defense and Trump probably performs poorly there. There are other counties where worldview defense has already kicked in and led people to draw relatedness from racial identification because local sources were inaccessible. The worry effect is weaker in these counties because relatedness is relatively high, but the racism–relatedness interaction is stronger.

Figure 1: Marginal effect of racial animus on Trump vote share by relatedness (7–35)

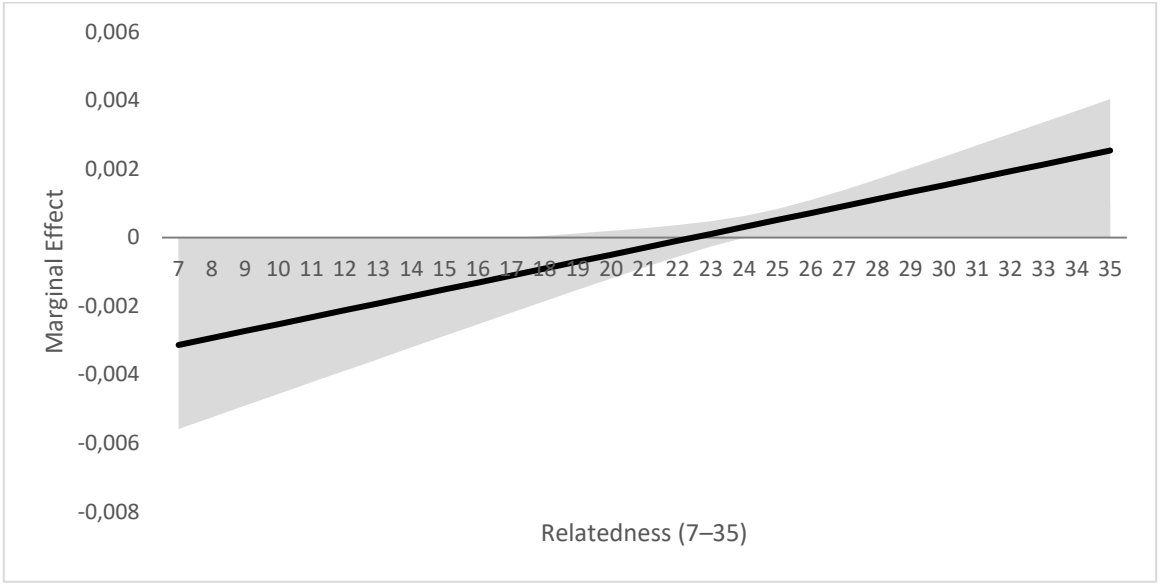
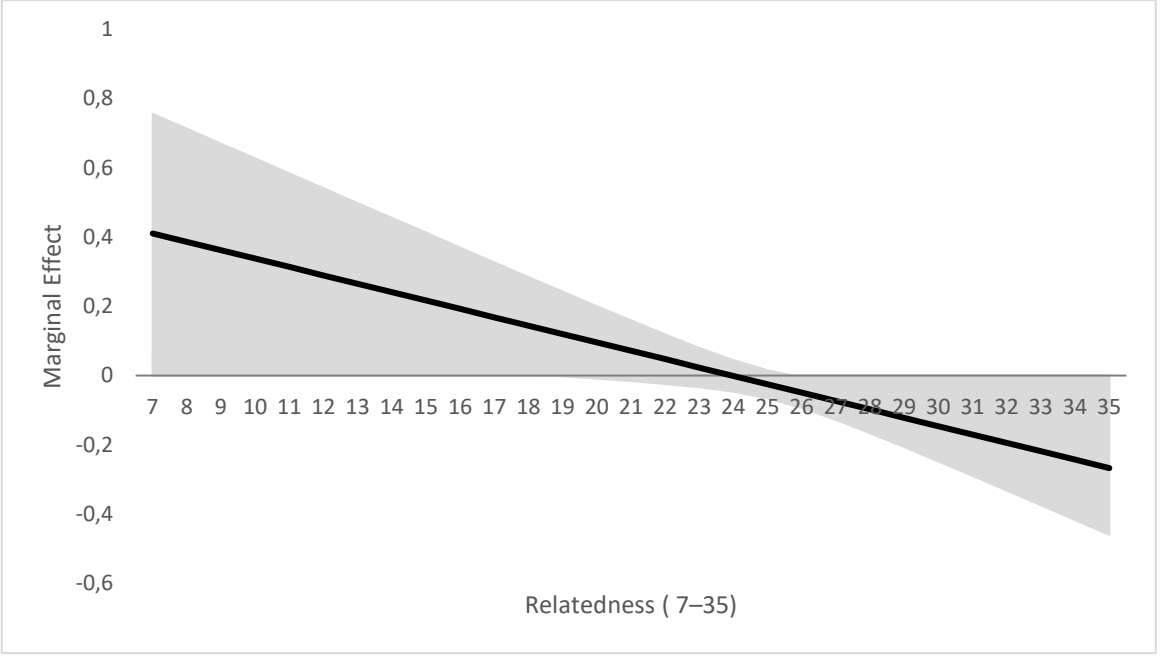


Figure 2: Marginal effect of worry on Trump vote share by relatedness (7–35)



The interaction terms in the regression model make it difficult to interpret the coefficients in isolation. Specifically, the marginal effect of worry and racial animus from the regression output captures the overall impact of changes in those variables, but this marginal effect will

vary with relatedness. Figures 1 and 2 show the marginal effects for racial animus and worry as relatedness increases. Both effects clearly switch signs depending on the value of relatedness. For example, consider two counties, one with a relatedness of 23.3/35 and another with relatedness of 26.8/35. These scores are, respectively, the cutoffs 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 1.7 percentage points. In contrast, the average marginal effect in the top decile county is to decrease Trump's vote share by 6.8 percentage points.

The short-tailed distribution of relatedness (see appendix figure A1.1) means that racial animus almost always exerts a very weak but positive effect on Trump's vote share. In the bottom decile county, the average marginal effect of racial animus is to increase Trump's vote share by 0.01 percentage points. In the top decile county, it increases Trump's vote share by 0.09 percentage points. As relatedness rarely reaches extreme values, this analysis suggests that Trump's relative success across counties is more about worry and in group identification than racial prejudice.

Our results in columns 1 and 2 might be biased by the omission of trade exposure. Autor et al. (2016b) found that greater exposure to import competition from Chinese was positively associated with Trump's electoral performance. To control for this, we follow their instrumental variable strategy and re-estimate our model using a two-stage least squares regression procedure. We include an interaction between trade exposure and relatedness to test whether economic anxiety leads to Trump voting through the channel of worldview defense. A positive coefficient on trade exposure and a negative coefficient on the interaction term would suggest that relatedness is offsetting worldview defence triggered by economic anxiety. The results are reported in columns 3 and 4. Neither trade exposure nor the interaction term is statistically significant. Our results do not support the hypothesis that trade shocks were a substantial driver of Trump's electoral success.[1]

This pattern of results carries over to the change in Republican vote share between the 2012 and 2016 elections, reported in table 3. Introducing the racism–relatedness interaction turns the coefficient on racism negative and eliminates its significance. It also boosts the size and significance of the estimates for worry and the worry–relatedness interaction.

[1] We report further robustness checks in Appendixes A3 through A5. We were concerned that our results might be driven by variation in worry and relatedness in the middle of America (see heatmaps in appendix figures A1.4 and A1.5) and that this variation might in turn be driven by under-sampling. We apply sampling weights in our main regressions to address this. The unweighted results are not meaningfully different, though they are less statistically significant (see appendix tables A3.1 and A3.2). In a further robustness check, we remove all counties from our sample with fewer than 20 observations between 2014–2016 in the Gallup data. Our sample size falls substantially from 2921 to 2382 counties but the results become starker (see appendix tables A4.1 and A4.2). Finally, we were concerned about bias arising from including party affiliation as explanatory variables. Appendix tables A5.1 and A5.2 report results from regressions where these variables are removed. Our results are meaningfully unchanged but the effect sizes increase.

Table 3: Well-Being and the Change in Republican Vote Share 2012–2016 (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			0.0002	0.0029
			(0.0048)	(0.0049)
Trade_Exposure*Relatedness			0.0000	-0.0001
			(0.0002)	(0.0002)
Experienced WORRY yesterday	0.1678*	0.2130**	0.1641	0.1965*
	(0.0797)	(0.0826)	(0.0869)	(0.0863)
Worry*Relatedness	-0.0078*	-0.0096**	-0.0076*	-0.0089*
	(0.0032)	(0.0033)	(0.0035)	(0.0035)
Racial Animus	0.0003***	-0.0010	0.0004***	-0.0008
	(0.0001)	(0.0006)	(0.0001)	(0.0008)
Racial_Animus*Relatedness		0.0001*		0.0000
		(0.0000)		(0.0000)
Social Capital	-0.0033*	-0.0032*	-0.0030	-0.0029
	(0.0013)	(0.0013)	(0.0019)	(0.0019)
I can't imagine living in a better community	0.0047	0.0023	0.0048	0.0029
	(0.0032)	(0.0034)	(0.0034)	(0.0036)
Community pride	-0.0178***	-0.0206***	-0.0169***	-0.0192***
	(0.0038)	(0.0040)	(0.0038)	(0.0042)
The city/area where I live is perfect for me	0.0132***	0.0105**	0.0126***	0.0106*
	(0.0036)	(0.0038)	(0.0038)	(0.0041)
Make time for vacations with family and friends	-0.0024	-0.0051	-0.0023	-0.0044
	(0.0026)	(0.0029)	(0.0025)	(0.0029)
My relationship with my partner is stronger than ever	0.0125***	0.0095**	0.0129***	0.0105**
	(0.0033)	(0.0036)	(0.0035)	(0.0039)
My friends and family give me energy	-0.0073*	-0.0095*	-0.0058	-0.0077*
	(0.0036)	(0.0037)	(0.0033)	(0.0036)
Recognition for improvements to the neighborhood	0.0063*	0.0036	0.0054	0.0033
	(0.0025)	(0.0028)	(0.0028)	(0.0032)
Competence	0.0001	0.0000	-0.0003	-0.0003
	(0.0012)	(0.0012)	(0.0011)	(0.0011)
Optimism	-0.0038*	-0.0035*	-0.0035*	-0.0033
	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Life Satisfaction	0.0037	0.0036	0.0033	0.0034
	(0.0020)	(0.0020)	(0.0019)	(0.0019)

*: Significant at the 5% level **: Significant at the 1% level ***: Significant at the 0.1% level

An additional result from table 3 worth underlining is that community pride has a strong, negative, and highly significant association with the change in Republican vote share. The relationship is similar though noisier for social capital. This suggests that cohesive, culturally healthy communities were less motivated by Trump's rhetoric.[2] Curiously, the coefficient on

[2] We were concerned that this result was driven by high rates of Mormon turnout for Romney in 2012 (the first Mormon candidate to contest a Presidential election). We investigated using data from the Association of Religion Data Archives (ARDA 2019) religious congregations and membership study 2010. We found that excluding counties with rates of Mormonism per 1000 population in the top decile barely affected the

"the city/area where I live is perfect for me" is positively associated with Trump's vote share. We can only speculate as to why this variable has the opposite sign to community pride. We suspect that city/area captures sentiment about where people live but not how engaged they are with community in their neighborhood. Alternatively, city/area might capture people's commitment to left behind places where their needs for relatedness aren't met. In any case, the coefficient on city/area is around half the size of the community pride coefficient and is less statistically significant.

Similarly, we can only speculate as to why "my relationship with my partner is stronger than ever" is positively associated with Trump's vote share. Higher rates of marriage within county is positively associated with Trump's vote share and relationship strength may overlap with marriage. However, that leaves to be explained why marriage is associated with Trump. These results are all marginal effects after controlling for everything else that is included in the model and marriage, for example, could be a key source of relatedness.

