Anti-Intellectualism in the 2016 Presidential Election

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Abstract

This paper presents an attempt at developing a set of operationalizations for Hofstadter's (1963) notion of anti-intellectualism. I develop a measure for each dimension of anti-intellectualism identified by Rigney (1991): Populist Anti-Elitism, Unreflective Instrumentalism, and Religious Anti-Rationalism. After presenting a series of reliability and validity tests, I then use these measures to explore the determinants of anti-intellectual attitudes, and to demonstrate that Populist Anti-Elitism was a significant predictor of support for Donald Trump in the 2016 Presidential election.

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Over 50 years ago historian Richard Hofstadter (1963) published his influential and Pulitzer Prize-winning book entitled *Anti-Intellectualism in American Life*. In it he documented the historical and cultural roots of what he described as *a resentment and suspicion of the life of the mind and of those who are considered to represent it*. It seems apparent now that the rise of Donald Trump, first as a candidate and now as President, represents the latest and very clear manifestation of that resentment and suspicion. This study is an attempt to measure and understand it in a way that has not been done since Hofstadter first put forward his observations.

As important and influential as Hofstadter's work may have been, there has been remarkably little empirical research done to follow it up. In the 50+ years since *Anti-Intellectualism in American Life* was published there have only been modest attempts at measuring the titular phenomenon, and only in a fairly limited context. For example, Eigenberger and Sealander (2001) developed a measure of *student* anti-intellectualism to assess student's orientation towards their education. Elias (2009) then used theis *Student Anti-Intellectualism Scale* to examine business students' perceptions of cheating. As informative as these studies might be in our understanding of the academic life of college students, they are a far cry from the full potential that Hofstadter's work could have on our understanding of American political attitudes and behavior.

The current public debate about climate change and whether or not global warming is due to human activity has sparked interest among social scientists about such things as the cultural authority of science, and people's willingness (or reluctance) to accept the

conclusions and recommendations of climate scientists. Gauchat (2008, 2012) has done considerable research on Americans' skepticism towards scientific knowledge and suspicion of scientists. He argues that this skepticism and animosity are on the rise, and that it is mainly due to the politicization of science. This is an important finding, and reinforces the argument that more research is necessary to understand why many people hold such a negative view of "experts." Even so, it represents a fairly narrow area of study, since "scientists" represent only a subset of the totality of people who are dedicated to the life of the mind.

The recent surge of interest in, and research about, the spread and influence of misinformation (Hochschild and Einstein, 2015; Lupia, 2015) presents a new opening for inquiry about anti-intellectualism in a much broader scope. Lupia (2015) explored the degree to which many Americans are significantly uninformed about politics, and offers prescriptions designed to help "civic educators" more easily help individuals acquire information, convert it to knowledge, and ultimately to competence. However, what if people are resistant to the messages of these "civic educators?" If there are people who are resistant to that messaging, who are they and why are they like that?

More recently, Cramer (2016) explored the notion that rural dwellers in Wisconsin were motivated by a sense that they were being ignored by urban elites, and therefore fostered a certain resentment towards them. Similarly, Nichols (2017) discusses "the rise of hostility towards established knowledge," and refers to it as "the aggressive replacement of expert views or established knowledge with the insistence that every opinion on any matter is as good as every other."

This suggests that new research into anti-intellectualism could help move this line of inquiry forward. In short, we need to think seriously about anti-intellectualism in an empirically rigorous way. Part of the problem, it seems, is that Hofstadter's notion of anti-intellectualism was rather amorphous. He offers pages and pages of anecdotes of the ways in which anti-intellectualism has presented itself throughout American history, but very little guidance as to what its essential attributes are beyond his simple definition of "*a resentment and suspicion of the life of the mind and of those who are considered to represent it*."

Rigney (1991) attempted to offer some focus based on a systematic reading of Hofstadter's main arguments. He argued that Hofstadter's concept could be broken into three separate, but inter-related, dimensions:

1. *Populist Anti-Elitism* – The belief that the values of intellect are, almost by definition, elitist in nature; that the educated classes are suspect, self-serving, and out-of-touch with the lives of "average Americans."

2. *Unreflective Instrumentalism* – The belief that the value of education is primarily found in the immediate, practical end of job training, and spurns the more abstract notions of expanding one's horizons and developing a deeper understanding of the human condition.

3. *Religious Anti-Rationalism* – The belief that science and rationality is emotionally sterile and promotes relativism by challenging the sanctity of absolute beliefs.

In this paper, I shall discuss my attempt to operationalize each of these dimensions, which I administered in a survey of Americans during the Summer leading up to the 2016 presidential election. After subjecting the measures to a series of reliability and validity assessments, I move on to a consideration of the determinants of anti-intellectualism. Finally, I examine the extent to which anti-intellectual attitudes were a factor in influencing

how people voted in the 2016 presidential election. Simply put, the question I seek to answer is: "Did anti-intellectualism among the American electorate contribute to the electoral success of Donald Trump?"

Data and Methods

To assess the pervasiveness of anti-intellectual attitudes during the 2016 election campaign, I administered an online survey from June to August through the internet survey research company Qualtrics. The survey was administered to a national quota sample of 1220 adults. The sex, race, age, education, income, and regional breakdowns of the sample are presented in the Appendix.

