

The Interaction of Economic Inequality and Authoritarianism on Voter Preference During the 2016 Presidential Election

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Abstract:

I examined the interaction of personality and environmental context on voter preference in the 2016 presidential election. Survey data from the 2016 CSPP-PEP was merged with county and zip-code level data including racial diversity, Gini coefficient (representing level of economic inequality) and percent below the poverty line. Authoritarianism was analyzed as the personality predisposition. I hypothesized that the impact of authoritarianism on voter choice in the election (Trump vs. Clinton) would depend on the context-level variables. The results of regression analyses interacting authoritarianism and Gini coefficient as well as percent below the poverty line showed these economic measures of inequality activated the authoritarian dynamic and led to divergent candidate evaluations.

The voting behavior of the U.S. public in the 2016 presidential election will be analyzed for decades to come, as social scientists come to grips with the complex factors that led to the unlikely election of President Donald J. Trump. The leading theories to date include: economic insecurity, opposition to immigration, racial prejudice, anxiety related to trade competition, unemployment in rural areas, authoritarianism, the populist rhetoric of Trump, nationalistic fervor, and education level. A recent study by Rothwell and Diego-Rosell (2016) has concluded that many of these factors, especially unemployment and trade competition, had little predictive validity. The authors provide evidence that the strongest support for Trump came from areas of racially and culturally isolated zip-codes.

A critical feature of prior research examining voting patterns in the 2016 election is that it has looked at a single level of analysis in isolation: individuals' variables and those at a higher level of aggregation (e.g., county-level) were examined in isolation from one another. Research has yet to examine whether contextual variables (i.e., those at the zip-code or county-level) interact with psychological dispositions (e.g., authoritarianism) at the individual level in explaining voting behavior. In this research, I hypothesize that the effect of personality on voting behavior will depend on varying levels of racial diversity and economic outcomes in the social environment. My general expectation is that threat in the environment—captured

by high levels of racial diversity and economic inequality—will increase the electoral role of authoritarianism at the individual level in predicting support for Trump. This research is rooted in prior work demonstrating that Americans are sorting themselves into political parties based on personality predispositions, like

authoritarianism, which can be activated by perceived threat (Hetherington & Weiler, 2009; Johnston, Lavine, & Federico, 2017).

Threat, Authoritarianism, and Politics

The trait of authoritarianism—defined as a generalized predisposition of an individual toward intolerance of difference in people, ideas, and behavior (Stenner, 2005)—has been cited as a central basis of support for Trump (MacWilliams, 2016). Individuals high in authoritarianism typically endorse autocratic social structures in which individual autonomy yields to group authority in the hope of suppressing difference and achieving "oneness and sameness" in the environment. High authoritarians have a strong need for order and tend to see the world as divided between in-groups, who they identify with, and out-groups, which makes the world more orderly. High authoritarians also see the social fabric as unstable, potentially under attack by individuals that do not adhere to social conventions. Low authoritarians, by contrast, tend to embrace difference as a strength to society.





Research indicates that the political influence of authoritarianism depends on the presence of threat in the environment (Feldman & Stenner, 1997; Hetherington & Weiler, 2009; Lavine et al., 1999, 2002, 2005; Stenner, 2005; Velez & Lavine, 2017). Both Feldman (2003) and Stenner (2005) argue that authoritarianism is most powerfully activated by what they refer to as normative threat, which they define as anything that threatens "some system of oneness and sameness that makes 'us' an 'us'; some demarcation of people, authorities, institutions, values, and norms that for some folks at some point defines who 'we' are, and what 'we' believe in" (Stenner, 2005, p.17).

Thus, the authoritarianism dynamic is the interaction between the personality trait of authoritarianism and normative threat in the environment (actual or perceived). Normative threat can come in many forms, including the perception of ideological disagreement (a difference in ideas), racial diversity (a difference among people), or cultural liberalism (a difference in behavior). Velez and Lavine (2017) used national survey data and a natural experiment in a dorm setting to provide external validity of this interaction. They measured racial diversity at the county-level, and showed that the impact of authoritarianism on political intolerance occurred only in counties in which racial diversity was high.