Our other results are broadly in line with the literature. We find that Trump's vote share is positively associated with low- and middle-class incomes, rural electorates, white-majority electorates, less educated voters, and Republican partisans. We find a small, negative, and faintly significant relationship between optimism and the change in republican vote share. Our results provide mixed support for an economic anxiety hypothesis. On the one hand, a negative assessment of the state of the economy has a strong, positive association with Trump's vote share. On the other hand, unemployment and poverty rates at the county level have a negative association. The large coefficient on worry despite our inclusion of a long (but not exhaustive) list of controls for economic issues suggests that people are also anxious about non-economic matters. We speculate that at least some of this is cultural anxiety, which includes status threat and aversion to change, but we do not have the means to test this suspicion with the data available to us.

Comparison with the 2016 Republican Primaries

Our model might be picking up trends related to Republican voters in general that are only weakly tied to Trump's distinct nativist policies and rhetoric. To investigate this possibility, we used the model to analyze Trump's vote share in the 2016 Republican party primaries. In those contests, Trump was competing against other Republican party politicians for the votes of only Republican partisans. As such, if the results are similar for both the Presidential election and the Republican primaries it suggests that the model tracks factors associated specifically with Trump's success rather than that of any Republican candidate who might have contested the 2016 election.

coefficient on community pride. It shrunk from 0.02 to 0.018 and remained statistically significant at the 0.1% level. Church attendance is similarly statistically insignificant in all of our regressions.

Table 4: Trump's Vote Share in the 2016 Republican Party Primaries (N=2705)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			0.0018	0.0101
			(0.0174)	(0.0180)
Trade_Exposure*Relatedness			0.0000	-0.0003
			(0.0007)	(0.0007)
Experienced WORRY yesterday	1.5152***	1.6220***	1.2779***	1.3919***
	(0.2687)	(0.2761)	(0.3228)	(0.3281)
Worry*Relatedness	-0.0634***	-0.0676***	-0.0539***	-0.0584***
	(0.0107)	(0.0110)	(0.0129)	(0.0132)
Racial Animus	0.0016***	-0.0021	0.0015***	-0.0034
	(0.0002)	(0.0022)	(0.0002)	(0.0025)
Racial_Animus*Relatedness		0.0001		0.0002
		(0.0001)		(0.0001)
Social Capital	-0.0041	-0.0038	-0.0038	-0.0035
	(0.0044)	(0.0044)	(0.0060)	(0.0060)
I can't imagine living in a better community	0.0267*	0.0193	0.0181	0.0091
	(0.0108)	(0.0116)	(0.0119)	(0.0131)
Community pride	-0.0198	-0.0285*	-0.0199	-0.0304*
	(0.0127)	(0.0137)	(0.0137)	(0.0143)
The city/area where I live is perfect for me	0.0041	-0.0042	0.0042	-0.0056
	(0.0122)	(0.0132)	(0.0145)	(0.0156)
Make time for vacations with family and friends	0.0003	-0.0076	-0.0025	-0.0120
	(0.0089)	(0.0100)	(0.0086)	(0.0102)
My relationship with my partner is stronger than ever	0.0202	0.0115	0.0174	0.0069
	(0.0110)	(0.0122)	(0.0130)	(0.0136)
My friends and family give me energy	0.0234	0.0163	0.0257*	0.0170
	(0.0119)	(0.0126)	(0.0125)	(0.0135)
Recognition for improvements to the neighborhood	0.0467***	0.0386***	0.0409***	0.0310**
	(0.0084)	(0.0097)	(0.0098)	(0.0110)
Competence	-0.0013	-0.0014	-0.0010	-0.0013
	(0.0040)	(0.0040)	(0.0044)	(0.0044)
Optimism	-0.0051	-0.0043	-0.0052	-0.0045
	(0.0055)	(0.0055)	(0.0058)	(0.0058)
Life Satisfaction	0.0115	0.0113	0.0108	0.0108
	(0.0067)	(0.0067)	(0.0069)	(0.0069)

Table 4 reports the results of our analysis of the Republican primaries. They are meaningfully identical to those in table 2. Worry has an even stronger positive relationship with Trump's performance in the primaries than in the general election, and the worry–relatedness interaction has a stronger negative relationship. Racial animus is positively and significantly associated with Trump's performance initially. However, it loses statistical significance once an interaction with relatedness is introduced into the model. This interaction is statistically significant at the 10 per cent level. Community pride has a statistically significant, negative association with Trump's vote share in the primaries. Curiously, recognition for improvements to the neighborhood has a large, positive, and highly statistically significant relationship with Trump's vote share. We speculate that this result is picking up people who

have stayed in left behind places hoping to rebuild them. These people could have low levels of community pride while still working to restore their towns. In her qualitative research, Hochschild (2016) found that such individuals were among Trump's most ardent supporters. Overall, these results from the Republican party primaries support our claim that the popularity of Trump specifically, and not all Republican party politicians, is driven by the need for relatedness.

Comparison with the 2012 Election

It's possible that worry and relatedness are predictive of elections *in general* and not associated in some special way with Trump's electoral appeal (this would be an important finding in and of itself). 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. In addition to having fewer questions to build our relatedness variable, having only a year of data means that some counties simply aren't sampled. Our sample size consequently falls from 2921 to 2572. This is a major concern because Trump is more popular in small, rural electorates that are more likely to be missing from our sample.

Table 5: Well-Being and Obama's Vote Share in 2012 (N=2515)

VARIABLE	**(1) OLS**	**(2) OLS**	**(3) IV**	**(4) IV**
Trade Exposure			-0.0125	-0.0230*
			(0.0084)	(0.0093)
Trade_Exposure*Relatedness			0.0012	0.0022*
			(0.0008)	(0.0009)
Experienced WORRY yesterday	-0.3085**	-0.3252**	-0.2876*	-0.3043**
	(0.1068)	(0.1073)	(0.1189)	(0.1181)
Worry*Relatedness	0.0310**	0.0327**	0.0298**	0.0315**
	(0.0102)	(0.0103)	(0.0112)	(0.0112)
Racial Animus	-0.0007***	0.0011	-0.0002	0.0039**
	(0.0001)	(0.0011)	(0.0002)	(0.0014)
Racial_Animus*Relatedness		-0.0002		-0.0004**
		(0.0001)		(0.0001)
Social Capital	-0.0081*	-0.0083*	-0.0087	-0.0089
	(0.0035)	(0.0035)	(0.0046)	(0.0047)
The city/area where I live is perfect for me	-0.0178**	-0.0068	-0.0229**	-0.0024
	(0.0060)	(0.0090)	(0.0076)	(0.0104)
My friends and family give me energy	-0.0185**	-0.0078	-0.0229**	-0.0029
	(0.0069)	(0.0095)	(0.0079)	(0.0104)
Recognition for improvements to the neighborhood	-0.0080	0.0025	-0.0106	0.0092
	(0.0052)	(0.0083)	(0.0063)	(0.0095)

*: Significant at the 5% level **: Significant at the 1% level ***: Significant at the 0.1% level

Despite these concerns, the results, summarized in tables 5 and 6, are encouraging for our story. The pattern of results repeats itself, but the signs on the key variables are reversed from our primary analysis and are not statistically significant predictors of the change in Democratic vote share. The size of the coefficients is also different, but these differences are not statistically significant. The coefficient on worry in column 4 is around half what we found in our primary analysis (-0.30 vs 0.58), while the coefficient on the worry–relatedness interaction is around 50% larger (0.03 vs -0.02). The coefficient on racism is a similar size (0.0039 vs 0.0046), but the coefficient on the racism*relatedness interaction is twice as large in 2012 (-0.0004 vs 0.0002). It seems that people who got their relatedness from racial identity unsurprisingly despised Obama (Piston 2010).

A major difference between the 2012 and 2016 results is the statistical significance of trade exposure and the trade–relatedness interaction in 2012. The negative coefficient on trade exposure but positive coefficient on the interaction term supports our theory that relatedness buffers against economic anxiety. However, because Romney was not a nativist candidate, this result does not support our identity-voting hypothesis.

Table 6: Well-Being and the Change in Democrat Vote Share 2008–2012 (N=2515)

VARIABLE	**(1) OLS**	**(2) OLS**	**(3) IV**	**(4) IV**
Trade Exposure			-0.0012	-0.0016
			(0.0024)	(0.0030)
Trade_Exposure*Relatedness			0.0000	0.0001
			(0.0002)	(0.0003)
Experienced WORRY yesterday	-0.0026	-0.0020	0.0018	0.0012
	(0.0279)	(0.0280)	(0.0299)	(0.0297)
Worry*Relatedness	0.0002	0.0001	-0.0000	0.0000
	(0.0027)	(0.0027)	(0.0028)	(0.0028)
Racial Animus	-0.0002***	-0.0002	-0.0000	0.0001
	(0.0000)	(0.0003)	(0.0001)	(0.0005)
Racial_Animus*Relatedness		0.0000		-0.0000
		(0.0000)		(0.0000)
Social Capital	-0.0033***	-0.0033***	-0.0039**	-0.0039**
	(0.0009)	(0.0009)	(0.0013)	(0.0013)
The city/area where I live is perfect for me	-0.0031*	-0.0035	-0.0031	-0.0024
	(0.0016)	(0.0023)	(0.0017)	(0.0028)
My friends and family give me energy	-0.0011	-0.0014	-0.0012	-0.0005
	(0.0018)	(0.0025)	(0.0019)	(0.0028)
Recognition for improvements to the neighborhood	0.0003	-0.0001	0.0006	0.0014
	(0.0013)	(0.0022)	(0.0014)	(0.0026)

*: Significant at the 5% level **: Significant at the 1% level ***: Significant at the 0.1% level

While open to debate, our interpretation of these results is that voter dynamics were similar but meaningfully different in the 2016 election compared to 2012. We see the larger coefficient on the worry–relatedness interaction term in 2012 as indicating that sources of relatedness other than racial identity were stronger then and better able to placate worry than

in 2016. The seeds of racialized economics were ready for further economic and cultural decay and Trump's candidacy to germinate them. This aligns with Sides et al. (2018) and Grimmer and Marble's (2019) evidence that Trump's success was a consequence of rising racial identification among historically more moderate whites. It also aligns with table 6. The null results there for 2008–2012 compared to the many statistically significant results for 2012–2016 in table 3 suggest that the power of racism, worry, and relatedness is only embryonic in 2012.

General Discussion

An obvious question to ask is whether the relationships we observe around relatedness and voting behavior are causal in nature. Our empirical methods certainly do not provide causal identification. This is unfortunate, but our research question is highly resistant to causal analysis. It is arguably impossible to experimentally allocate worry, racial animus, or relatedness to people. The 2016 election also only occurred once, which rules out most causal identification methods. Instrumental-variable methods are feasible, but it is hard to imagine something that varies with worry or community health but does not affect people's voting decisions. As such, we adopt a cautious perspective. The theories that form the core of our conceptual framework—SDT and WDT—are grounded in extensive experimental evidence. We have good data on individual well-being and a very large sample size, and we employ a large body of control variables. Our findings parallel results from qualitative studies of voters in districts associated with support for Trump. Our study can thus be thought of as a falsification exercise for these studies, one that they pass. We feel that our results call for greater quantitative inquiry into the effect of cultural identity, community, and relatedness on political behavior.

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 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. We suspect that there would be some challenges with respect to sample size in many cases, but state elections might be worth looking into as a starting point. Finally, it would be helpful to examine identity voting trends on the political left.

It is noteworthy that relatedness has strong predictive power in our model whereas social capital struggles to attain significance.[3] Measuring social capital has always been a challenge (JEC 2018). Skepticism remains around whether things that are commonly included in social capital indexes, like voter turnout rates and NGO numbers, capture networks of reciprocity and other central forms of social capital. Our results suggest that measures of relatedness

[3] We tried running our model with social capital replacing relatedness. The results are reported in appendix tables A6.2 and A6.2. In the analysis of Trump's vote share, none of the key indicator variables is statistically significant, including social capital itself, and racial animus remains positive and significant across all four models. Racial animus is also positive and significant across all four models of the change in Republican vote share. However, worry is negatively and significantly associated with Trump's performance here, as is the worry–social capital interaction. Social capital itself remains insignificant.

might be useful in this context. 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. Someone might live in an area without community networks but nonetheless have a few close friends they can rely on, for example.