The survey was presented to respondents as "The UVU Education Survey" with the description indicating that we were interested in assessing their attitudes about education and how those attitudes were related to various political issues as well as how they were planning on voting in the upcoming presidential election. The survey was administered after Hillary Clinton and Donald Trump had both become the presumptive nominees of their respective parties by securing enough delegates to be able to clinch the nomination at their conventions.[1]

To develop a measure of anti-intellectualism, I drew upon Rigney's (1991) dimensions of anti-intellectualism to create a battery of nine questions that were designed to tap into each one (three per dimension). Each question was presented as a 5-point

[1] Including the Automatic Delegates that had pledged their support for her, Hillary Clinton won enough delegates to secure the nomination after the California Primary on June 6. While many Bernie Sanders supporters disputed the appropriateness of referring to her as the "presumptive nominee" since Automatic Delegates do not officially cast a vote until the Convention, it was widely reported in the media that she was, indeed, the presumptive nominee.

Likert-type statement which presented sentiments that one might associate with anti-intellectual attitudes. The statements are presented, along with their associated dimension in Table 1.

In order to subject these operationalizations to various reliability and validity tests, I also included a series of questions to measure various demographic characteristics and political attitudes that one would reasonably presume to be correlated with one or more of these dimensions. It is a discussion of these tests to which we now turn.

Assessing the Reliability and Validity of the Anti-Intellectualism Measures

Before we can examine the extent to which anti-intellectual attitudes influenced the vote in 2016, we must first assess whether we are truly measuring the concept of anti-intellectualism and not some other construct.

First, I assessed the validity of these operationalizations with confirmatory factor analysis. The notions to be tested in this analysis are fairly straightforward: Are the dimensions identified by Rigney (1991) indeed unique components of the broader construct of anti-intellectualism, and do the individual operationalizations adequately measure each of those components? Confirmatory factor analysis is used to test the underlying assumptions of a hypothesized structure of correlations between variables. In this particular instance, I tested these underlying assumptions using Maximum Likelihood Estimation in SPSS-AMOS. The results of this analysis are presented in Figure 1.

These results provide substantial support that the anti-intellectualism items are, in fact, adequately measuring their hypothesized constructs. The estimates show that each of

the items load strongly and significantly on their respective factors. As we would expect, each factor is correlated with the others, but not so strongly to the point that we would question whether they are separate and distinct components. The goodness of fit statistics all suggest that the hypothesized structure fits the data well. While the Chi-Square is significant, indicating that the model fit is poor, this is not necessarily an indication of poor fit. With a large Ns, Chi-Square is not always a good indicator of model fit in analyses such as this because the sample size tends to inflate it. The other goodness of fit statistics, however, all give strong evidence of a good model fit with the data. The Comparative Fit Index (CFI) and Adjusted Goodness-of-Fit Index (AGFI) are both above the .95 cutoff point recommended by Hu and Bentler (1999). Similarly, the Root Mean Squared Error of Approximation [RMSEA] is below Hu and Bentler's recommended cutoff value of .06.

Using Cronbach's Alpha to assess the inter-item reliability reveals that the measures have strong enough inter-item correlations to be used to construct scales for each dimension. Nunnally (1978) and Kaplan and Saccuzzo (1982) recommend at least a value of .70 for Cronbach's Alpha. For the Populist Anti-Elitism, Unreflective Instrumentalism, and Religious Anti-Rationalism items, α = .76, .74, and .84, respectively. Given these results, I created additive scales for each dimension with their respective items. Table 2 presents the univariate statistics for each of these scales.

Establishing the Construct Validity
of the Anti-Intellectualism Scales

The next step in evaluating the utility of these new operationalizations of anti-intellectualism is to run a series of additional construct validity tests. The key to establishing the construct validity of an operationalization is to demonstrate that it

performs in accordance with theoretical expectations (Carmines and Zeller, 1979). So, the question is: If these measures are truly valid measures of their purported dimensions of anti-intellectualism, what other variables would we reasonably expect them to have correlations with?

One obvious expectation is that we would presume that anti-intellectualism would be correlated with levels of education. If, in fact, anti-intellectualism is a manifestation of animosity and resentment towards those with higher levels of education, we would expect education to be negatively correlated with level of anti-intellectualism.

Figure 2 displays the relationship between education level and the three measures of anti-intellectualism. As expected, the level of anti-intellectualism on all three dimensions decreases as education level increases. Even so, the effect of education level on anti-intellectualism is relatively modest, suggesting that while education will lessen one's animosity towards the more highly educated, there are clearly other factors that determine one's disposition towards those with education, and towards education in general. We will return to a more thorough discussion of the determinants of anti-intellectualism later.

For further evidence of the construct validity of the anti-intellectualism measures we can examine whether it is correlated with other attitudes with which we would expect it to be correlated. Gauchat's (2012) evidence of the declining trust in science in the United States since 1970 offers a rich line of inquiry. At the core of his findings is the implicit notion that there has been a growth in feelings of animosity towards "scientific experts," which would certainly fit within the broader concept of anti-intellectualism.

The key operationalization that Gauchat relies upon is an item in the General Social Survey that assesses respondents' level of trust in the "scientific community." If a lack of trust in science is indicative of anti-intellectual sentiments, we should find that it will be negatively correlated with these measures of anti-intellectualism. We should also especially find this to be true for the measure of Religious Anti-Rationalism, which is specifically focused on the conflict between religion and science.

