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Pure Authoritarianism: A New Approach to Authoritarianism

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PURE AUTHORITARIANISM:
A NEW APPROACH TO AUTHORITARIANISM

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Michael E. Vallerga

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PURE AUTHORITARIANISM:
A NEW APPROACH TO AUTHORITARIANISM

by

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ABSTRACT

PURE AUTHORITARIANISM: A NEW APPROACH TO AUTHORITARIANISM

by Michael E. Vallerga

Attempting to explain the Holocaust, Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) developed a theory of the authoritarian personality, looking at people who follow strong leaders and adhere to tradition. Altemeyer (1996) conceptualized authoritarianism as Authoritarian Submission (submission to authority), Authoritarian Aggression (aggression on behalf of an authority), and Conventionalism (adherence to tradition). However, his Right Wing Authoritarianism (RWA) scale is ideologically biased and is unable to separate the different aspects of authoritarianism. The present study improved upon RWA by creating the Pure Authoritarianism (PA) scale.

The present study developed PA as a measure of authoritarianism with each aspect of authoritarianism as a separate subscale and, with it, looked at the relationship between authoritarianism and ideology. PA and its subscales are each best described by a single factor, and each are internally reliable. Regression analyses of PA with RWA and ideology, respectively, supported convergent and discriminant validity. These analyses showed Conventionalism to be strongly related to conservatism. Other aspects of authoritarianism were found to be unrelated to ideology. Regression analyses examined the relationship between authoritarianism and ideology by comparing PA to issue questions. With refinement, PA's subscales could be used to better understand authoritarianism and possibly prevent future tragedies that arise out of it.

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Introduction

As World War II came to an end, psychologists raced to determine how the German people became a party to the brutalities of the Holocaust. One line of research that came out of this tragedy was the authoritarian personality, which was intended to explain German participation in the Holocaust, including an examination of ethnocentrism, heterosexism, and anti-democratic tendencies.

The Authoritarian Personality

In reaction to the Holocaust, Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) constructed and validated an anti-semitism scale and an ethnocentrism scale. The authors made a detailed examination of those prejudiced against Jews and those prejudiced against minorities in general. From clinical analyses, the authors found that many of these people also have anti-democratic tendencies.

The F scale. Adorno et al. (1950) examined the relationship between racism and anti-democratic tendencies, two primary features of the brutalities committed by the German people under the authority of the Nazi party. This relationship was codified in the Authoritarian Personality, which suggests that some people are racist or ethnocentric because of an adherence to an authority's norm in the treatment of minorities.

The fascism (F) scale (Adorno et al., 1950) attempted to measure nine aspects of authoritarianism: conventionalism, authoritarian submission, authoritarian aggression, anti-intraception, superstition and stereotypy, power and toughness,

destructiveness and cynicism, projectivity, and sex. These nine areas represented different aspects of the basic nature of authoritarianism, acting on behalf of authorities both internally and externally. The F scale was found to be strongly related to previous measures of anti-semitism and ethnocentrism. The Authoritarian Personality was heralded as a landmark study that brought the study of personality influences on racism to the forefront.

Right Wing Authoritarianism

In contrast to the Authoritarian Personality (Adorno et al., 1950), Altemeyer (1996) proposed that authoritarianism is not a personality type, but a cluster of attitudes. He implicitly added conservatism to his definition of authoritarianism as one point in a constellation of attitudes that relate to authoritarianism. He called this new concept Right Wing Authoritarianism. In contrast to the Authoritarian Personality's syndrome of nine related characteristics, Altemeyer conceptualized authoritarianism as consisting of three core aspects. Authoritarian Submission is "a high degree of submission to the authorities who are perceived to be established and legitimate in the society in which one lives." Authoritarian Aggression is "a general aggressiveness, directed against various persons, that is perceived to be sanctioned by established authorities." Conventionalism is "a high degree of adherence to the social conventions that are perceived to be endorsed by society and its established authorities" (Altemeyer, 1996, p. 6). Altemeyer chose these subscales from the original F scale based upon their relevance to the more central anti-democratic tendencies.

Over two decades, Altemeyer developed Right-Wing Authoritarianism (RWA) into a very internally reliable measure of authoritarianism as seen by its consistently high alphas (Altemeyer, 1996). The RWA scale has been validated in a number of different populations across the world and has strong positive correlations with ethnocentrism, religiosity, heterosexism, and conservatism, among many other attitudes, feelings, and behaviors (Altemeyer, 1996).