Hypotheses

There has yet to be a study of the results of the 2016 presidential election in regard to the interaction of threat in the environment and authoritarianism in personality. Based on prior research, in areas that are high in racial diversity individuals with high authoritarian predispositions will have a greater effect on behavior and expressed attitudes, especially in the domains of race and immigration. For the 2016 election, this means individuals living in racially diverse areas that are high in authoritarianism may be especially likely to vote for Trump. Low authoritarians in this same environment will embrace diversity and be more likely to vote for Hillary Clinton. Areas low in diversity will not see the activation of this intolerance of difference and the relationship between authoritarianism and vote choice will be weak. These dynamics may also hold true for areas marked by economic downturn or high levels of economic inequality. The combination of demographic shifts, economic inequality, and authoritarianism has the potential of very large consequences for democracy in America.

Methods

Participants

Participants for this study were recruited by the Center for the Study of Political Psychology's Presidential Election Study (CSPP-PEPS), a survey that took place over the course of the 2016 election cycle. Participants were invited by e-mail to opt-in to the Survey Sampling International's (SSI) Internet Panel. Four waves of the survey were conducted, the first wave was between July 1st and July 18th, 2016. The subsequent sample size in the first wave was 3,552 individuals (completion rate of 87%, persons who both qualified and completed the survey). These same participants were invited to complete the later waves of the survey, Wave 2 was in September 2016 (N=2,020). Response for Wave 3 was in October 2016 (N=1,234) and Wave 4 took place in November 2016 after the presidential election (N=1,730). The data was weighted to a nationally represented sample based on known demographics of race, ethnicity, age, gender, income, and education in the first wave. This benchmark was adjusted in later waves to make up for lack of response.

Procedure

STATA-Data Analysis Software was used to examine the interaction of authoritarianism and contextual variables that reflect the environment of the individuals taking part in the 2016 CSPP-PEPS survey using regression models (StataCorp, 2015). Authoritarianism at the individual level was regressed with contextual variables in the aggregate of the area in which the participants reside to test if an interactive relationship exists when measuring predicted levels of comparative candidate evaluations (CCE). Controlling for the prior Wave's CCE score in later waves (Wave 1 controlled when using Wave 2, or Wave 2 controlled for when using Wave 3) allowed the models to show the change in candidate evaluations over time as well as relative to each other. All of the analyses were two-tailed tests and were restricted to all non-Black respondents. Non-Black respondents were used based on prior research that the child-rearing questions that makes up the authoritarianism scale has a divergent pattern for Black respondents (Pérez & Hetherington, 2014).

Measures

The dependent variable used in Waves 1, 2, and 3 was the comparative candidate evaluation (CCE) generated by feeling thermometers that all respondents used to rate their evaluations of the candidates on a scale of 0 to 100. On this scale 0 to 50 represented low favorability and 50 to 100 represented high favorability, 100 being the

highest. The feeling thermometer scores of Trump were subtracted from the feeling thermometer scores of Hillary Clinton for each individual, then 100 was added and that total divided by 200 to create a 0-1 scale. The CCE score represented 0 being a more favorable view of Clinton over Trump and 1 represented a more favorable view of Trump over Clinton. The CCE was generated for Waves 1, 2, and 3.

Authoritarianism scores were generated using four child-rearing questions that respondents answered in Waves 1 and 2. These four separate questions ask respondents which one out of two attributes would be more desirable for a child to have: independence or respect for elders, self-reliance or obedience, curiosity or good-manners, and being considerate or well-behaved. Individuals who give responses which signify with the preference for authority and order in the raising of children receive higher scores. The scale is a total count of the responses which fall on the side of authoritarianism—respect, obedience, good-manners, and well-behaved. The child-rearing battery has been shown to be reliable and well-validated as a measure of authoritarianism (Stenner, 2005). These four questions were recoded for both Wave 1 and 2 on a 0-1 scale, so that 0 represented low authoritarians and 1 represented high authoritarians (Wave 1 a = 0.60, Wave 2 a = 0.64).

The contextual variables that were used as the other independent variables in interaction with authoritarianism were racial diversity and the Gini coefficient, both were measured at the county-level, as wells as zipcode level of percent below the poverty line. The zip-code level of percent below the poverty line was generated using census data from 2015. This scale was recoded 0-1, 0 representing areas with a low percentage of people below the poverty line and 1 represents areas high in the percentage of people below the poverty line.