One last point to raise is 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 talkback 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 Russian attempts to ferment polarization and anxiety during the 2016 campaign (Hall Jamieson 2018). Even greater volumes 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 liberal norms in America.

Conclusion

This paper extends the literature on the causes of Trump's victory in the 2016 US Presidential election by explaining the psychological roots of racialized economics. Worldview defense theories argue that a natural, often subconscious response to anxiety is to bolster feelings of in-group affiliation. Self-determination theory similarly predicts that people feeling mentally unwell will seek to improve their sense of relatedness. People with local, ready-to-hand sources of relatedness will be buffered against anxiety. 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 might appeal to such individuals with his America First, pro-white, and anti-immigrant rhetoric and policy positions. We therefore hypothesize that Trump should be more electorally successful in counties with high rates of worry and low rates of relatedness. We further hypothesize that an interaction between racial animus and relatedness should swamp the effect of racial animus alone, as this would indicate that rising racial sentiment reflected people seeking relatedness.

Our results support this hypothesis. We find 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 reverses the sign on the racial animus variable and reduces its significance while the interaction term is positive and highly significant. Similar relationships are observed between these variables and the change in Republican vote share between 2012 and 2016. While our results suggest a role for economic anxiety in the 2016 election, exposure to trade shocks specifically was not a statistically significant predictor of Trump's vote share. This contrasts with 2012, where trade exposure was negatively associated with Obama's vote share. While our methods do not allow for causal identification, our results provide suggestive evidence for the importance of worldview defense and relatedness in Trump's victory. Racialized economics 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.

Works Cited

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Appendix Section 1: Summary Statistics for Key Variables

Table A1.1: Summary Statistics for Key Variables

Variable	Obs	Mean	S.D.	Min	Max
Trade Shock	3092	3.7	3.61	~0	49
Worry	3092	0.29	0.11	0	0.87
Relatedness	3092	25.02	1.66	10	35
Racial Animus	3092	61.59	17.71	25.68	154.51
Social Capital	2921	0.00426	1.003	-4.31	2.97
Can't Imagine living in a better community	3092	3.54	0.39	1	5
Community Pride	3092	3.85	0.37	1	5
The city/area where I live is perfect for me	3092	3.84	0.37	1	5
My relationship with my partner is stronger than ever	3092	4.18	0.29	2	5
Make time for vacations with family and friends	3092	3.26	0.39	1	5
Recognition for improvements to neighborhood	3092	2.22	0.40	1	5
My friends and family give me energy	3092	4.14	0.27	2	5
Competence	3091	15.13	1.00	4	19.48
Optimism	3092	7.54	0.63	5	10
Life Satisfaction	3092	6.94	0.55	2.39	10

Figure A1.1: Histogram of relatedness by county (7–35)

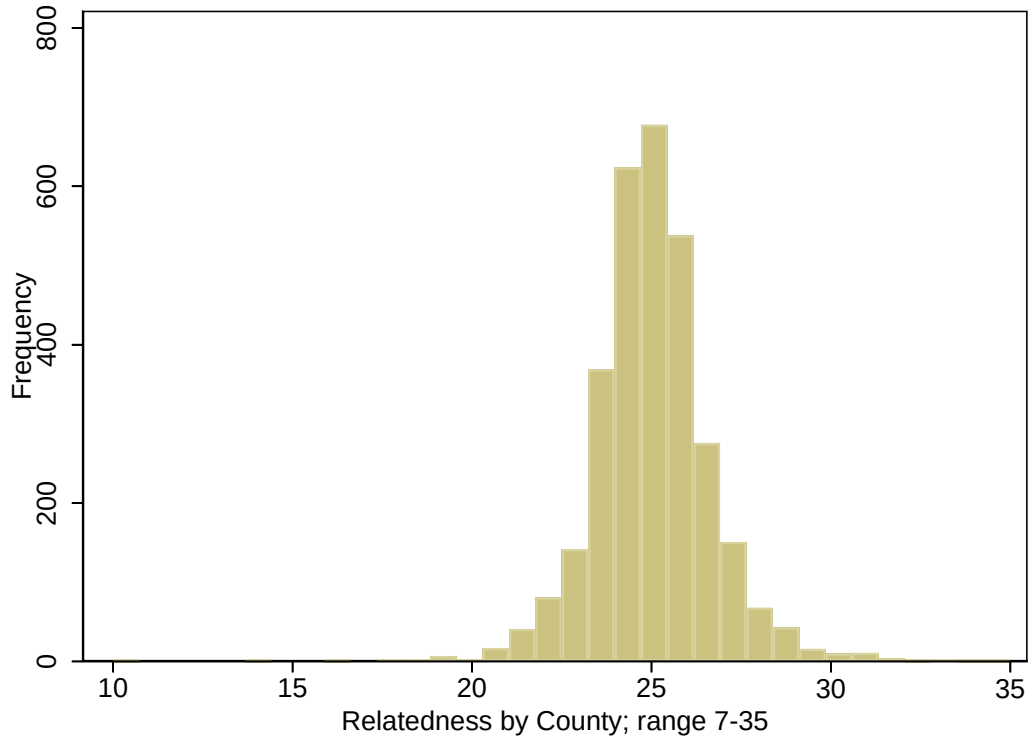


Figure A1.2: Histogram of rates of worry by county (0–1)

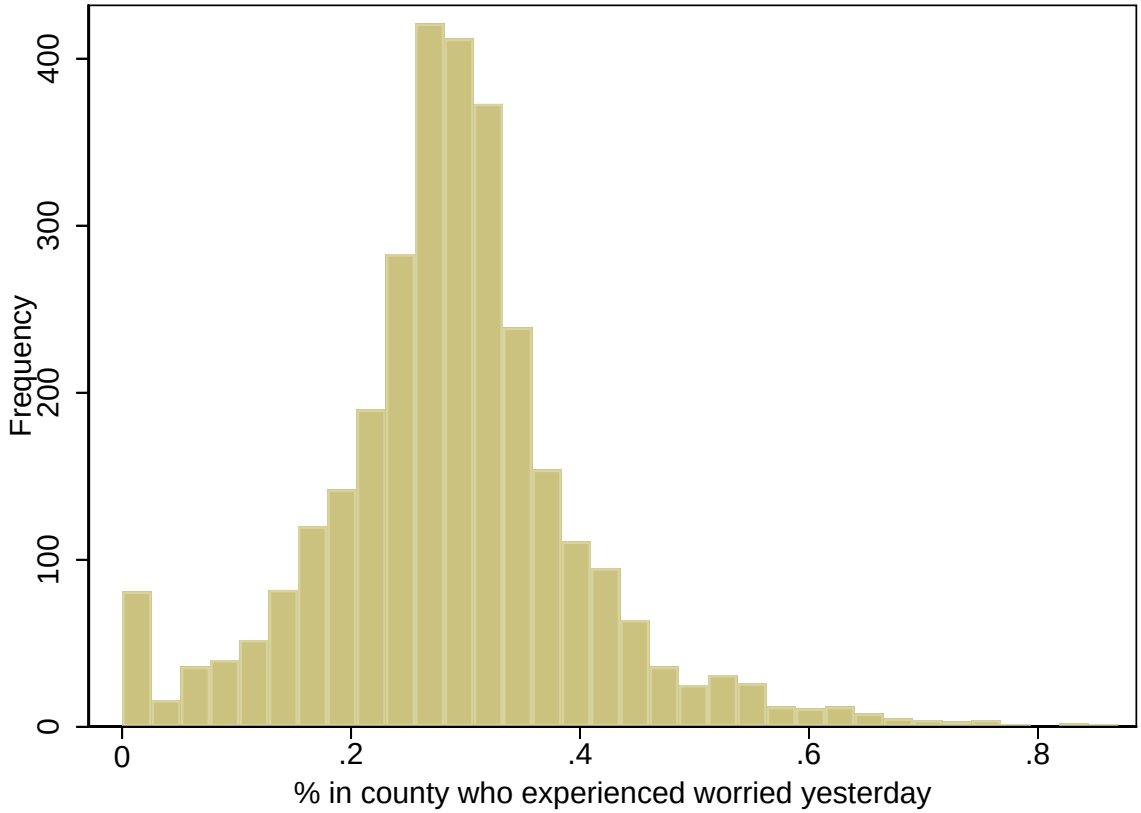


Figure A1.3: Histogram of rates of racial animus by county

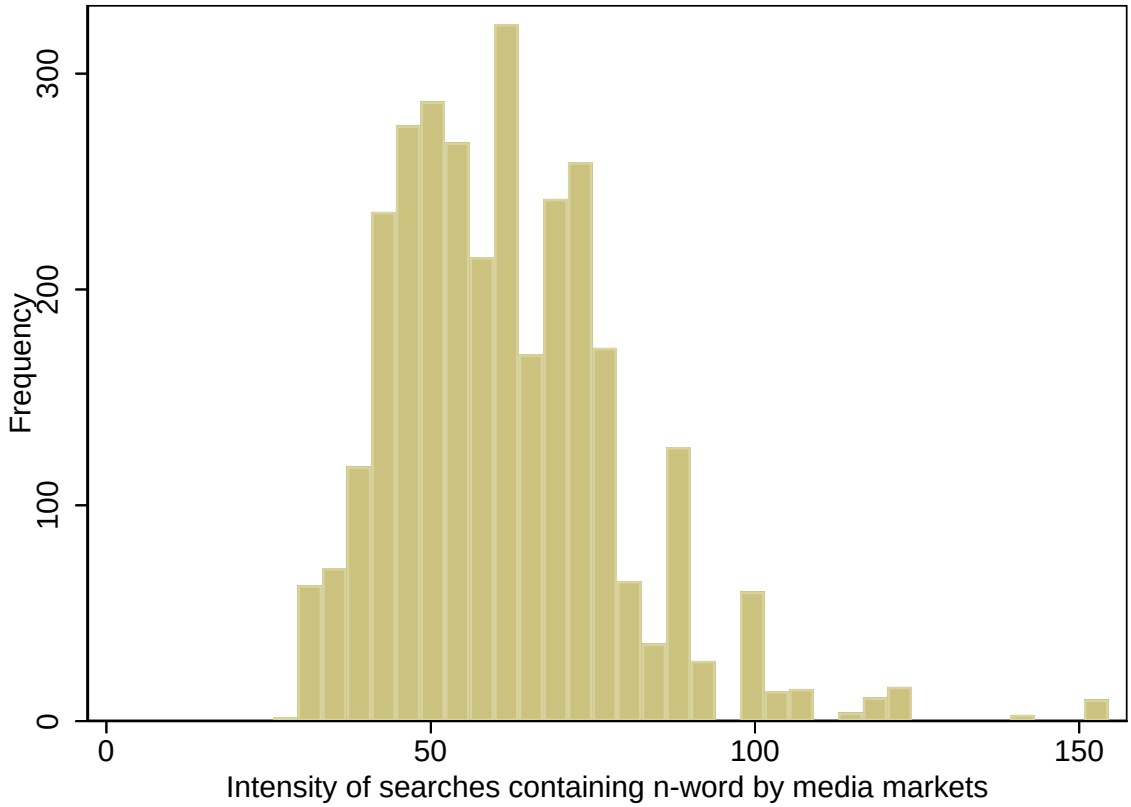


Figure A1.4: Relatedness across US counties 2014–2016 (darker = more relatedness; white = missing values)