We can also use Gauchat's analysis as a guide in examining the question even more directly. If distrust in the scientific community is an indication of anti-intellectual sentiments, then specific distrust in *academia* should be even more so. So, in addition to the confidence in the scientific community question, I also included similar questions to assess respondents' confidence in "Universities and Colleges" as well as "the public education system."

Another approach we can take is to assess one's affect towards *members* of the scientific community and academia. To do this, I included a question that asked respondents to indicate whether, and now much, they liked or disliked on 5-point Likert scales "the kind of person who is likely to hold" various occupations. Respondents were then presented a list of various occupations such as "factory workers," religious leaders," "lawyers," and "law enforcement officers." The critical occupations included in this list that I used as an indication of animosity towards "intellectuals" were "college professors" and "research scientists." Of course, professions in *academia* and *the life of the mind* extends beyond professors and scientists, so I also included other occupations in education (e.g. "elementary school teachers" and "high school teachers") as well as other professions

which are rather exclusive and require considerable advanced education: “medical doctors” and “lawyers.” We would expect that affect towards those in professions that require higher levels of education will be negatively associated with anti-intellectual attitudes.

Finally, there are a number of other attitudes and beliefs that we would expect to be associated with anti-intellectual attitudes. Aside from the perennial issue about the validity of the theory of evolution, two of the most notable issues where the credibility of “so-called experts” is called into question are climate change and the safety of vaccinations. While there is widespread consensus in the scientific community that the planet’s climate is warming and that such warming is the product of human activity (Cook, et al, 2013), there is considerable skepticism among the public about the validity of such research (Zehr, 2000).

Similarly, there is also a fairly wide chasm between the scientific community (e.g. Jain, et al., 2015) and many in the general public about the debunked link between vaccinations and serious side-effects like autism. Additional controversies surround the safety of genetically modified organisms (GMOs) and pesticides. We would expect anti-intellectual attitudes to be positively correlated with skepticism towards the scientific consensus in these areas.

Table 3 presents the bivariate correlations of each of these variables with the operationalizations of the three dimensions of anti-intellectualism. While many of the correlations are modest, most are statistically significant and in conformity with our expectations. Anti-Intellectual attitudes, as measured by these constructs, are in fact associated with greater animosity towards those with advanced education.

The most notable results in Table 3 are those for confidence in the scientific community, and colleges and universities, as well as for affect in both college professors and research scientists. Those exhibiting anti-intellectual attitudes, especially populist anti-elitism, are considerably more likely to lack confidence in, and dislike, the academic and scientific professions. The populist anti-elitism scale is even negatively correlated, although somewhat less so, with affect towards those in other aspects of the academic community: Elementary and High School teachers. Simply put, with the exception of perhaps religious training, if you were occupied in a position that required some degree of advanced education, those exhibiting Populist Anti-Elitist attitudes are going to be less likely to like you.

Perhaps not surprisingly, the Religious Anti-Rationalism measure is most highly correlated with attitudes about those objects that are most closely aligned with science and religion. Some of the strongest correlations in the table are those between the Religious Anti-Rationalism and confidence in the scientific community, and affect towards research scientists. On the other hand, and also not surprisingly, the highest coefficients in the table are the *positive* correlations between the Religious Anti-Rationalism measure and the attitudes towards organized religion and religious leaders.

There is further confirmation of the validity of the measures to be found in their correlations with the various attitudes and beliefs. All three dimensions are negatively correlated with support for education funding. Those scoring higher on all three dimensions are more likely to deny that global warming is happening, and to disagree with the scientific community that such warming is due to human activity.

Additionally, all three dimensions are positively correlated with the mistaken belief that there is a causal link between vaccines and autism. Again, the Religious Anti-Rationalism dimension leads the way in many of these, especially those dealing specifically with scientific research and religion, especially on the issue of evolution. Those scoring higher on the Religious Anti-Rationalism scale are more likely to part ways with the scientific community and believe that GMOs and food treated with pesticides are unsafe to eat. And while all three dimensions show correlations indicating that anti-intellectualism is negatively associated with supporting the notion of human evolution, the Religious Anti-Rationalism dimension stands out as having the strongest correlation.

The evidence in Table 3 offers support for the notion that these measure are, in fact, valid measures of the concept of anti-intellectualism. Furthermore, there is support that they are measuring the three separate and distinct dimensions identified by Rigney (1991). The Populist Anti-Elitism dimension appears to be most strongly associated with animosity with those with higher levels of education, and those most "dedicated to the life of the mind." Unreflective Instrumentalism appears to focus most directly on the specific field of education. Those scoring higher on this dimension are the least likely to support education funding compared to the other dimensions, and exhibit slightly greater animosity towards even elementary and high school teachers. Finally, the Religious Anti-Rationalism dimension stands out as specifically focused on the conflict between science and religion.

Given these results we can now turn to a more detailed consideration of these attitudes. What leads an individual to hold such attitudes? And what, if any, effect did these attitudes have on individuals' vote decisions in the 2016 election?

The Determinants of Anti-Intellectualism

In Figure 2, I showed that increasing education is associated with lower levels on all three dimensions of anti-intellectualism, but clearly there are other factors that can contribute to one's level of animosity towards intellectuals and "the life of the mind." Gauchat (2012) argued that much of the decline in the cultural authority of science has been driven by its politicization. This was exhibited most by ideological conservatives and, to a lesser extent, moderates. Therefore it is reasonable for us to expect a similar relationship between ideology and anti-intellectualism.