Racial diversity was generated by census data from 2015 and recoded on a scale of 0 to 1, 1 being high racial diversity. In other words, all racial demographics equally represented in the population. Low racial diversity, a lower score closer to 0, represents counties that have one racial demographic having the greatest share of the population. The Gini coefficient is a measure of income inequality at the county-level, this was also coded on a 0-1 scale. A higher score, closer to 1 on this scale, represents counties with high income inequality, where a few individuals have a greater share of the total income. A lower score, closer to 0, represents areas with low income inequality or places where individuals make the same amount of money. For each of the contextual variables, including

county-level Gini coefficient, county-level racial diversity and zip-code level percentage below the poverty line, the marginal differences for the models were set at the *5th* percentile and the 95th percentile. The marginal difference was set at these points to give a more realistic number of individuals at the low and high levels of each variable.

All models controlled for other demographic and political variables, which were all scaled on 0-1 scale. These individual variables include: age, gender (0=female, 1=male), income, education, ideology (0= "extremely liberal" and 1= "extremely conservative"), and partisan identity (0= "strong Democrat", 1= "strong Republican"). In Waves 2 and 3 the comparative candidate evaluation from the prior wave was also controlled for to reflect the change in candidate evaluation that took place over the course of the election cycle.

Results

A regression analysis indicated a statistically significant interaction between the county-level Gini coefficient and authoritarianism in Wave 2 (N = 679) on comparative candidate evaluation ($F_{(14,664)} = 175.45$, p =0.008) (See Table 1). Since all the variables are on a scale of 0-1, the coefficients can be interpreted as percent change in support for the candidates. The marginal difference at the 5th percentile for the county Gini coefficient at the minimum of the authoritarianism scale (0) was .55, and was to .47 at the maximum of the authoritarianism scale (1). This reflects a total difference of -.08 in the direction of support for Clinton and away from support for Trump. The marginal difference at the 95th percentile for the county Gini coefficient at the minimum of the authoritarianism scale (0) was .46, and moved to .55 at the maximum of the authoritarianism scale (1). This reflects a total difference of .09 in the direction of support for Trump and away from

The Interaction of County-Level Gini Coefficient and Authoritarianism on Comparative Candidate Evaluation in Wave 2

Variables	Coefficient	Standard Error
County-Level Gini Coefficient	809**	.370
Authoritarianism	667***	.248
County-Level Gini x Authoritarianism	1.536***	.582
Population	131	.085
Population x Authoritarianism	.153	.127
County-Level Racial Diversity	.094	.070
County-Level Racial Diversity		
x Authoritarianism	087	.113
Wave 1 Comparative		
Candidate Evaluation	.734***	.027
Ideology	.045**	.027
Party Identity	.079***	.025
Age	044	.030
Gender	023**	.012
Income	032	.028
Education	039	.025
Constant	.479***	.160
\mathbb{R}^2	.787	
N	679	

Table 1.

The Interaction of County-Level Gini Coefficient and Authoritarianism on Comparative Candidate Evaluation in Wave 2

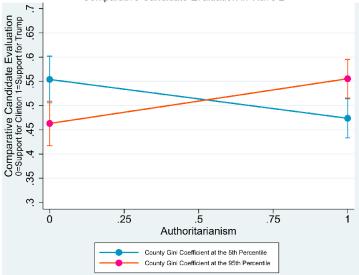


Figure 1. Graph represents marginal differences. (p = 0.008) Bars represent standard errors.

support for Clinton (See Figure 1). Since this model controlled for the Wave 1 comparative candidate evaluation, this effect is reflective of the change happening between Waves I and 2.

These differences mean that in areas of high income inequality, individuals high in authoritarianism were predicted to have increased support for Trump between Wave 1 and 2. Individuals in the same environment low in authoritarianism were predicted to have increased support for Clinton between Wave 1 and Wave 2. In areas of low income inequality, individuals high in authoritarianism were predicted to have increased support for Clinton between Wave 1 and Wave 2. Individuals low in authoritarianism and in the same areas of low income inequality were predicted to have increased support for Trump between Wave 1 and Wave 2.