Although Altemeyer's RWA scale (1996) has been the most popular measure of authoritarianism in recent decades, there are a few problematic aspects of the RWA scale. One problem is that most items within the RWA scale directly reference politically charged groups. Consider the RWA item: "Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly." In the above item, atheists and established religions are both specifically mentioned. As a result, this measurement of RWA is inherently ideologically biased, with a strong relationship to conservatism. This relationship makes it difficult to distinguish between this measure of authoritarianism and conservatism.

Another problem with this measurement of authoritarianism is that each item in the RWA scale represents at least two of the underlying aspects of RWA, making it impossible to divide the overall RWA scale into subscales. For example, "What our country really needs is a strong, determined leader [Authoritarian Submission] who will crush evil [Authoritarian Aggression], and take us back to our true path [Conventionalism]." As a result, the three diverse aspects of RWA cannot be measured independently.

The relationship between authoritarianism and ideology

A persistent controversy in authoritarianism research is over the relationship between political ideology and authoritarianism. Most measures of authoritarianism are strongly correlated with conservatism, which has been explained through a number of theories. Altemeyer (1996) takes the position that the relationship between these two concepts is not causal and that they simply coincide. Others (Eysenck, 1955; Stone, Lederer, & Christie, 1993) contend that there is a measurement flaw and that the content of the scale is ideologically charged in the direction of conservatism. For example, an item of the RWA scale reads, “What our country *really* needs, instead of more “civil rights” is a good stiff dose of law and order.”

Stenner (2005) makes a strong case that authoritarianism and conservatism are distinct, but related concepts that reinforce each other, but that more often, the former influences the latter. She suggests that they originate in different basic cognitive dispositions: authoritarianism is based upon inability to deal with complexity, and conservatism is based upon inability to deal with uncertainty. This brings some clarity to this heated debate that has been carried on with no definitive conclusion throughout its 50-year existence.

Liberal authoritarianism. Though most early work on authoritarianism focuses upon high scorers on the F scale, Adorno et al. (1950) closely examined low scorers on the F scale and sought to explain them. Through detailed case studies, the authors derived a number of possible personality types that could explain low scores

on the F scale. The two most relevant personalities of low scorers on the F scale embody two sides of an ongoing debate about the nature of authoritarianism and its relationship to ideology.

The “*Rigid*” *Low Scorer* was described by Adorno et al. (1950) to be almost the same as the type of respondents who scored high of the F scale but for their ideology. Because racism was used in this scale to determine authoritarianism, those who did not hold racist attitudes did not score highly. The authors suggest that these people hold many of the traditional authoritarian tendencies that can be seen in the high scorers but went undetected because of their ideological views.

Adorno et al. (1950) also suggested that some of those who scored low on the F scale were *Genuine Liberals*, described by the authors as anti-totalitarian in terms of authoritarianism and almost completely independent and autonomous. Genuine Liberals also hold corresponding ideological views, at least when regarding racism, which is reflected in their low scores on the F scale.

These two personality types represent an ambiguity in the Authoritarian Personality and the F scale that has remained since its development. The Genuine Liberal represents the antiauthoritarian, which is commonly conceptualized as the opposite of an authoritarian. The “Rigid” Low Scorer represents the left wing authoritarian, the existence of which has since been debated at great length (Altemeyer, 1996; Stone, 1980). The difficulty in distinguishing these two personalities indicates that the F scale was ideologically oriented to find

conservative authoritarians and is not sufficient to understand the nature of the relationship between ideology and authoritarianism.

Tough-mindedness and dogmatism. In an effort to understand the relationship between ideology and authoritarianism, Eysenck (1955) and Rokeach (1960) suggested a specific personality type that those with authoritarian characteristics shared. They proposed that the personality type should be evident in both conservative and liberal populations. They cited anecdotal evidence for left wing authoritarianism, suggesting that communist countries as well as some more radical left wing political groups in the West shared the authoritarian mandates and structures described in the theory of the Authoritarian Personality (Eysenck, 1955; Eysenck, 1981; Rokeach, 1960). Eysenck believed that the shared personality characteristic of those with an Authoritarian Personality was actually a shared tendency for tough-mindedness, or inflexibility in thinking. Rokeach similarly believed that personality characteristic was actually a tendency towards dogmatic thinking.

Each developed a scale to measure inflexibility in thinking (Eysenck, 1955; Rokeach, 1960). They designed their scales to be able to detect tough-mindedness and dogmatism in liberals as well as conservatives and did so by including only ideology-neutral items. Despite this conceptual improvement over the F scale, each scale had poor internal reliability and was unable to escape a meaningful correlation with conservatism (Altemeyer, 1996; Stone, 1980).