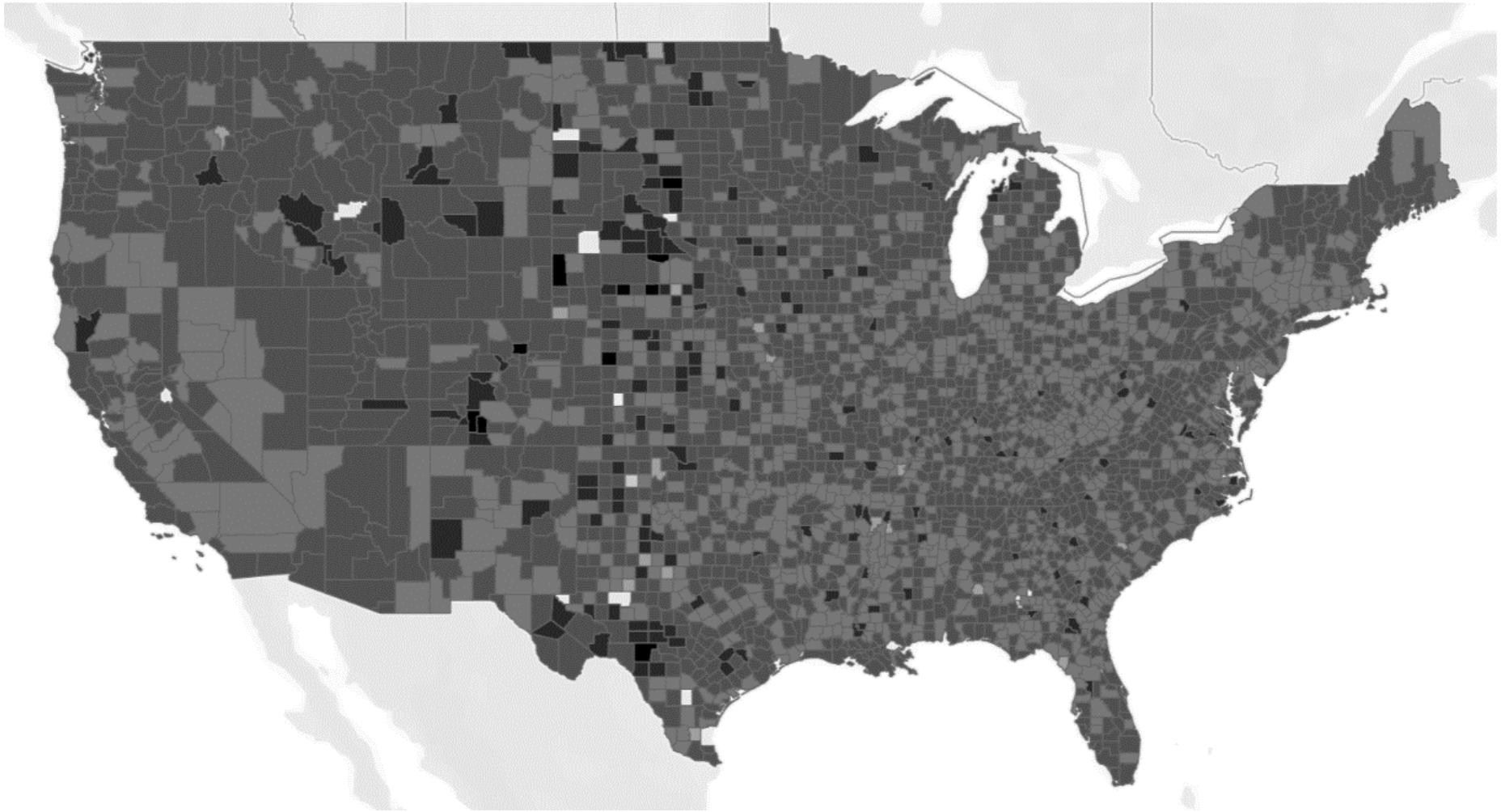


Figure A1.5: Rates of worry across US counties 2014–2016 (darker = more worry; white=missing values)

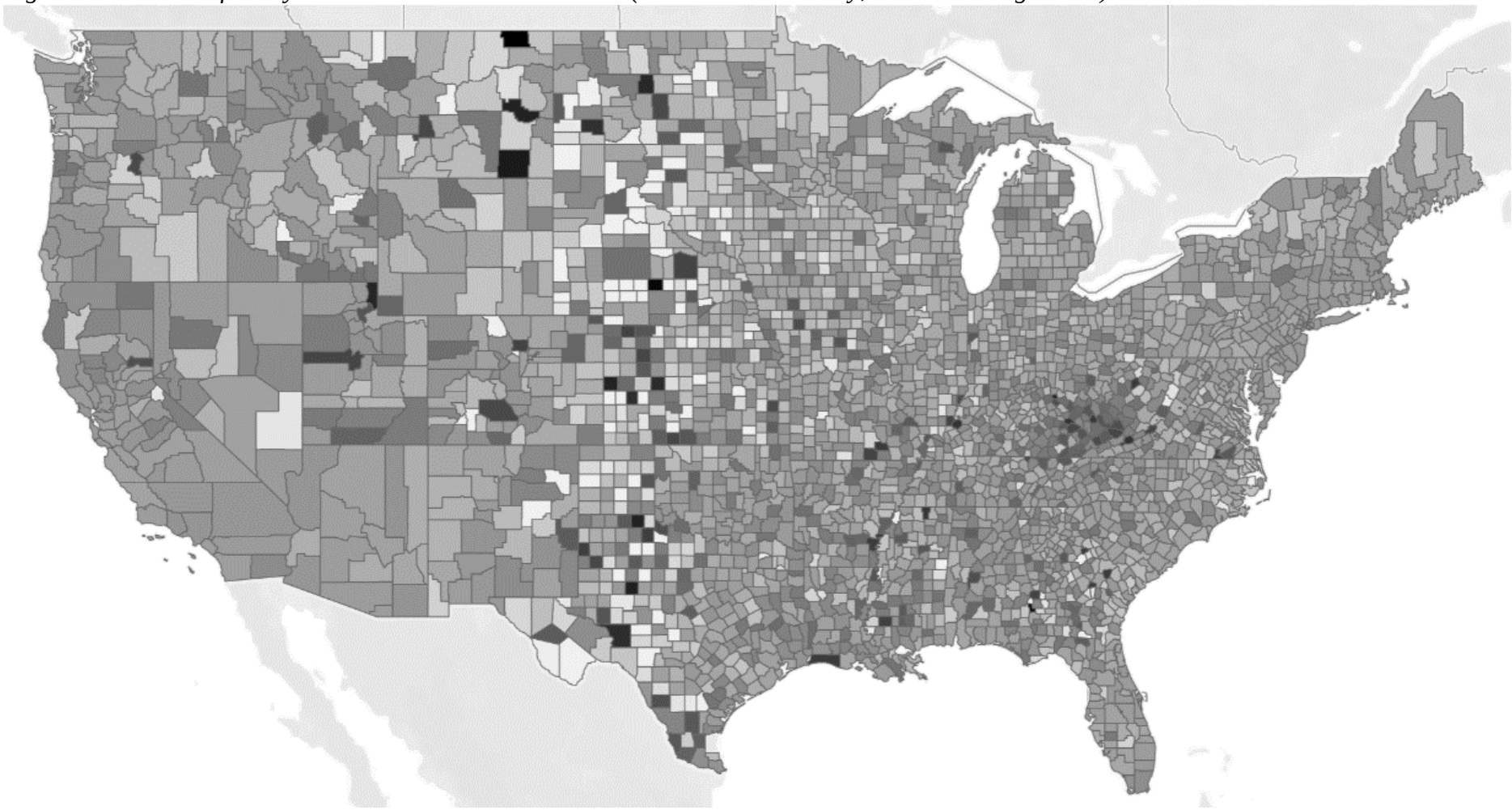
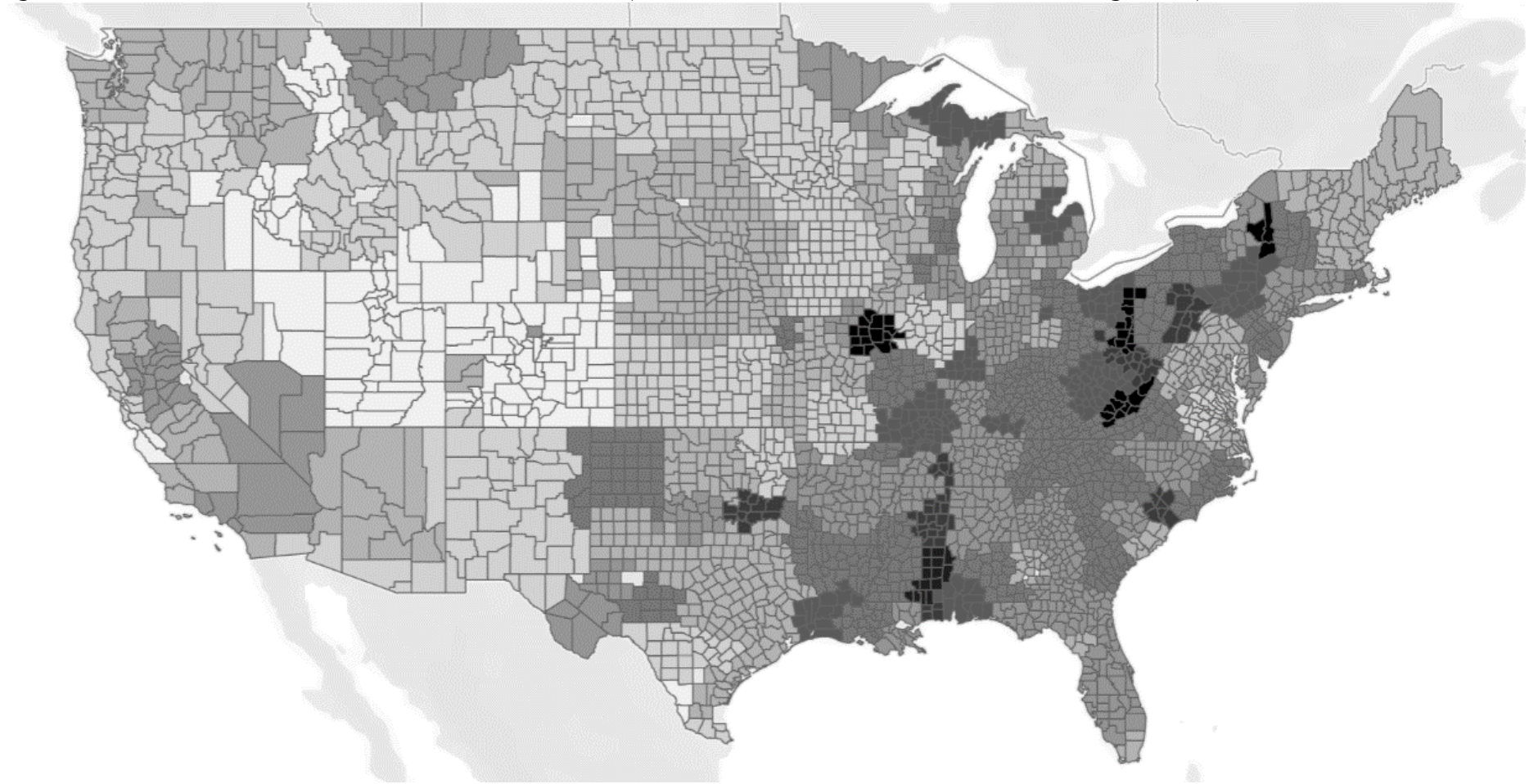


Figure A1.6: Racial animus across US counties 2004–2007 (darker = more racist searches; white=missing values)