A regression analysis indicated a statistically significant interaction between the zip-code level of the percent below the poverty line and authoritarianism in Wave 1 (N =1,267) on CCE ($F_{(9,\ 1257)}$ = 195.01, p =0.053) (See Table 2). The marginal difference at the 5th percentile of

The Interaction of Zip-Code Level Percent Below the Poverty Line and Authoritarianism on Comparative Candidate Evaluation in Wave 1

Variables	Coefficient	Standard Error
Zip-Code Level Percent Below the		
Poverty Line	084	.107
Authoritarianism	024	.029
Zip-Code Level Percent Below the		
Poverty Line x Authoritarianism	.352***	.182
Ideology	.229***	.027
Party Identity	.514***	.020
Age	.064**	.029
Gender	007	.012
Income	008	.029
Education	060**	.026
Constant	.140***	.031
\mathbb{R}^2	.582	
N	1,267	

Table 2

percent below poverty line at the minimum of the authoritarianism scale (0) was .51 and moved to .48 at the maximum of the authoritarianism scale (1), this reflects total difference of -.03 toward support for Clinton and away from support for Trump. The marginal difference at 95th percentile of percent below the poverty line moved from .48 at the minimum of authoritarianism (0) to .57 at the maximum of the authoritarianism scale (1). This reflects a total difference of .09 toward support for Trump and away from support for Clinton, moving from low authoritarianism to high (See Figure 2).

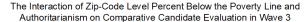
These differences mean that in areas of high poverty, individuals high in authoritarianism were predicted to have increased support for Trump at Wave 1. Individuals in the same environment low in authoritarianism were predicted to have increased support for Clinton at Wave 1. In areas of low poverty, authoritarianism had little predicted effect on individuals' candidate evaluations at Wave 1.

A regression analysis indicated a statistically significant interaction between the zip-code level of the percent below the poverty line and authoritarianism in Wave 3 (N = 315) on the CCE ($F_{(10,304)}$ = 148.46, p =0.089) (See Table 3). The marginal difference at the 5th percentile of percent below poverty line at the minimum of the authoritarianism scale (0) was .52 and moved to .50 at the maximum of authoritarianism (1), this reflects a total difference of -.02 toward Clinton and away from support for Trump. The marginal difference at the 95th percentile of percent below the poverty line at the minimum of the authoritarianism scale (0) was .44 and moved to .57 at the maximum of authoritarianism (1). This reflects a total difference of .13 toward support for Trump and away from support for Clinton, moving from low authoritarianism to high authoritarianism (See Figure 3). Since this model controlled for the Wave 2 comparative candidate evaluation, this effect is reflective of the change in CCE between Waves 2 and 3.

These differences mean that in areas of high poverty, individuals high in authoritarianism were predicted to have increased support for Trump between Wave 2 and Wave 3. Individuals low in authoritarianism and in the areas of high poverty were predicted to have increased support for Clinton between Wave 2 and Wave 3. In areas of low poverty, authoritarianism had little predicted effect on individuals' candidate evaluations between Wave 2 and Wave 3.

Discussion

The regression analyses of the data in the 2016



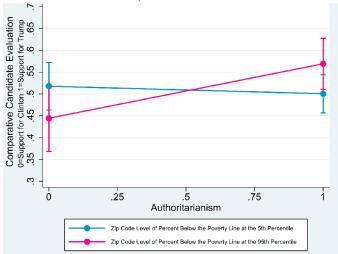


Figure 2. Graph represents marginal differences. (p = 0.053) Bars represent standard errors.

CSPP-PEP has shown evidence for the authoritarian dynamic having an effect during the 2016 presidential election. Income inequality and poverty, not racial diversity, were the environmental variables that seem to have activated the authoritarian personality predisposition and influenced voting behavior. In areas low in poverty, as authoritarianism increased there was no relationship to comparative candidate evaluation. In areas of low income inequality, as authoritarianism increased so too did support for Hillary Clinton. In areas of both high in income inequality and poverty, as authoritarianism increased, so too did support for Donald Trump. All of these analyses have shown an interactive element between authoritarianism and economic contextual variables.