Gauchat (2008) also found that a number of demographic factors were correlated with anti-science attitudes. In addition to education, he found that socio-economic status, age, sex, religion, religiosity, geography, and race all were significantly associated with anti-science attitudes. Less wealthy, older people, women (at least in some analyses), Evangelical Christians, frequent church attenders, rural dwellers, and African-Americans were all more likely to exhibit anti-science attitudes.

To the extent possible, I sought to replicate some of Gauchat's findings here with my own measures of anti-intellectualism. I included some additional variables in the analysis as I found them to be more theoretically satisfying. After all, it is one thing to conclude that African-Americans and those who are less well-off financially are less likely to support science. The bigger question is "why?" What key attitudinal factors might lead some groups more than others to hold a certain point of view? And would those same groups exhibit the same correlations with each of the separate components of anti-intellectualism?

For example, Gauchat speculates that his finding that African-Americans are more likely to express anti-science views may have something to do with the legacy of the Tuskegee experiments, and that those who live in urban areas would be more likely to be exposed to technology and rationality and therefore would be less likely to express anti-science views. These explanations may very well be true, but I think there is a much broader explanation for his findings: resentment.

My analysis is focusing on more than just views about science. It is examining the broader concept of animosity towards the "intellectual elite." The extent to which individuals feel this animosity may very well be a function of their sense that they've been ignored and/or left behind (Cramer, 2012). Whether they feel that they've been denied the opportunities afforded by education, or simply feel that those who *have* been able to take advantage of those opportunities don't understand them or care, they may very well resent those they see as being part of the intellectual elite.

In that sense, the explanation of variation in anti-intellectualism could extend well beyond race, urban v. rural, or even socio-economic status, and simply be driven by an overall sense of powerlessness. As a result, I included measures of political trust and efficacy (both internal and external) in my analysis. In particular, I think it is more likely that external political efficacy is the operative attitude, as opposed to internal political efficacy because of their differences in the "locus of control." A person's sense of resentment towards elites is more likely to be a function of a sense that elites don't care about them, rather than his or her sense that they just don't understand what's going on.

Gauchat also found that the level of scientific knowledge was negatively associated with anti-science views. Again, since my focus is on the much broader concept of anti-intellectualism, I used the standard battery of political information questions (Delli Carpini and Keeter, 1996). The expectation is that individuals with a higher level of political information will be less likely to express anti-intellectual views.

To test these hypotheses, I regressed each of the anti-intellectualism measures on this set of independent variables. The results are presented in Table 4, and they largely conform to our expectations. On all three dimensions, the more highly educated and politically informed were less likely to express anti-intellectual sentiments. In addition, and in accordance with Gauchat's findings, we see that political conservatives are more likely to exhibit anti-intellectual views as well.

We also see that religion and religiosity are correlated with anti-intellectualism according to our expectations. Perhaps not surprisingly, we find the strongest coefficient in the analysis for the Biblical Liberalism variable (the belief that the Bible is "an ancient book of fables written by men," as opposed to "the actual word of God") in the model for Religious Anti-Rationalism. The Church Attendance variable also has its strongest effect on Religious Anti-Rationalism compared to its role in the explanations for Populist Anti-Elitism and Unreflective Instrumentalism. Since this construct specifically focuses on the potential animosity driven by the conflict between science and religion, this is to be expected.

The most notable findings in Table 4 are the evidence supporting the notion that anti-intellectualism stems from a sense of powerlessness in the political system. External

Political Efficacy consistently achieves significance in all three models and is the most potent predictor of Populist Anti-Elitism and Unreflective Instrumentalism. It is also notable that the race, socio-economic status, and rural[2] variables are not significant, contrary to Gauchat's findings. African-Americans, low income, and rural individuals *may* be more likely to express anti-science sentiments, but it appears from this analysis that anti-intellectual views from these groups and others may be driven more by a sense that they do not have a voice in society.

One finding in Table 4 that runs counter to Gauchat's findings are that women are significantly *less* likely to express anti-intellectual views, at least on the Populist Anti-Elitism and Unreflective Instrumentalism dimensions. The Female variable fails to achieve significance in the model for Religious Anti-Rationalism. Given the importance that gender played in the 2016 election, and the significant focus on the stark differences in the experience and expertise of the two candidates, it may very well be the case that this finding is an artifact of the specific context of this election.

This leads us to our final question. Now that we've established that these measures of anti-intellectualism appear to be valid and robust measures of their underlying construct and that they appear to be driven by significant political considerations, the next logical course of inquiry is to see if they are, in fact, correlated with the vote. In the next section, we will examine the evidence that anti-intellectualism was a significant factor in influencing how individuals chose to cast their vote.

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[2] The Rural variable was derived from respondents' ZIP Codes, which were matched to the U.S. Census Bureau's FIPS codes. These were then cross-referenced with the United States Department of Agriculture's Rural/Urban Continuum Code and collapsed into 3 ordinal categories.