APPENDIX A2.1: Full Results—Trump Vote Share 2016

VARIABLE/MODEL	OLS Trump Vote	OLS Trump Vote	IV Trump Vote	IV Trump Vote
Trade Exposure			-0.0150	-0.0038
			(0.0145)	(0.0152)
Trade_Exposure*Relatedness			0.0006	0.0001
			(0.0006)	(0.0006)
Experienced WORRY yesterday	0.4534*	0.6062**	0.4432	0.5798*
	(0.1851)	(0.1917)	(0.2331)	(0.2439)
Worry*Relatedness	-0.0192**	-0.0253***	-0.0188*	-0.0242*
	(0.0074)	(0.0076)	(0.0092)	(0.0097)
Racial Animus	0.0008***	-0.0036*	0.0005**	-0.0046**
	(0.0001)	(0.0015)	(0.0002)	(0.0017)
Racial_Animus*Relatedness		0.0002**		0.0002**
		(0.0001)		(0.0001)
Social Capital	0.0018	0.0020	0.0019	0.0021
	(0.0030)	(0.0030)	(0.0039)	(0.0039)
I can't imagine living in a better community	0.0056	-0.0026	0.0021	-0.0062
	(0.0074)	(0.0079)	(0.0089)	(0.0091)
Community pride	0.0053	-0.0042	0.0025	-0.0071
	(0.0088)	(0.0093)	(0.0108)	(0.0109)
The city/area where I live is perfect for me	0.0069	-0.0023	0.0032	-0.0057
	(0.0083)	(0.0088)	(0.0100)	(0.0107)
Make time for vacations with family and friends	-0.0117	-0.0205**	-0.0146	-0.0234**
	(0.0060)	(0.0067)	(0.0076)	(0.0081)
My relationship with my partner is stronger than ever	0.0287***	0.0186*	0.0276**	0.0175
	(0.0077)	(0.0084)	(0.0085)	(0.0090)
My friends and family give me energy	0.0116	0.0041	0.0092	0.0013
	(0.0083)	(0.0086)	(0.0099)	(0.0101)
Recognition for improvements to the neighborhood	0.0147**	0.0058	0.0116	0.0023
	(0.0057)	(0.0064)	(0.0071)	(0.0078)
Competence	-0.0024	-0.0027	-0.0015	-0.0018
	(0.0028)	(0.0028)	(0.0034)	(0.0034)
Optimism	0.0014	0.0024	0.0020	0.0028
	(0.0038)	(0.0039)	(0.0041)	(0.0042)
Life Satisfaction	0.0006	0.0005	0.0003	0.0005
	(0.0046)	(0.0046)	(0.0049)	(0.0050)
Satisfied with QOL relative to peers	0.0038	0.0027	-0.0003	-0.0015
	(0.0092)	(0.0092)	(0.0103)	(0.0104)
Experienced PAIN yesterday	0.0447*	0.0452*	0.0417	0.0413
	(0.0193)	(0.0192)	(0.0236)	(0.0235)
Experienced STRESS yesterday	0.0031	0.0041	-0.0055	-0.0048
	(0.0187)	(0.0187)	(0.0209)	(0.0209)
Treated for depression in past month	-0.0513*	-0.0516*	-0.0539*	-0.0538*
	(0.0214)	(0.0213)	(0.0245)	(0.0244)
Large metro	-0.1199***	-0.1200***	-0.0948***	-0.0941***
	(0.0127)	(0.0127)	(0.0126)	(0.0126)
Medium metro	-0.0393***	-0.0394***	-0.0232**	-0.0230**
	(0.0066)	(0.0066)	(0.0085)	(0.0085)
Small metro	-0.0526***	-0.0526***	-0.0413***	-0.0411***
	(0.0060)	(0.0060)	(0.0073)	(0.0073)
Micropolitan	-0.0296***	-0.0293***	-0.0254***	-0.0250***
	(0.0059)	(0.0058)	(0.0062)	(0.0062)
Rural, metropolitan-adjacent	-0.0190***	-0.0186***	-0.0180***	-0.0177***
	(0.0047)	(0.0047)	(0.0050)	(0.0050)
Income1	0.2831***	0.2826***	0.2791**	0.2734**
	(0.0763)	(0.0762)	(0.0879)	(0.0887)
Income2	0.1804**	0.1865**	0.1607	0.1683
	(0.0608)	(0.0608)	(0.0924)	(0.0888)
Income3	0.1638***	0.1649***	0.1569**	0.1585**
	(0.0452)	(0.0451)	(0.0604)	(0.0605)
Income4	0.1538***	0.1535***	0.1344**	0.1330**
	(0.0370)	(0.0370)	(0.0454)	(0.0452)
Income5	0.1722***	0.1704***	0.1621***	0.1594***
	(0.0343)	(0.0343)	(0.0426)	(0.0422)
Income6	0.1215**	0.1209**	0.1111*	0.1089*
	(0.0377)	(0.0376)	(0.0468)	(0.0464)
Income7	0.0882*	0.0858*	0.0730	0.0685
	(0.0393)	(0.0393)	(0.0490)	(0.0488)
Income8	0.1010**	0.0998**	0.0874*	0.0855*
	(0.0350)	(0.0350)	(0.0412)	(0.0412)
Income9	0.0804	0.0802	0.0720	0.0704

	(0.0447)	(0.0447)	(0.0514)	(0.0515)
Income missing	0.1740***	0.1731***	0.1646***	0.1635***
	(0.0307)	(0.0306)	(0.0428)	(0.0426)
Unemployed	0.0098	0.0070	-0.0015	-0.0041
	(0.0431)	(0.0430)	(0.0462)	(0.0454)
Underemployed	-0.0719*	-0.0717*	-0.0758*	-0.0775*
	(0.0315)	(0.0315)	(0.0372)	(0.0367)
Out of Labor Force	0.0034	0.0045	-0.0082	-0.0080
	(0.0258)	(0.0258)	(0.0306)	(0.0305)
County unemployment 2014	-0.0020	-0.0017	-0.0017	-0.0014
	(0.0032)	(0.0032)	(0.0042)	(0.0042)
County unemployment 2015	-0.0128*	-0.0130*	-0.0113	-0.0114
	(0.0053)	(0.0053)	(0.0066)	(0.0066)
County unemployment 2016	0.0085**	0.0085**	0.0040	0.0040
	(0.0033)	(0.0033)	(0.0045)	(0.0046)
County_GDP_2014	-0.0002	-0.0002	-0.0002	-0.0002
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
County_GDP_2015	0.0007**	0.0007**	0.0007**	0.0007**
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
County poverty rate 2014	-0.0013	-0.0013	-0.0017	-0.0016
	(0.0011)	(0.0011)	(0.0011)	(0.0011)
County poverty rate 2015	-0.0020	-0.0021	-0.0024*	-0.0024*
	(0.0011)	(0.0011)	(0.0011)	(0.0011)
County poverty rate 2016	-0.0003	-0.0003	-0.0010	-0.0010
	(0.0011)	(0.0011)	(0.0012)	(0.0012)
Race missing	-0.1787*	-0.1780*	-0.1452	-0.1487
	(0.0831)	(0.0830)	(0.0929)	(0.0935)
Race other	-0.2054***	-0.2100***	-0.1843***	-0.1906***
	(0.0387)	(0.0386)	(0.0546)	(0.0550)
BLACK	-0.3911***	-0.3908***	-0.3689***	-0.3698***
	(0.0186)	(0.0185)	(0.0237)	(0.0236)
HISPANIC	-0.2254***	-0.2269***	-0.1919***	-0.1934***
	(0.0172)	(0.0172)	(0.0340)	(0.0341)
ASIAN	-0.7408***	-0.7358***	-0.6526***	-0.6499***
	(0.1254)	(0.1252)	(0.1656)	(0.1647)
Male	0.0012	-0.0009	0.0014	-0.0007
	(0.0154)	(0.0154)	(0.0201)	(0.0199)
Age 25–34	0.0655*	0.0644*	0.0575	0.0567
	(0.0294)	(0.0294)	(0.0341)	(0.0338)
Age 35–44	0.0847**	0.0828**	0.0829*	0.0806*
	(0.0303)	(0.0302)	(0.0370)	(0.0366)
Age 45–54	0.0201	0.0182	0.0151	0.0125
	(0.0302)	(0.0302)	(0.0351)	(0.0345)
Age 55–64	-0.0086	-0.0118	-0.0058	-0.0089
	(0.0299)	(0.0299)	(0.0347)	(0.0344)
Age 65–100	-0.0160	-0.0152	-0.0066	-0.0071
	(0.0320)	(0.0319)	(0.0403)	(0.0396)
Health problems	0.0069	0.0063	0.0020	0.0020
	(0.0201)	(0.0201)	(0.0251)	(0.0250)
State of economy is very bad	0.1957***	0.1940***	0.1890***	0.1877***
	(0.0217)	(0.0217)	(0.0266)	(0.0265)
State of economy is bad	0.0880***	0.0865***	0.0844**	0.0827**
	(0.0213)	(0.0212)	(0.0273)	(0.0272)
State of economy is good	0.0499	0.0519	0.0392	0.0414
	(0.0542)	(0.0541)	(0.0693)	(0.0695)
State of economy is very good	-0.0890	-0.0949	-0.0369	-0.0392
	(0.1588)	(0.1586)	(0.1381)	(0.1367)
Divorced or separated	-0.0199	-0.0199	-0.0176	-0.0167
	(0.0256)	(0.0256)	(0.0296)	(0.0296)
Single	-0.1013***	-0.1039***	-0.0914**	-0.0924**
	(0.0222)	(0.0222)	(0.0291)	(0.0288)
Widowed	-0.0078	-0.0113	-0.0047	-0.0058
	(0.0350)	(0.0350)	(0.0352)	(0.0353)
Marital status unknown	-0.0081	-0.0242	-0.0073	-0.0267
	(0.1249)	(0.1249)	(0.1121)	(0.1201)
High school drop out	0.1157***	0.1165***	0.1067***	0.1066***
	(0.0225)	(0.0225)	(0.0275)	(0.0275)
High school completed	0.0507**	0.0526**	0.0456*	0.0470*
	(0.0190)	(0.0190)	(0.0209)	(0.0208)
Some tertiary (technical college)	0.0118	0.0116	-0.0024	-0.0023
	(0.0362)	(0.0362)	(0.0395)	(0.0394)
University	-0.1985***	-0.1963***	-0.1949***	-0.1934***
	(0.0280)	(0.0280)	(0.0386)	(0.0385)

Postgrad	-0.2726***	-0.2721***	-0.2631***	-0.2641***
	(0.0341)	(0.0341)	(0.0649)	(0.0639)
Education unknown	-0.2060	-0.2057	-0.1942	-0.1998
	(0.1292)	(0.1291)	(0.1227)	(0.1248)
Union member	-0.0163	-0.0149	-0.0135	-0.0127
	(0.0189)	(0.0188)	(0.0234)	(0.0237)
Almost never attend church	-0.0157	-0.0104	-0.0076	0.0003
	(0.0774)	(0.0773)	(0.0890)	(0.0884)
Attend church occasionally	0.0375	0.0486	0.0342	0.0474
	(0.0908)	(0.0908)	(0.0972)	(0.0968)
Attend church monthly	0.0256	0.0343	0.0357	0.0432
	(0.0896)	(0.0895)	(0.1052)	(0.1044)
Attend church weekly	0.0940	0.0992	0.0848	0.0897
	(0.0684)	(0.0683)	(0.0744)	(0.0742)
Church missing	0.0546	0.0592	0.0444	0.0494
	(0.0587)	(0.0586)	(0.0641)	(0.0639)
Region: Mid-Atlantic	0.1079***	0.1078***	0.1015***	0.1009***
	(0.0135)	(0.0135)	(0.0222)	(0.0220)
Region: East North-Central	0.1192***	0.1187***	0.1075***	0.1066***
	(0.0121)	(0.0121)	(0.0217)	(0.0215)
Region: West North-Central	0.1635***	0.1641***	0.1561***	0.1563***
	(0.0121)	(0.0121)	(0.0213)	(0.0211)
Region: South-Atlantic	0.1876***	0.1871***	0.1721***	0.1715***
	(0.0123)	(0.0122)	(0.0218)	(0.0216)
Region: East South-Central	0.2194***	0.2183***	0.1936***	0.1919***
	(0.0129)	(0.0129)	(0.0223)	(0.0222)
Region: West South-Central	0.2387***	0.2384***	0.2158***	0.2144***
	(0.0129)	(0.0129)	(0.0226)	(0.0225)
Region: Mountains	0.1358***	0.1381***	0.1260***	0.1272***
	(0.0131)	(0.0131)	(0.0234)	(0.0232)
Region: Pacific	0.1038***	0.1040***	0.1068***	0.1061***
	(0.0139)	(0.0138)	(0.0252)	(0.0250)
l_shind_manuf_cbp			0.0164	0.0165
			(0.0391)	(0.0391)
l_sh_popedu_c			-0.0014*	-0.0013*
			(0.0005)	(0.0005)
l_sh_empl_f			-0.0028***	-0.0029***
			(0.0008)	(0.0008)
l_sh_popfborn			-0.0023*	-0.0023*
			(0.0011)	(0.0011)
l_task_outsource			0.0113	0.0117
			(0.0113)	(0.0113)
l_sh_routine33			-0.0010	-0.0011
			(0.0015)	(0.0015)
Independent	-0.0344	-0.0365	-0.0251	-0.0283
	(0.0345)	(0.0345)	(0.0394)	(0.0395)
Democrat	-0.1567***	-0.1530***	-0.1490***	-0.1453***
	(0.0255)	(0.0255)	(0.0402)	(0.0397)
Leans Democrat	-0.1477***	-0.1470***	-0.1403**	-0.1411**
	(0.0391)	(0.0391)	(0.0453)	(0.0449)
Republican	0.2151***	0.2158***	0.2122***	0.2120***
	(0.0213)	(0.0213)	(0.0254)	(0.0251)
Leans Republican	0.1063***	0.1074***	0.1041***	0.1039***
	(0.0302)	(0.0301)	(0.0295)	(0.0297)
Constant	0.0838	0.3014*	0.5104***	0.7410***
	(0.1051)	(0.1277)	(0.1497)	(0.1634)