Altemeyer's (1996) Left Wing Authoritarianism scale. Altemeyer (1996), using an alternative perspective from Eysenck (1955) and Rokeach (1960) created a

Left Wing Authoritarianism (LWA) scale that was virtually identical to his RWA scale except that the submission, aggression and conventionalism constructs were oriented to a revolutionary group rather than the establishment. For example, “Socialist revolutions require great leadership. When a strong, determined rebel leads the attack on the Establishment, that person deserves our complete faith and support.” After extensive study, not one person scored above the theoretical mean on this LWA scale and there were moderately strong correlations between the LWA scale and the RWA scale (Altemeyer 1996).

Altemeyer tracked the number of high scorers in both RWA and LWA and discovered that some of the participants scored highly on both measures, called *wild-card authoritarians*, and some scored low on both measures, called *unauthoritarians*. The existence of these wild card authoritarians suggests that authoritarianism can transcend ideology, as they may indicate the presence of authoritarianism in ideologically neutral participants.

Van Hiel, Duriez, & Kossowska (2006) Left Wing Authoritarianism scale.

In an effort to demonstrate ideologically liberal authoritarians, Van Hiel et al. (2006) developed a new Left Wing Authoritarianism scale using two distinct subscales taken from Altemeyer’s (1996) RWA scale: Authoritarian Aggression and Authoritarian Submission. They reasoned that authoritarians on the left would not seem authoritarian in other areas common to the F scale and its successors. The authors sampled specific non-student populations including Neo-Marxists and Anarchists. Their new scale had adequate overall reliability and found left wing authoritarians in the Neo-Marxist and

Anarchist populations. The Authoritarian Aggression and Submission subscales had inadequate internal reliability, but were able to discriminate between the Neo-Marxists and the Anarchists. The Neo-Marxists scored highly on both the Authoritarian Aggression and Submission subscales, but the Anarchists only scored highly on the Authoritarian Aggression subscale. This speaks to differences in ideological outlook and types of authoritarianism (Van Hiel et al., 2006).

Though rare in the authoritarianism literature, researchers have found populations of authoritarians that are not conservative. Adorno et al. (1950) theorized that liberal authoritarians might account for some of the low scorers on the F scale. Van Hiel et al. (2006) created an authoritarianism scale that was able to detect a number of Left Wing Authoritarians in specific groups. While these studies are a small fraction of the general authoritarianism literature, they do support the idea that authoritarians without conservative leanings exist, though they need to be sought out.

The present study

The present study attempted to better understand the nature of the relationship between ideology and authoritarianism. Previous measures of authoritarianism are generally ideologically focused which makes the distinction between ideology and authoritarianism difficult to recognize.

The present line of research attempted to develop a more psychometrically sound measure of authoritarianism, using that improved measure of authoritarianism to determine if ideology is indeed bound to authoritarianism. Previous studies have generally found authoritarianism to be related to conservatism, but this relationship

could possibly be due to some of the conceptual and psychometric problems in the scales used. It was necessary to develop and examine the psychometric properties of a more ideologically neutral authoritarianism scale in an effort to find an ideologically independent measurement of authoritarianism.

This new measure reflects the three aspects of authoritarianism outlined by Altemeyer (1996). Conventionalism is a high degree of adherence to the social conventions perceived to be endorsed by society and its established authorities. Authoritarian Submission is a high degree of submission to personally accepted authorities. Authoritarian Aggression is a general aggressiveness, directed against various persons, which is perceived to be sanctioned by personally accepted authorities.

Approximately 20 items were generated for each of these three constructs. This Pure Authoritarianism (PA) scale was evaluated psychometrically for internal reliability, expecting a modest correlation between the overall scale and its subscales. Convergent validity with RWA was examined by a series of bivariate correlations between the PA scale, its subscales and RWA, expecting a moderate correlation between PA and RWA. Divergent validity with RWA was examined by a series of bivariate correlations between ideology, PA and its subscales, and RWA, expecting ideology to have a stronger relationship with RWA than with PA and its subscales. In an effort to examine the relationship between authoritarianism and ideology, this new ideologically neutral scale and its subscales were compared with diverse measures of ideology.

Methods

Participants

Two hundred and fifty San Jose State University Psychology 001 students (169 women and 81 men) participated for course credit. Their ages ranged between 18 and 45 ($M = 19.3$, $SD = 2.7$). Mostly Asian (77) and White (70) students participated (with 40 Latinos, 12 African Americans, 15 Pacific Islanders, 30 selected Other and 6 declined to answer).