Although these relationships were statistically significant, it should be noted that the marginal differences at the 5th and 95th percentile of the contextual variable and at 0 and 1 on the authoritarianism scale are relatively small. In the first model, the difference at the 5th percentile moving from 0 to 1 on the authoritarian scale was -.08 and +.09 at the 95th percentile; the second model was -.03 and +.09; and the third was -.02 and +.13 respectively. Also, this research has limited generalizability to the broader public since it used only non-Black respondents because prior research has shown a divergent pattern in the measure of authoritarianism and the related political behavior in Black respondents (Pérez & Hetherington, 2014).

These relationships suggest multiple factors that impact authoritarianism, environment, and behavior. Prior research has shown that the authoritarian personality predisposition is activated by high levels of difference and diversity in society and the environment (Stenner, 2005;

Velez & Lavine, 2017). The relationships found in this dataset could offer evidence of difference in socioeconomic status activating the authoritarian dynamic. Individuals high in authoritarianism could see different societal norms for wealthy individuals and poor individuals sharing the same environment as being a threat to the social fabric. Individuals low in authoritarianism could see this difference as being non-threatening or even a possible strength to society.

The authoritarian dynamic could have been activated by Trump's rhetoric in speaking to increasing American economic strength and could have led high authoritarians to support Trump in the 2016 presidential election. Candidate Trump derided the former administration's economic policies during the campaign and he vowed to bring back manufacturing and coal jobs if elected. Trump also spoke in support of tariffs to reduce a supposed trade imbalance with Mexico and China. Trump also promised to take on Wall Street and was marketed as a business insider who could get "the best deals" for America. Individuals high in authoritarianism could have interpreted this rhetoric as Trump bringing about a more even distribution of income by increasing jobs and reducing poverty. The less socioeconomic difference individuals high in authoritarianism experience in the environment, the less threat they feel to the social fabric; thus, these individuals would have less anxiety about the makeup of society.

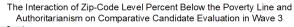
The salience of socioeconomic class in areas of high income inequality and high poverty is much greater than in areas of low income inequality and poverty. These two, broad categories of environments tend to fall into urban and rural areas, respectively. Urban areas typically are high in income inequality and rural areas low in income inequality. These are also environments becoming politically divergent; with strong support for Democratic candidates in urban areas and strong support for Republican candidates in rural areas. To control for this alternative explanation, the model of the county-level Gini coefficient

The Interaction of Zip-Code Level Percent Below the Poverty Line and Authoritarianism on Comparative Candidate Evaluation in Wave 1

Variables	Coefficient	Standard Error
Zip-Code Level Percent Below the		
Poverty Line	084	.107
Authoritarianism	024	.029
Zip-Code Level Percent Below the	024	.027
Poverty Line x Authoritarianism	.352**	.182
Ideology	.229***	.027
Party Identity	.514***	.020
Age	.064**	.029
Gender	007	.012
Income	008	.029
Education	060**	.026
Constant	.140***	.031
R ²	.582	
N	1.267	

Note. Significance levels are based on two-tailed tests. * p < 0.10, *** p < 0.05, **** p < 0.01

Table 2



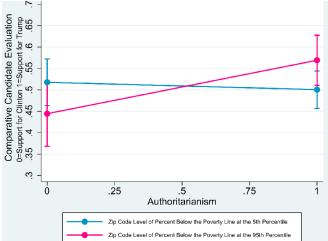


Figure 3. Graph represents marginal differences. (p = 0.089) Bars represent standard errors.

included interactions of population and racial diversity with authoritarianism. The interaction of the county-level Gini coefficient was still statistically significant with these controls.

In the model interacting the county-level Gini coefficient with authoritarianism, there was a statistically significant relationship between areas low in income inequality, increased predicted support for Hillary Clinton by individuals high in authoritarianism (See Figure 1 & Table 1). This trend is different than the models interacting zip-code level percent below the poverty line and authoritarianism, where low poverty areas had no relationship with authoritarianism. It could be that individuals in areas of low income inequality saw in Hillary Clinton support for the status quo, as a carryover from the previous Obama administration; where the social safety net was reinforced and difference in threat due to economic trends was reduced. Predicted increase of support for Hillary Clinton by high authoritarians in this model could also be a move away from the political uncertainty of Trump, who was a newcomer to politics with a volatile character and no real political experience.