Anti-Intellectualism and Vote Choice

Given Donald Trump's populist and anti-intellectual rhetoric throughout the 2016 campaign, it seems reasonable that the anti-intellectualism measures would be correlated with how individuals voted. To examine this, I ran a logistic regression with a binary vote intention variable (Clinton = 0, Trump = 1) as my dependent variable. For the independent variables I used each of the measures for the three anti-intellectualism dimensions, along with party identification and ideology as controls. The results of this analysis are presented in Table 5. While each dimension is a significant predictor on its own when included in a model separately with party identification and ideology (not shown), when all three are included together in the same model, only the Populist Anti-Elitism variable achieves statistical significance. Whether Donald Trump's anti-intellectual rhetoric was serving as a cue to his supporters, or whether he was tapping into their pre-existing sentiments cannot be determined from this. However, it does seem clear that anti-intellectualism was a key consideration as voters were making their choice between Donald Trump and Hillary Clinton.

To examine the dynamics of the role that anti-intellectualism played in voters' decisions, Figure 3 plots the predicted probabilities of voting for Trump as a function of party identification and Populist Anti-Elitism. All three partisan groups demonstrated an increased propensity to vote for Donald Trump the more they held anti-intellectual attitudes. As expected, Republicans were much more likely to support Trump than Democrats, but even those at the low end of the anti-intellectualism scale were somewhat more likely to indicate a willingness to defect towards Clinton. Similarly, while Democrats

were understandably and significantly less likely to support Trump, even those Democrats who exhibited anti-intellectual attitudes had an increased likelihood of defecting to him. Furthermore, as we would expect, anti-intellectualism had its most substantial impact on the vote decision of Independents.

So, this evidence all seems to present a very clear answer to the question I posed at the outset of the paper: Yes, anti-intellectualism did indeed contribute to the electoral success of Donald Trump. The blatant anti-intellectual tone of Donald Trump's campaign rhetoric definitely seemed to translate into votes in Election Day. His unorthodox campaign was able to tap into a sentiment of resentment towards "the establishment" among a significant segment of the population, and that helped propel him into the White House.

Conclusion

Anti-Intellectualism appears to have most definitely played a role in the election of 2016. These findings are certainly not surprising given Donald Trump's campaign rhetoric, which Nichols (2017) described as "a one-man campaign against established knowledge." Throughout the campaign Trump repeatedly made unsubstantiated and demonstrably untrue statements, while claiming "to know more than the generals" and other "so-called experts." He questioned the intelligence and capabilities of experienced elected officials, journalists, academics, and other policy professionals. This rhetoric clearly seems to have struck a chord with working class, rural, and otherwise disaffected individuals.

The research I have presented here perhaps gives us some insight into why many of the high-profile renunciations of Donald Trump we heard during the campaign seemed to

have had so little effect. Newspaper editors, national security officials, former Presidents, government officials, and conservative and liberal pundits alike lined up in their vocal and detailed opposition to a Trump presidency over the course of the campaign. However, most of these appeals appear to have fallen on many deaf ears. Clearly, it seems that many of Trump's supporters felt they have lost their voice in the nation's political discourse and resent the way they've been talked down to, and about, by the "intellectual elite."

This study has been an attempt to understand that resentment, and to develop a set of measures that will help us explore it in more detail. There is a rich field of inquiry that can potentially be opened up with these operationalizations. Is anti-intellectualism at play when people come under the spell of misinformation? Can we develop strategies for overcoming the pervasiveness of misinformation if we understand the barriers that anti-intellectualism create? These are questions that I hope to explore in future research with the operationalizations I have created here.

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Table 1 – Anti-Intellectualism Survey Items

Dimension – *Populist Anti-Elitism*

CONDESCENDING	Highly educated people think they know what's good for people than the people themselves.
ARROGANT	Highly educated people have an arrogant way about them.
INFLUENCE	I am concerned that highly educated people have too much influence in our political system.

Dimension – *Unreflective Instrumentalism*

VOCATIONALISM1	Courses in Philosophy won't help students get a job after they graduate so they shouldn't be required by colleges and universities.
VOCATIONALISM2	Subjects like Business and Computer Science are more important than Literature and Philosophy.
VOCATIONALISM3	Universities and colleges place too much emphasis on subjects like Philosophy and the Arts and not enough on practical job training.

Dimension – *Religious Anti-Rationalism*

THREAT1	It is troubling when science challenges someone's deeply held beliefs.
THREAT2	Scientists should not conduct research that challenges religious doctrine.
THREAT3	It is troubling that some people put more of their trust in science than they do in religion.

Table 2 – Univariate Statistics for Anti-Intellectual Dimension Scales

Dimension	Mean	Standard Deviation
Populist Anti-Elitism	7.00	2.69
Unreflective Instrumentalism	6.26	2.74
Religious Anti-Rationalism	5.38	3.22

Table 3 – Attitudinal Correlates of Anti-Intellectualism

	Populist Anti-Elitism	Unreflective Instrumentalism	Religious Anti-Rationalism
Confidence in…			
Public education system	-0.10***	-0.03	0.06*
Scientific community	-0.25***	-0.14***	-0.29***
Universities and Colleges	-0.23***	-0.17***	-0.05
Organized religion	0.10**	0.12***	0.34***
Medical system	-0.08**	-0.01	-0.02
Affect toward…			
Elementary teachers	-0.10***	-0.12***	-0.07*
High school teachers	-0.14***	-0.17***	-0.04
College professors	-0.29***	-0.27***	-0.13***
Research scientists	-0.31***	-0.16***	-0.31***
Medical doctors	-0.12***	-0.05	-0.02
Lawyers	-0.11***	-0.03	0.12***
Religious leaders	0.11***	0.06*	0.45***
Attitudes and Beliefs			
Increase Education $	-0.16***	-0.20***	-0.14***
Global warming denial	0.14***	0.14***	0.10**
Warming human caused	-0.12***	-0.12***	-0.22***
Vaccines/Autism link	0.21***	0.14***	0.34**
GMOs unsafe	0.05	0.06*	0.18***
Pesticides unsafe	0.03	0.05	0.10**
Evolution	-0.17***	-0.14***	-0.45***

Figures are Pearson's r.