Measures

Pure Authoritarianism scale. This scale (see Appendix A) is made up of 63 statements rated on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Half of the items are reverse scored. Items were either modified from previous measures of authoritarianism or were generated to encapsulate specific aspects of authoritarianism. Unlike Altemeyer's (1996) RWA scale, items were designed to not refer to ideologically charged entities and to represent single and distinct aspects of authoritarianism. This measure is based upon the framework of authoritarianism provided by Altemeyer with slight modifications to his definitions. As such, it includes three subscales: Authoritarian Aggression, Authoritarian Submission, and Conventionalism.

Authoritarian Aggression is aggression directed against persons perceived to be sanctioned by personally accepted authorities. Within the Authoritarian Aggression subscale, half of the items have overt references to aggression (e.g., "Dangerous people need to be dealt with harshly.") and half of the items do so implicitly, relating to a

divisive perspective (e.g., “There are people so different that they can never be a part of our community.”). *Authoritarian Submission* is a high degree of submission to personally accepted authorities (e.g., “No principal is more sacred than obedience.”). *Conventionalism* is a high degree of adherence to the social conventions that are perceived to be endorsed by society and its established authorities. Within the Conventionalism subscale, some of the items are related to the perception of change as bad (e.g., “We should keep the character of our community the way it is.”) and others are more related to a favorable view of the past (e.g., “I would prefer to live in a specific time in the past when more people were good.”). Specific aspects of this scale’s psychometric properties will be discussed in the results section.

Altemeyer’s (1996) RWA scale. Altemeyer’s (1996) RWA scale (See Appendix B) measures authoritarian tendencies including aggression on behalf of an authority (*Authoritarian Aggression*), submission to an authority (*Authoritarian Submission*), and adherence to established societal traditions (*Conventionalism*). These three aspects of authoritarianism are often represented in a single item (e.g., “Our country will be great if we honor the ways of our forefathers [Conventionalism], do what the authorities tell us to do [Authoritarian Submission], and get rid of the ‘rotten apples’ who are ruining everything [Authoritarian Aggression].”)

The RWA scale is made up of 34 statements, with a 9-point Likert scale (1 = *strongly disagree* to 9 = *strongly agree*). Half of the items are reverse scored. The RWA scale was found to be internally reliable with an alpha of .90. Responses

tended toward slightly below the middle of the scale ($M = 4.04$, $SD = 1.02$) and varied between 1.74 and 7.56. RWA has historically been found to correlate highly with ethnocentrism, heterosexism, and conservatism (Altemeyer, 1996).

Political ideology. *Ideology* was measured with a single item on a three-point scale asking participants about their ideological perspective (1 = *Liberal*, 2 = *Moderate*, and 3 = *Conservative*). Most participants considered themselves moderates (73) or liberals (65), with only 23 considering themselves conservative. Eighty-nine participants declined to answer this question.

Ideology issue items. These items, (See Appendix C) are comprised of a series of 9 opinion questions about political topics. They were taken from the 2004 American National Election Study. These questions are very specific (e.g., “Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. Where would you place yourself on this scale, or haven't you thought much about this?”).

Kerlinger's (1984) Referent scale. This ideological inventory (Knight, 1999; See Appendix D) includes 31 politically charged phrases (e.g., “Faith in God”, “Free Abortion”, and “Social Change”) rated on a 6-point scale, with 1 meaning “Very Strongly Disagree” and 6 meaning “Agree Very Strongly.” These phrases are prefaced with the instruction:

Ideas confront us on all sides. And these ideas affect our ways of thinking and behaving. The notions equality and moderation, for example, to some extent affect us and the way we think about ourselves and react to other people. Notions like love of country and women have rich meanings for us,

meanings that are bound up with our beliefs and opinions. Of course, different people will react differently to many concepts. Some people, for instance, will feel positively while others will feel negatively toward a word like Medicare. We would like you to indicate your positive or negative feeling about each of the words or phrases as follows.

Procedure

Participants contacted the experimenter by e-mail, found on fliers distributed in the Psychology department. Participants were sent a unique web address from which they were able to take the survey online. Participants first viewed a consent form that reminded them their participation is voluntary, that they are free to skip any question or end the survey entirely at any time, and that their responses would be confidential. They completed a number of scales including Pure Authoritarianism, RWA, Ideology, ideology issue questions, and the Referent Scale.

Results

Scale construction and refinement

A key feature of the Pure Authoritarianism scale is that each of the subscales is intended to be independently meaningful. As such, the initial PA scale was broken into Authoritarian Aggression, Authoritarian Submission, and Conventionalism subscales in an effort to find a single factor measure for each subscale.