Implications for this research include the possibility of an increase in the sorting of political parties by socioeconomic class. The political party or candidate that uses rhetoric that assuages high authoritarians in areas of high economic inequality will garner more support from these individuals. Language in political campaigns that emphasizes the threat of increasing income inequality and poverty will also win support of high authoritarians. The party or candidate that espouses the strength of the economy and American meritocracy could win the support of

low or moderate authoritarians.

Although this research shows broad trends of the interaction of environment and authoritarianism, the relatively small marginal differences in change of support for either candidate in the 2016 presidential election show that further research on this topic is necessary. Future research using this paradigm could help to understand the complex interactive nature of authoritarianism and other personality predispositions. Prior research has shown an increase in demographic shifts, racial diversity, and income inequality; which point to the importance of the interaction of authoritarianism and threat in future political discourse (Craig & Richeson, 2014; Velez & Lavine, 2017).

The Interaction of Zip-Code Level Percent Below the Poverty Line and Authoritarianism on Comparative Candidate Evaluation in Wave 3

Variables	Coefficient	Standard Error
Zin Code Level Persont Releve the		
Zip-Code Level Percent Below the	240	170
Poverty Line	240	.178
Authoritarianism	017	.043
Zip-Code Level Percent Below the		
Poverty Line x Authoritarianism	.464*	.271
Wave 2 Comparative		
Candidate Evaluation	.794***	.039
Ideology	.115***	.041
Party Identity	.127***	.034
Age	.055	.050
Gender	.002	.018
Income	.091**	.042
Education	018	.037
Constant	087	.049
R ²	.830	
N	315	

Note. Significance levels are based on two-tailed tests. * p < 0.10, *** p < 0.05, **** p < 0.01

Table 3

References:

Craig, M. A., & Richeson, J. A. (2014). On the precipice of a "majority-minority" america. *Psychological Science*, 25(6), 1189-1197. doi:10.1177/0956797614527113

Feldman, S. (2003). Enforcing social conformity: A theory of authoritarianism. *Political Psychology*, 24(1), 41-74.

Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology*, 18(4), 741-770.

Hetherington, M. J., & Weiler, J. D. (2009). *Authoritarianism and Polarization in American Politics*. New York: Cambridge University Press.

Johnston, C. D., Lavine, H., & Federico, C. M. (2017). *Open versus closed: Personality, identity, and the politics of redistribution.* New York, NY: Cambridge University Press.

Lavine, H., Burgess, D., Snyder, M., Transue, J., Sullivan, J., Haney, B., & Wagner, S. (1999). Threat, authoritarian-

ism, and voting: An investigation of personality and persuasion. Personality and Social Psychology Bulletin, 25(3), 337-347.

Lavine, H., Lodge, M., & Freitas, K. (2005). Threat, authoritarianism, and selective Exposure to Information. Political Psychology, 26(2), 219-244.

Lavine, H., Lodge, M., Polichak, J., & Taber, C. (2002). Explicating the black box through experimentation: Studies of authoritarianism and threat. *Political Analysis*, 10(4), 343-361.

MacWilliams, M. (2016). Who decides when the party doesn't? Authoritarian voters and the rise of Donald Trump. *PS: Political Science & Politics*, 49(4), 716-721. doi:10.1017/S1049096516001463

Pérez, E., & Hetherington, M. (2014). Authoritarianism in black and white: Testing the cross-racial validity of the child rearing scale. *Political Analysis*, 22(3), 398-412. doi:10.1093/pan/mpu002

Rothwell, J., & Diego-Rosell, P. (2016). Explaining nationalist political views: The case of Donald Trump.

StataCorp. (2015). Stata Statistical Software: Release 14. College Station, TX: StataCorp LP.

Stenner, K. (2005). *The Authoritarian Dynamic*. New York, NY: Cambridge University Press.

Velez, Y. R. & Lavine, H. (2017). Racial diversity and the dynamics of authoritarianism. *The Journal of Politics*, 79(2), 519-533.