***** Significant at the 5% level

** Significant at the 1% level

*** Significant at the 0.1% level

APPENDIX A2.2: Full Results—Change in Republican Vote Share 2012–2016

VARIABLE/MODEL	OLS ΔRep Vote	OLS ΔRep Vote	IV ΔRep Vote	IV ΔRep Vote
Trade Exposure			0.0002	0.0029
			(0.0048)	(0.0049)
Trade_Exposure*Relatedness			0.0000	-0.0001
			(0.0002)	(0.0002)
Experienced WORRY yesterday	0.1678*	0.2130**	0.1641	0.1965*
	(0.0797)	(0.0826)	(0.0869)	(0.0863)
Worry*Relatedness	-0.0078*	-0.0096**	-0.0076*	-0.0089*
	(0.0032)	(0.0033)	(0.0035)	(0.0035)
Racial Animus	0.0003***	-0.0010	0.0004***	-0.0008
	(0.0001)	(0.0006)	(0.0001)	(0.0008)
Racial_Animus*Relatedness		0.0001*		0.0000
		(0.0000)		(0.0000)
Social Capital	-0.0033*	-0.0032*	-0.0030	-0.0029
	(0.0013)	(0.0013)	(0.0019)	(0.0019)
I can't imagine living in a better community	0.0047	0.0023	0.0048	0.0029
	(0.0032)	(0.0034)	(0.0034)	(0.0036)
Community pride	-0.0178***	-0.0206***	-0.0169***	-0.0192***
	(0.0038)	(0.0040)	(0.0038)	(0.0042)
The city/area where I live is perfect for me	0.0132***	0.0105**	0.0126***	0.0106*
	(0.0036)	(0.0038)	(0.0038)	(0.0041)
Make time for vacations with family and friends	-0.0024	-0.0051	-0.0023	-0.0044
	(0.0026)	(0.0029)	(0.0025)	(0.0029)
My relationship with my partner is stronger than ever	0.0125***	0.0095**	0.0129***	0.0105**
	(0.0033)	(0.0036)	(0.0035)	(0.0039)
My friends and family give me energy	-0.0073*	-0.0095*	-0.0058	-0.0077*
	(0.0036)	(0.0037)	(0.0033)	(0.0036)
Recognition for improvements to the neighborhood	0.0063*	0.0036	0.0054	0.0033
	(0.0025)	(0.0028)	(0.0028)	(0.0032)
Competence	0.0001	0.0000	-0.0003	-0.0003
	(0.0012)	(0.0012)	(0.0011)	(0.0011)
Optimism	-0.0038*	-0.0035*	-0.0035*	-0.0033
	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Life Satisfaction	0.0037	0.0036	0.0033	0.0034
	(0.0020)	(0.0020)	(0.0019)	(0.0019)
Satisfied with QOL relative to peers	-0.0000	-0.0003	0.0001	-0.0002
	(0.0039)	(0.0039)	(0.0039)	(0.0039)
Experienced PAIN yesterday	-0.0022	-0.0021	0.0014	0.0013
	(0.0083)	(0.0083)	(0.0083)	(0.0082)
Experienced STRESS yesterday	0.0002	0.0005	-0.0003	-0.0001
	(0.0080)	(0.0080)	(0.0088)	(0.0088)
Treated for depression in past month	0.0028	0.0027	0.0029	0.0029
	(0.0092)	(0.0092)	(0.0102)	(0.0102)
Large metro	-0.0363***	-0.0363***	-0.0301***	-0.0300***
	(0.0055)	(0.0055)	(0.0055)	(0.0055)
Medium metro	-0.0189***	-0.0189***	-0.0117**	-0.0116**
	(0.0029)	(0.0029)	(0.0036)	(0.0036)
Small metro	-0.0209***	-0.0209***	-0.0159***	-0.0158***
	(0.0026)	(0.0026)	(0.0032)	(0.0032)
Micropolitan	-0.0204***	-0.0203***	-0.0185***	-0.0185***
	(0.0025)	(0.0025)	(0.0029)	(0.0029)
Rural, metropolitan-adjacent	-0.0105***	-0.0104***	-0.0101***	-0.0100***
	(0.0020)	(0.0020)	(0.0022)	(0.0022)
Income1	0.0114	0.0112	0.0094	0.0081
	(0.0329)	(0.0329)	(0.0309)	(0.0307)
Income2	0.0187	0.0205	0.0137	0.0155
	(0.0262)	(0.0262)	(0.0269)	(0.0274)
Income3	-0.0100	-0.0097	-0.0082	-0.0078
	(0.0195)	(0.0194)	(0.0190)	(0.0190)
Income4	0.0113	0.0112	0.0070	0.0067
	(0.0159)	(0.0159)	(0.0170)	(0.0170)
Income5	0.0029	0.0024	-0.0012	-0.0018
	(0.0148)	(0.0148)	(0.0151)	(0.0151)
Income6	0.0266	0.0265	0.0251	0.0246
	(0.0162)	(0.0162)	(0.0172)	(0.0173)
Income7	0.0332	0.0325	0.0296	0.0286
	(0.0169)	(0.0169)	(0.0178)	(0.0179)
Income8	0.0216	0.0212	0.0157	0.0153
	(0.0151)	(0.0151)	(0.0158)	(0.0158)
Income9	-0.0174	-0.0174	-0.0256	-0.0260

	(0.0193)	(0.0193)	(0.0191)	(0.0192)
Income missing	0.0163	0.0160	0.0138	0.0135
	(0.0132)	(0.0132)	(0.0143)	(0.0143)
Unemployed	-0.0242	-0.0251	-0.0173	-0.0179
	(0.0186)	(0.0186)	(0.0177)	(0.0178)
Underemployed	-0.0117	-0.0117	-0.0082	-0.0086
	(0.0136)	(0.0136)	(0.0130)	(0.0130)
Out of Labor Force	-0.0041	-0.0038	-0.0027	-0.0027
	(0.0111)	(0.0111)	(0.0116)	(0.0116)
County unemployment 2014	0.0081***	0.0081***	0.0082***	0.0082***
	(0.0014)	(0.0014)	(0.0020)	(0.0020)
County unemployment 2015	-0.0073**	-0.0073**	-0.0081**	-0.0081**
	(0.0023)	(0.0023)	(0.0031)	(0.0031)
County unemployment 2016	0.0013	0.0013	0.0030	0.0030
	(0.0014)	(0.0014)	(0.0020)	(0.0020)
County_GDP_2014	0.0001	0.0001	0.0001	0.0001
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
County_GDP_2015	-0.0003*	-0.0002*	-0.0002*	-0.0002*
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
County poverty rate 2014	-0.0002	-0.0002	-0.0003	-0.0003
	(0.0005)	(0.0005)	(0.0004)	(0.0004)
County poverty rate 2015	-0.0006	-0.0006	-0.0004	-0.0004
	(0.0005)	(0.0005)	(0.0005)	(0.0005)
County poverty rate 2016	0.0012*	0.0012*	0.0012**	0.0012**
	(0.0005)	(0.0005)	(0.0005)	(0.0005)
Race missing	0.0072	0.0074	0.0085	0.0077
	(0.0358)	(0.0358)	(0.0372)	(0.0371)
Race other	-0.0145	-0.0158	-0.0177	-0.0192
	(0.0167)	(0.0167)	(0.0215)	(0.0214)
BLACK	-0.1073***	-0.1072***	-0.0985***	-0.0987***
	(0.0080)	(0.0080)	(0.0099)	(0.0099)
HISPANIC	-0.0553***	-0.0558***	-0.0542***	-0.0546***
	(0.0074)	(0.0074)	(0.0109)	(0.0107)
ASIAN	-0.3656***	-0.3641***	-0.3239***	-0.3233***
	(0.0540)	(0.0540)	(0.0634)	(0.0634)
Male	-0.0093	-0.0099	-0.0075	-0.0080
	(0.0067)	(0.0067)	(0.0069)	(0.0069)
Age 25–34	0.0358**	0.0355**	0.0359*	0.0358*
	(0.0127)	(0.0127)	(0.0146)	(0.0146)
Age 35–44	0.0333*	0.0327*	0.0304*	0.0298*
	(0.0130)	(0.0130)	(0.0143)	(0.0143)
Age 45–54	0.0460***	0.0454***	0.0460**	0.0454**
	(0.0130)	(0.0130)	(0.0153)	(0.0152)
Age 55–64	0.0437***	0.0428***	0.0441**	0.0434**
	(0.0129)	(0.0129)	(0.0161)	(0.0160)
Age 65–100	0.0316*	0.0319*	0.0296	0.0295
	(0.0138)	(0.0138)	(0.0166)	(0.0166)
Health problems	0.0074	0.0072	0.0083	0.0083
	(0.0087)	(0.0087)	(0.0091)	(0.0091)
State of economy is very bad	0.0137	0.0132	0.0138	0.0135
	(0.0094)	(0.0094)	(0.0101)	(0.0100)
State of economy is bad	-0.0019	-0.0024	-0.0039	-0.0043
	(0.0092)	(0.0092)	(0.0096)	(0.0095)
State of economy is good	-0.0003	0.0002	-0.0047	-0.0042
	(0.0233)	(0.0233)	(0.0235)	(0.0236)
State of economy is very good	0.0612	0.0594	0.0517	0.0512
	(0.0684)	(0.0684)	(0.0702)	(0.0697)
Divorced or separated	0.0317**	0.0316**	0.0313*	0.0315*
	(0.0110)	(0.0110)	(0.0123)	(0.0124)
Single	0.0207*	0.0199*	0.0181	0.0179
	(0.0096)	(0.0096)	(0.0107)	(0.0106)
Widowed	0.0633***	0.0622***	0.0575***	0.0572***
	(0.0151)	(0.0151)	(0.0161)	(0.0162)
Marital status unknown	-0.0841	-0.0889	-0.0719	-0.0765
	(0.0538)	(0.0538)	(0.0414)	(0.0430)
High school drop out	0.0093	0.0096	0.0073	0.0072
	(0.0097)	(0.0097)	(0.0100)	(0.0100)
High school completed	0.0302***	0.0308***	0.0268**	0.0271**
	(0.0082)	(0.0082)	(0.0084)	(0.0084)
Some tertiary (technical college)	0.0259	0.0258	0.0193	0.0193
	(0.0156)	(0.0156)	(0.0162)	(0.0161)
University	-0.0704***	-0.0698***	-0.0662***	-0.0659***
	(0.0121)	(0.0121)	(0.0142)	(0.0141)