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 4 - The Determinants of Anti-Intellectualism

	Populist Anti-Elitism		**Unreflective Instrumentalism**		**Religious Anti-Rationalism**	
	b	**BETA**	**b**	**BETA**	**b**	**BETA**
Education	-0.33	-0.17***	-0.19	-0.10**	-0.25	-0.11***
	(0.06)		(0.07)		(0.06)	
Political Information	-0.13	-0.10**	-0.22	-0.16***	-0.25	0.15***
	(0.05)		(0.05)		(0.04)	
Ideology	0.22	0.14***	0.28	0.17***	0.23	0.12***
	(0.05)		(0.06)		(0.05)	
Political Efficacy						
Internal	0.05	0.03	0.04	0.02	-0.04	-0.02
	(0.05)		(0.05)		(0.05)	
External	-0.38	-0.27***	-0.31	-0.22***	-0.14	-0.08**
	(0.04)		(0.05)		(0.04)	
Political Trust	-0.09	-0.06†	0.01	0.00	0.12	0.07**
	(0.04)		(0.05)		(0.04)	
Biblical Liberalism	-0.27	-0.15***	-0.24	-0.13**	-1.04	-0.47***
	(0.07)		(0.07)		(0.06)	
Church Attendance	0.16	0.09**	0.01	0.01	0.36	0.18***
	(0.06)		(0.06)		(0.06)	
Age	0.10	0.06 †	-0.04	-0.02	0.11	0.05*
	(0.05)		(0.06)		(0.05)	
Female	-0.53	-0.10**	-0.37	-0.07*	0.02	0.00
	(0.16)		(0.18)		(0.16)	
Black	-0.25	-0.03	0.24	0.03	0.33	0.04
	(0.22)		(0.24)		(0.22)	
Income	0.01	0.01	0.03	0.02	-0.03	-0.02
	(0.04)		(0.05)		(0.04)	
Rural	0.00	0.00	-0.18	-0.4	0.04	0.01
	(0.12)		(0.14)		(0.12)	
Constant	10.82***		9.90***		11.56***	
	(0.77)		(0.85)		(0.77)	
R^2	**0.26**		**0.16**		**0.50**	

Figures are OLS regression coefficients. Figures in parentheses are standard errors.
* = p < .05 ** = p < 0.01 *** = p < 0.001 † = p < 0.10

Table 5 – Anti-Intellectualism and Vote Choice

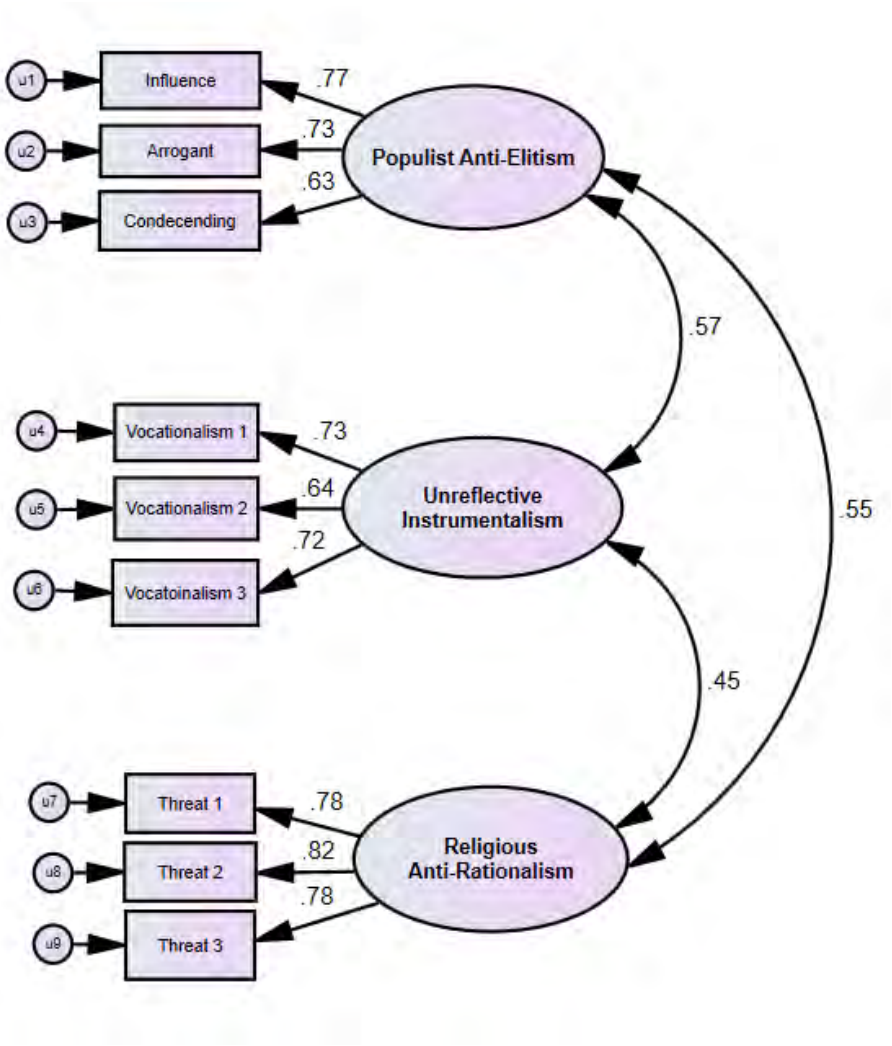
	b	Odds Ratio
Party Identification	1.16***	3.19
	(0.09)	
Ideology	0.26*	1.29
	(0.11)	
Populist Anti-Elitism	0.18**	1.20
	(0.07)	
Unreflective Instrumentalism	0.11†	1.12
	(0.06)	
Religious Anti-Rationalism	0.03	1.03
	(0.05)	
Constant	-7.741	
Pseudo R^2	0.79	
Model Chi-Square	652.07	$p < 0.001$
Cases correctly classified	92.8%	

N = 751

† = $p < 0.10$
* = $p < 0.05$
** = $p < 0.01$
*** = $p < 0.001$

Note: The dependent variable is Vote Intention (0 = Clinton, 1 = Trump)
Figures in parentheses are standard errors.

Figure 1 – Confirmatory Factor Analysis of Anti-Intellectualism Items



Parameter values represent standardized regression estimates. All have p > .001

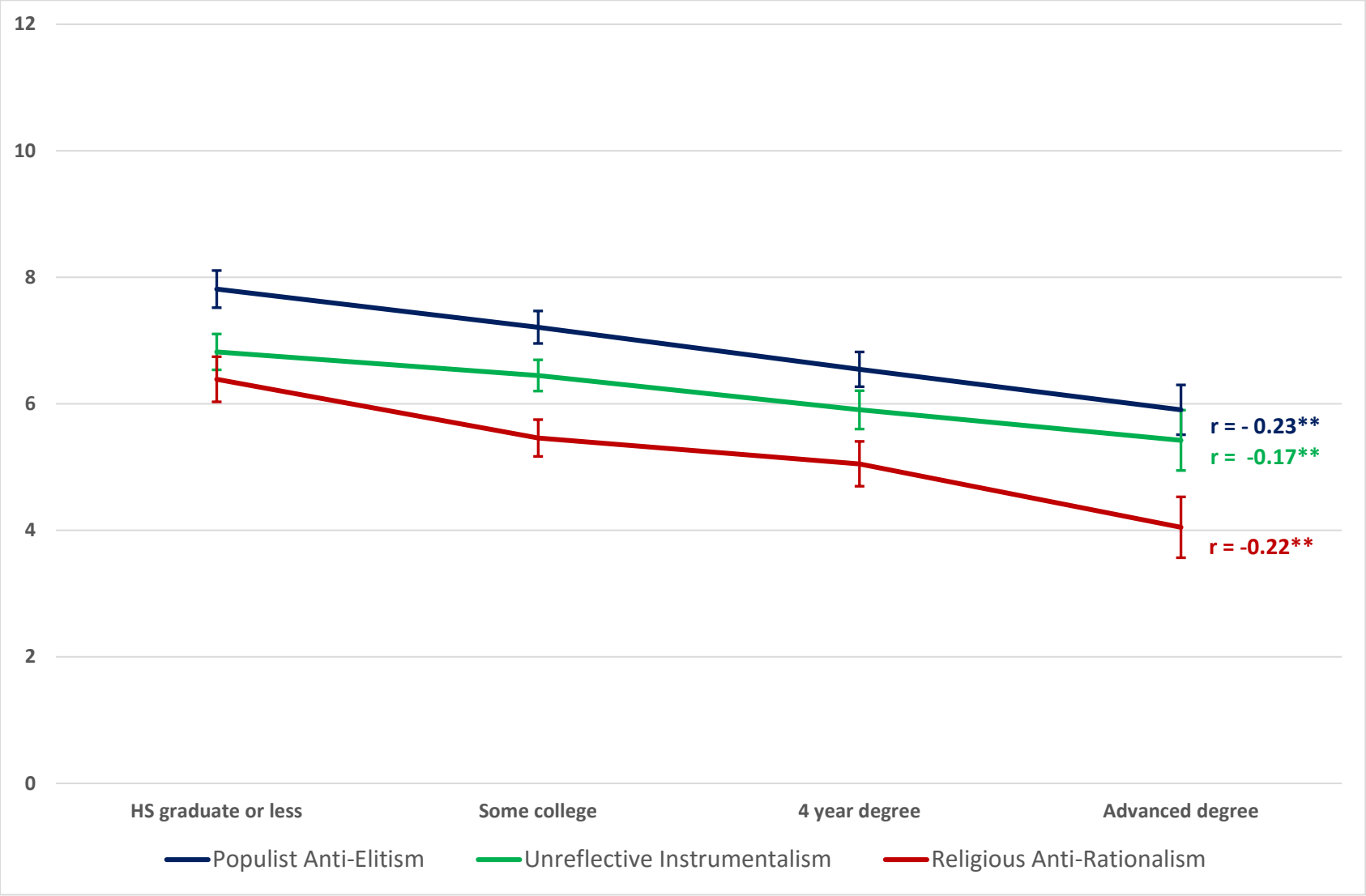
Goodness of Fit Statistics

Chi-Square = 116.982, DF = 24 p = .000
Chi-Square/DF = 4.874

Adjusted Goodness of Fit Index = .960
Comparative Fit Index = .975

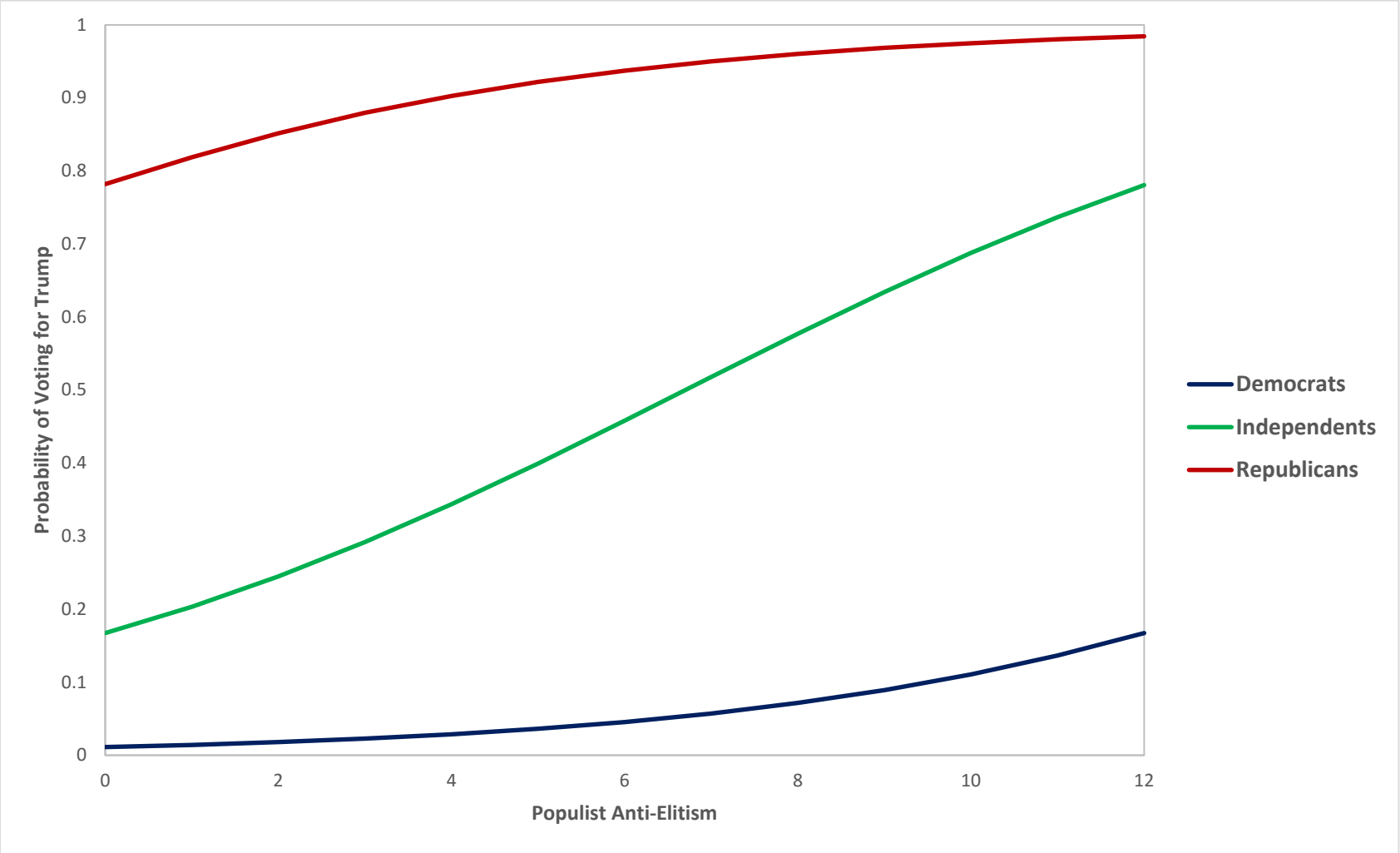
Root Mean Square Error of Approximation = .056

Figure 2 – Anti-Intellectualism by Education Level



Note: The lines represent group means for each level of education. The "whiskers" represent 95% confidence intervals around each mean.

Figure 3 – Party Identification, Anti-Intellectualism, and the Probability of Voting for Trump



APPENDIX – UVU Education Survey Sample Characteristics

Sex	
Male	49.1%
Female	50.9%

Race	
White	61.6%
Black	15.9%
Latino	14.5%
Asian	5.5%
Other	2.5%

Education	
< High School Degree	2.0%
High School Degree	21.7%
Some College	25.3%
2 year Degree	11.6%
4 year Degree	25.6%
Advanced Degree	13.8%

Income	
< $20K	16.7%
$20K - $50K	33.7%
$50K - $70K	19.1%
$70K - $100K	15.3%
$100K - $150K	9.1%
> $150K	6.2%

Region	
Northeast	23.5%
Midwest	20.3%
South	33.9%
West	22.3%

Age	
18 – 24	8.9%
25 - 44	46.3%
45 – 64	31.0%
65+	13.8%

N = 1220