Postgrad	-0.1381*** (0.0147)	-0.1380*** (0.0147)	-0.1267*** (0.0163)	-0.1270*** (0.0162)
Education unknown	0.1153* (0.0557)	0.1154* (0.0556)	0.1152* (0.0560)	0.1139* (0.0556)
Union member	0.0520*** (0.0081)	0.0524*** (0.0081)	0.0581*** (0.0096)	0.0583*** (0.0095)
Almost never attend church	-0.0050 (0.0333)	-0.0034 (0.0333)	-0.0012 (0.0324)	0.0007 (0.0326)
Attend church occasionally	-0.0410 (0.0391)	-0.0377 (0.0391)	-0.0372 (0.0382)	-0.0341 (0.0382)
Attend church monthly	-0.0352 (0.0386)	-0.0326 (0.0386)	-0.0335 (0.0378)	-0.0317 (0.0381)
Attend church weekly	-0.0441 (0.0295)	-0.0426 (0.0295)	-0.0417 (0.0294)	-0.0405 (0.0294)
Church missing	-0.0256 (0.0253)	-0.0242 (0.0253)	-0.0258 (0.0233)	-0.0246 (0.0233)
Region: Mid-Atlantic	0.0334*** (0.0058)	0.0333*** (0.0058)	0.0360*** (0.0084)	0.0359*** (0.0084)
Region: East North-Central	0.0184*** (0.0052)	0.0183*** (0.0052)	0.0222*** (0.0059)	0.0220*** (0.0059)
Region: West North-Central	0.0290*** (0.0052)	0.0291*** (0.0052)	0.0285*** (0.0057)	0.0285*** (0.0057)
Region: South-Atlantic	0.0023 (0.0053)	0.0022 (0.0053)	0.0034 (0.0055)	0.0032 (0.0056)
Region: East South-Central	-0.0022 (0.0056)	-0.0026 (0.0056)	0.0054 (0.0065)	0.0050 (0.0065)
Region: West South-Central	-0.0145** (0.0056)	-0.0146** (0.0056)	-0.0053 (0.0059)	-0.0056 (0.0059)
Region: Mountains	-0.0453*** (0.0056)	-0.0446*** (0.0057)	-0.0323** (0.0098)	-0.0320** (0.0098)
Region: Pacific	-0.0387*** (0.0060)	-0.0386*** (0.0060)	-0.0248*** (0.0072)	-0.0249*** (0.0072)
l_shind_manuf_cbp			-0.0334 (0.0236)	-0.0334 (0.0234)
l_sh_popedu_c			-0.0012*** (0.0003)	-0.0012*** (0.0003)
l_sh_empl_f			0.0021*** (0.0005)	0.0021*** (0.0005)
l_sh_popfborn			0.0004 (0.0003)	0.0004 (0.0003)
l_task_outsource			-0.0157** (0.0052)	-0.0156** (0.0052)
l_sh_routine33			0.0002 (0.0007)	0.0001 (0.0007)
Independent	-0.0210 (0.0149)	-0.0216 (0.0149)	-0.0178 (0.0145)	-0.0186 (0.0144)
Democrat	0.0534*** (0.0110)	0.0545*** (0.0110)	0.0504*** (0.0118)	0.0513*** (0.0119)
Leans Democrat	0.0216 (0.0168)	0.0218 (0.0168)	0.0216 (0.0162)	0.0214 (0.0163)
Republican	-0.0445*** (0.0092)	-0.0443*** (0.0092)	-0.0419*** (0.0094)	-0.0419*** (0.0094)
Leans Republican	0.0143 (0.0130)	0.0147 (0.0130)	0.0190 (0.0143)	0.0189 (0.0143)
Constant	-0.0303 (0.0452)	0.0340 (0.0550)	-0.1323* (0.0591)	-0.0777 (0.0684)

***** Significant at the 5% level

** Significant at the 1% level

*** Significant at the 0.1% level

APPENDIX A3.1: Results for Trump vote share 2016 from unweighted sample (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			-0.0091	0.0007
			(0.0147)	(0.0156)
Trade_Exposure*Relatedness			0.0004	-0.0000
			(0.0006)	(0.0006)
Experienced WORRY yesterday	0.3611	0.5476*	0.3395	0.5121
	(0.2336)	(0.2441)	(0.3080)	(0.3290)
Worry*Relatedness	-0.0153	-0.0226*	-0.0145	-0.0212
	(0.0092)	(0.0096)	(0.0121)	(0.0130)
Racial Animus	0.0007***	-0.0036*	0.0004*	-0.0045*
	(0.0001)	(0.0016)	(0.0001)	(0.0019)
Racial_Animus*Relatedness			0.0004	-0.0000
			(0.0006)	(0.0006)
Social Capital	0.0004	0.0006	0.0010	0.0012
	(0.0029)	(0.0029)	(0.0035)	(0.0035)
I can't imagine living in a better community	-0.0044	-0.0125	-0.0076	-0.0159
	(0.0084)	(0.0090)	(0.0107)	(0.0110)
Community pride	0.0283**	0.0196	0.0246*	0.0158
	(0.0105)	(0.0110)	(0.0124)	(0.0125)
The city/area where I live is perfect for me	-0.0067	-0.0149	-0.0098	-0.0179
	(0.0097)	(0.0102)	(0.0112)	(0.0118)
Make time for vacations with family and friends	-0.0186**	-0.0268***	-0.0204*	-0.0287**
	(0.0071)	(0.0078)	(0.0086)	(0.0089)
My relationship with my partner is stronger than ever	0.0310***	0.0211*	0.0299**	0.0198
	(0.0087)	(0.0095)	(0.0112)	(0.0118)
My friends and family give me energy	0.0072	0.0012	0.0044	-0.0020
	(0.0094)	(0.0097)	(0.0117)	(0.0116)
Recognition for improvements to the neighborhood	0.0125*	0.0043	0.0108	0.0024
	(0.0061)	(0.0068)	(0.0080)	(0.0084)
Competence	-0.0003	-0.0005	0.0005	0.0003
	(0.0032)	(0.0032)	(0.0038)	(0.0038)
Optimism	0.0037	0.0044	0.0043	0.0050
	(0.0042)	(0.0042)	(0.0049)	(0.0049)
Life Satisfaction	-0.0091	-0.0088	-0.0101	-0.0096
	(0.0054)	(0.0054)	(0.0066)	(0.0066)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A3.2: Results for change in Republican vote share 2012–2016 from unweighted sample (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			0.0050	0.0060
			(0.0055)	(0.0058)
Trade_Exposure*Relatedness			-0.0002	-0.0002
			(0.0002)	(0.0002)
Experienced WORRY yesterday	0.0168	0.0330	0.0149	0.0318
	(0.1065)	(0.1114)	(0.1341)	(0.1378)
Worry*Relatedness	-0.0024	-0.0030	-0.0022	-0.0028
	(0.0042)	(0.0044)	(0.0054)	(0.0055)
Racial Animus	0.0003***	-0.0000	0.0003***	-0.0001
	(0.0001)	(0.0008)	(0.0001)	(0.0009)
Racial_Animus*Relatedness		0.0000		0.0000
		(0.0000)		(0.0000)
Social Capital	-0.0027*	-0.0027*	-0.0024	-0.0023
	(0.0013)	(0.0013)	(0.0018)	(0.0018)
I can't imagine living in a better community	0.0079*	0.0072	0.0086*	0.0078
	(0.0038)	(0.0041)	(0.0041)	(0.0043)
Community pride	-0.0302***	-0.0310***	-0.0286***	-0.0294***
	(0.0048)	(0.0050)	(0.0052)	(0.0056)
The city/area where I live is perfect for me	0.0139**	0.0132**	0.0149**	0.0141**
	(0.0044)	(0.0047)	(0.0047)	(0.0050)
Make time for vacations with family and friends	-0.0083*	-0.0090*	-0.0074*	-0.0083*
	(0.0032)	(0.0035)	(0.0033)	(0.0038)
My relationship with my partner is stronger than ever	0.0115**	0.0107*	0.0130**	0.0120*
	(0.0040)	(0.0043)	(0.0046)	(0.0048)
My friends and family give me energy	-0.0104*	-0.0109*	-0.0092*	-0.0098*
	(0.0043)	(0.0044)	(0.0046)	(0.0048)
Recognition for improvements to the neighborhood	0.0055*	0.0048	0.0055	0.0047
	(0.0028)	(0.0031)	(0.0030)	(0.0035)
Competence	0.0009	0.0009	0.0002	0.0002
	(0.0015)	(0.0015)	(0.0015)	(0.0015)
Optimism	-0.0044*	-0.0044*	-0.0036	-0.0035
	(0.0019)	(0.0019)	(0.0020)	(0.0020)
Life Satisfaction	0.0028	0.0029	0.0021	0.0021
	(0.0025)	(0.0025)	(0.0024)	(0.0024)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A4.1: Results for Trump vote share 2016 with under-sampled counties removed (N=2328)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			-0.0243	-0.0133
			(0.0131)	(0.0140)
Trade_Exposure*Relatedness			0.0010	0.0005
			(0.0005)	(0.0006)
Experienced WORRY yesterday	0.7347*	1.1371***	0.7664*	1.1071***
	(0.3219)	(0.3335)	(0.3097)	(0.3207)
Worry*Relatedness	-0.0306*	-0.0464***	-0.0317*	-0.0451***
	(0.0128)	(0.0133)	(0.0124)	(0.0128)
Racial Animus	0.0006***	-0.0072***	0.0003	-0.0072***
	(0.0001)	(0.0018)	(0.0002)	(0.0020)
Racial_Animus*Relatedness		0.0003***		0.0003***
		(0.0001)		(0.0001)
Social Capital	-0.0038	-0.0032	-0.0033	-0.0028
	(0.0033)	(0.0033)	(0.0039)	(0.0039)
I can't imagine living in a better community	0.0203	0.0077	0.0156	0.0044
	(0.0104)	(0.0108)	(0.0111)	(0.0114)
Community pride	-0.0162	-0.0322*	-0.0219	-0.0361**
	(0.0122)	(0.0127)	(0.0127)	(0.0133)
The city/area where I live is perfect for me	0.0091	-0.0087	0.0075	-0.0074
	(0.0115)	(0.0122)	(0.0119)	(0.0125)
Make time for vacations with family and friends	-0.0188*	-0.0329***	-0.0210*	-0.0335**
	(0.0087)	(0.0093)	(0.0096)	(0.0103)
My relationship with my partner is stronger than ever	0.0333**	0.0174	0.0306**	0.0167
	(0.0106)	(0.0111)	(0.0111)	(0.0116)
My friends and family give me energy	-0.0045	-0.0185	-0.0077	-0.0204
	(0.0114)	(0.0118)	(0.0119)	(0.0124)
Recognition for improvements to the neighborhood	0.0166*	0.0027	0.0138	0.0012
	(0.0081)	(0.0087)	(0.0086)	(0.0093)
Competence	0.0003	-0.0012	-0.0001	-0.0014
	(0.0037)	(0.0037)	(0.0039)	(0.0039)
Optimism	0.0014	0.0030	0.0011	0.0027
	(0.0051)	(0.0051)	(0.0049)	(0.0050)
Life Satisfaction	0.0134*	0.0135*	0.0129*	0.0129*
	(0.0061)	(0.0061)	(0.0061)	(0.0061)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A4.2: Results for change in Republican vote share 2012–2016 with under-sampled counties removed (N=2328)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			0.0029	0.0059
			(0.0059)	(0.0060)
Trade_Exposure*Relatedness			-0.0001	-0.0002
			(0.0002)	(0.0002)
Experienced WORRY yesterday	0.0458	0.1518	0.0243	0.1181
	(0.1487)	(0.1544)	(0.1542)	(0.1612)
Worry*Relatedness	-0.0032	-0.0074	-0.0021	-0.0058
	(0.0059)	(0.0062)	(0.0062)	(0.0065)
Racial Animus	0.0002***	-0.0018*	0.0003***	-0.0018*
	(0.0001)	(0.0008)	(0.0001)	(0.0009)
Racial_Animus*Relatedness		0.0001*		0.0001*
		(0.0000)		(0.0000)
Social Capital	-0.0031*	-0.0030	-0.0031	-0.0030
	(0.0015)	(0.0015)	(0.0020)	(0.0020)
I can't imagine living in a better community	0.0058	0.0024	0.0053	0.0022
	(0.0048)	(0.0050)	(0.0046)	(0.0048)
Community pride	-0.0265***	-0.0307***	-0.0253***	-0.0292***
	(0.0056)	(0.0059)	(0.0055)	(0.0056)
The city/area where I live is perfect for me	0.0126*	0.0079	0.0135*	0.0094
	(0.0053)	(0.0056)	(0.0057)	(0.0060)
Make time for vacations with family and friends	-0.0077	-0.0115**	-0.0079*	-0.0113**
	(0.0040)	(0.0043)	(0.0037)	(0.0041)
My relationship with my partner is stronger than ever	0.0075	0.0033	0.0084	0.0045
	(0.0049)	(0.0052)	(0.0050)	(0.0052)
My friends and family give me energy	-0.0063	-0.0100	-0.0047	-0.0082
	(0.0052)	(0.0054)	(0.0049)	(0.0053)
Recognition for improvements to the neighborhood	0.0096*	0.0059	0.0086*	0.0052
	(0.0037)	(0.0040)	(0.0041)	(0.0044)
Competence	0.0007	0.0003	0.0005	0.0001
	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Optimism	-0.0030	-0.0026	-0.0023	-0.0019
	(0.0024)	(0.0024)	(0.0023)	(0.0023)
Life Satisfaction	-0.0008	-0.0008	-0.0011	-0.0012
	(0.0028)	(0.0028)	(0.0025)	(0.0025)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A5.1: Results for Trump's Results for Trump vote share 2016 with party affiliation control removed (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			-0.0125	-0.0000
			(0.0136)	(0.0144)
Trade_Exposure*Relatedness			0.0005	-0.0000
			(0.0005)	(0.0006)
Experienced WORRY yesterday	0.5794**	0.7426***	0.5537*	0.7040**
	(0.1911)	(0.1979)	(0.2308)	(0.2405)
Worry*Relatedness	-0.0241**	-0.0306***	-0.0231*	-0.0290**
	(0.0076)	(0.0079)	(0.0092)	(0.0095)
Racial Animus	0.0008***	-0.0040**	0.0004*	-0.0052**
	(0.0001)	(0.0015)	(0.0002)	(0.0017)
Racial_Animus*Relatedness		0.0002**		0.0002**
		(0.0001)		(0.0001)
Social Capital	0.0020	0.0023	0.0018	0.0021
	(0.0031)	(0.0031)	(0.0041)	(0.0040)
I can't imagine living in a better community	0.0033	-0.0055	-0.0003	-0.0096
	(0.0077)	(0.0082)	(0.0087)	(0.0090)
Community pride	0.0064	-0.0038	0.0033	-0.0073
	(0.0090)	(0.0096)	(0.0105)	(0.0108)
The city/area where I live is perfect for me	0.0160	0.0062	0.0130	0.0032
	(0.0085)	(0.0091)	(0.0100)	(0.0106)
Make time for vacations with family and friends	-0.0124*	-0.0219**	-0.0149*	-0.0246**
	(0.0062)	(0.0069)	(0.0075)	(0.0081)
My relationship with my partner is stronger than ever	0.0317***	0.0209*	0.0308***	0.0196*
	(0.0079)	(0.0086)	(0.0085)	(0.0089)
My friends and family give me energy	0.0119	0.0039	0.0092	0.0005
	(0.0085)	(0.0089)	(0.0097)	(0.0100)
Recognition for improvements to the neighborhood	0.0144*	0.0049	0.0117	0.0014
	(0.0059)	(0.0066)	(0.0071)	(0.0077)
Competence	-0.0014	-0.0017	-0.0003	-0.0007
	(0.0029)	(0.0029)	(0.0034)	(0.0035)
Optimism	-0.0001	0.0011	0.0003	0.0013
	(0.0040)	(0.0040)	(0.0043)	(0.0044)
Life Satisfaction	0.0026	0.0024	0.0025	0.0026
	(0.0048)	(0.0048)	(0.0051)	(0.0052)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A5.2: Results for change in Republican vote share 2012–2016 with party affiliation control removed (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			0.0002	0.0025
			(0.0049)	(0.0050)
Trade_Exposure*Relatedness			0.0000	-0.0001
			(0.0002)	(0.0002)
Experienced WORRY yesterday	0.1420	0.1811*	0.1408	0.1676*
	(0.0804)	(0.0834)	(0.0855)	(0.0853)
Worry*Relatedness	-0.0069*	-0.0085*	-0.0067*	-0.0078*
	(0.0032)	(0.0033)	(0.0034)	(0.0034)
Racial Animus	0.0003***	-0.0008	0.0004***	-0.0006
	(0.0001)	(0.0006)	(0.0001)	(0.0007)
Racial_Animus*Relatedness		0.0000		0.0000
		(0.0000)		(0.0000)
Social Capital	-0.0033*	-0.0032*	-0.0029	-0.0029
	(0.0013)	(0.0013)	(0.0019)	(0.0019)
I can't imagine living in a better community	0.0052	0.0031	0.0054	0.0038
	(0.0032)	(0.0034)	(0.0035)	(0.0037)
Community pride	-0.0186***	-0.0210***	-0.0176***	-0.0195***
	(0.0038)	(0.0040)	(0.0040)	(0.0043)
The city/area where I live is perfect for me	0.0119***	0.0096*	0.0113**	0.0096*
	(0.0036)	(0.0038)	(0.0039)	(0.0042)
Make time for vacations with family and friends	-0.0021	-0.0043	-0.0020	-0.0037
	(0.0026)	(0.0029)	(0.0026)	(0.0029)
My relationship with my partner is stronger than ever	0.0125***	0.0099**	0.0129***	0.0109**
	(0.0033)	(0.0036)	(0.0036)	(0.0039)
My friends and family give me energy	-0.0074*	-0.0093*	-0.0060	-0.0075*
	(0.0036)	(0.0037)	(0.0034)	(0.0036)
Recognition for improvements to the neighborhood	0.0066**	0.0044	0.0058*	0.0040
	(0.0025)	(0.0028)	(0.0028)	(0.0032)
Competence	-0.0002	-0.0002	-0.0005	-0.0006
	(0.0012)	(0.0012)	(0.0011)	(0.0011)
Optimism	-0.0031	-0.0028	-0.0028	-0.0027
	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Life Satisfaction	0.0031	0.0031	0.0028	0.0028
	(0.0020)	(0.0020)	(0.0019)	(0.0019)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A6.1: Results for Trump's Results for Trump vote share 2016 with social capital used instead of relatedness (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			-0.0002	-0.0002
			(0.0013)	(0.0013)
Trade_Exposure*Social_Capital			-0.0001	-0.0002
			(0.0010)	(0.0010)
Experienced WORRY yesterday	-0.0311	-0.0309	-0.0311	-0.0309
	(0.0204)	(0.0204)	(0.0214)	(0.0214)
Worry*Social_Capital	0.0168	0.0165	0.0164	0.0161
	(0.0142)	(0.0142)	(0.0175)	(0.0176)
Racial Animus	0.0008***	0.0008***	0.0005**	0.0005**
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Racial_Animus*Social_Capital		0.0000		0.0001
		(0.0001)		(0.0002)
Social Capital	-0.0028	-0.0050	-0.0021	-0.0048
	(0.0051)	(0.0085)	(0.0078)	(0.0110)
I can't imagine living in a better community	0.0009	0.0009	-0.0007	-0.0007
	(0.0072)	(0.0072)	(0.0081)	(0.0081)
Community pride	0.0006	0.0007	-0.0001	0.0001
	(0.0086)	(0.0086)	(0.0106)	(0.0106)
The city/area where I live is perfect for me	0.0006	0.0004	-0.0004	-0.0005
	(0.0080)	(0.0080)	(0.0094)	(0.0094)
Make time for vacations with family and friends	-0.0165**	-0.0165**	-0.0172*	-0.0172*
	(0.0058)	(0.0058)	(0.0069)	(0.0069)
My relationship with my partner is stronger than ever	0.0224**	0.0223**	0.0238**	0.0237**
	(0.0073)	(0.0073)	(0.0079)	(0.0079)
My friends and family give me energy	0.0062	0.0063	0.0055	0.0055
	(0.0080)	(0.0080)	(0.0093)	(0.0093)
Recognition for improvements to the neighborhood	0.0101	0.0101	0.0087	0.0088
	(0.0054)	(0.0054)	(0.0062)	(0.0062)
Competence	-0.0023	-0.0023	-0.0015	-0.0015
	(0.0028)	(0.0028)	(0.0034)	(0.0034)
Optimism	0.0013	0.0013	0.0015	0.0015
	(0.0039)	(0.0039)	(0.0041)	(0.0041)
Life Satisfaction	0.0001	0.0001	0.0003	0.0002
	(0.0046)	(0.0046)	(0.0049)	(0.0049)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level

APPENDIX A6.2: Results for change in Republican vote share 2012–2016 with social capital used instead of relatedness (N=2921)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) IV	(4) IV
Trade Exposure			0.0006	0.0006
			(0.0006)	(0.0006)
Trade_Exposure*Social_Capital			-0.0001	-0.0002
			(0.0003)	(0.0003)
Experienced WORRY yesterday	-0.0232**	-0.0226**	-0.0205*	-0.0201*
	(0.0088)	(0.0088)	(0.0090)	(0.0089)
Worry*Social_Capital	-0.0164**	-0.0171**	-0.0152*	-0.0159*
	(0.0061)	(0.0061)	(0.0070)	(0.0071)
Racial Animus	0.0003***	0.0003***	0.0004***	0.0004***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Racial_Animus*Social_Capital		0.0001*		0.0001
		(0.0001)		(0.0001)
Social Capital	0.0016	-0.0049	0.0018	-0.0039
	(0.0022)	(0.0036)	(0.0027)	(0.0052)
I can't imagine living in a better community	0.0026	0.0027	0.0029	0.0030
	(0.0031)	(0.0031)	(0.0033)	(0.0033)
Community pride	-0.0202***	-0.0199***	-0.0191***	-0.0188***
	(0.0037)	(0.0037)	(0.0038)	(0.0038)
The city/area where I live is perfect for me	0.0112**	0.0107**	0.0107**	0.0104**
	(0.0034)	(0.0034)	(0.0035)	(0.0035)
Make time for vacations with family and friends	-0.0041	-0.0041	-0.0039	-0.0038
	(0.0025)	(0.0025)	(0.0024)	(0.0024)
My relationship with my partner is stronger than ever	0.0105***	0.0103**	0.0111***	0.0109**
	(0.0032)	(0.0032)	(0.0033)	(0.0033)
My friends and family give me energy	-0.0095**	-0.0092**	-0.0080*	-0.0078*
	(0.0034)	(0.0034)	(0.0031)	(0.0031)
Recognition for improvements to the neighborhood	0.0040	0.0041	0.0033	0.0034
	(0.0023)	(0.0023)	(0.0026)	(0.0026)
Competence	-0.0000	-0.0000	-0.0004	-0.0004
	(0.0012)	(0.0012)	(0.0011)	(0.0011)
Optimism	-0.0035*	-0.0035*	-0.0032	-0.0032
	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Life Satisfaction	0.0034	0.0033	0.0030	0.0030
	(0.0020)	(0.0020)	(0.0019)	(0.0019)

*: Significant at the 5% level
**: Significant at the 1% level
***: Significant at the 0.1% level