Construction of the Authoritarian Aggression scale. The Authoritarian Aggression subscale was designed to measure aggression directed against various persons perceived to be sanctioned by personally accepted authorities. This scale should consist of strongly intercorrelated items that reflect such aggression. A reliability analysis showed the initial 23-item Authoritarian Aggression scale to be weakly reliable ($\alpha = .70$). An exploratory principal axis factor analysis was conducted to examine the relationship between Authoritarian Aggression items.

In the initial factor analysis, a total of seven factors with an eigenvalue greater than 1 were extracted, and these factors accounted for 39.3% of the variance. The scree plot suggested a two factor solution would be most parsimonious, with one dominant factor. The same analysis was conducted, constrained to a two-factor solution. These two factors extracted accounted for 24.0% of the variance (with eigenvalues of 3.91 and 1.62).

Inspection of the rotated factor loadings suggested that Factor 1 was most strongly related to the concept of *Authoritarian Aggression*, with high-loading items (factor loading $> .40$) that reflected a blunt and raw aggression (e.g., “Certain groups of people

deserve to be toughly sanctioned because they are menaces to society”). High-loading items on Factor 2 were mostly reverse-coded items.

Items that had factor loadings of lower than .40 on the first factor were removed from the scale in an effort to improve internal validity and reliability. The remaining 10 items were subjected to an exploratory factor analysis constrained to a one-factor solution, which yielded factor loadings of between .42 and .74.

This refined Authoritarian Aggression scale was found to be reliable ($\alpha = .83$). Responses tended toward slightly below the theoretical midpoint of the scale ($M = 3.66$, $SD = .85$) and varied between 1.67 and 6.50. The final Authoritarian Aggression scale consisted of 10 strongly interrelated items reflecting strong aggression on behalf of authority figures (see Table 1).

Table 1. Factor Analysis of Authoritarian Aggression Items

Please rate your agreement with the following statements	Factor Loading
Certain groups of people deserve to be toughly sanctioned because they are menaces to society.	.74
If this country's situation is serious enough, the strongest methods would be justified to eliminate the troublemakers.	.69
Dangerous people need to be dealt with harshly.	.65
Some types of people need to be prevented from participating in society because they are corrupting forces.	.63
For the best of society we need to get rid of people that are ruining everything.	.59
Some of those that have hurt us deserve harsh punishment.	.56
We need officials that believe that the best way to lead is with a firm hand.	.51
Society needs to be aggressively defended against threats.	.50
If a good leader needs me to enforce a rule necessary to a better world, I will take action.	.45
There are people so different that they can never be a part of out community.	.42
Alpha	.83
<i>M(SD)</i>	3.66 (0.85)
Range of scores	1.67 – 6.50

Construction of the Authoritarian Submission Scale. The Authoritarian Submission subscale was designed to measure submission to personally accepted authorities. This scale should consist of strongly intercorrelated items that reflect such submission. A reliability analysis showed the initial 20-item Authoritarian Submission scale to be weakly reliable ($\alpha = .70$). An exploratory factor analysis was conducted to examine the relationship between Authoritarian Submission items.

In the initial principal axis factor analysis, a total of five factors with an eigenvalue greater than 1 were extracted, and these factors accounted for 53.2% of the variance. The scree plot suggested a two factor solution would be most parsimonious, with one dominant factor. The same analysis was conducted, constrained to a two-factor solution. These 2 factors accounted for 32.5% of the variance (with eigenvalues of 4.12 and 2.34).

Inspection of the rotated factor loadings suggested that Factor 1 was most strongly related to this concept of *Authoritarian Submission*, with high-loading items that reflected a simple affinity for strong leaders (e.g., “Leaders need to be followed for the good of society.”) High-loading items on Factor 2 were mostly reverse-coded items.

Items that had factor loadings of .40 or lower were removed from the scale in an effort to improve internal validity and reliability. The remaining 11 items were subjected to an exploratory factor analysis constrained to a one-factor solution, which yielded factor loadings of between .46 and .69.

This refined Authoritarian Submission scale was found to be reliable ($\alpha = .81$). Responses tended toward theoretical midpoint of the scale ($M = 3.99$, $SD = .80$) and

varied between 2.18 and 6.91. The final Authoritarian Submission scale consisted of 11 strongly interrelated items reflecting submission to personally accepted authorities (see Table 2).

Construction of the Conventionalism scale. The Conventionalism subscale was designed to measure adherence to established societal traditions. This scale should consist of strongly intercorrelated items that reflect such adherence to tradition. A reliability analysis showed the initial 20-item Conventionalism scale to be weakly reliable ($\alpha = .69$). An exploratory factor analysis was conducted to examine the relationship between Conventionalism items.

In the initial principal axis factor analysis, a total of five factors with an eigenvalue greater than 1 were extracted, and these factors accounted for 57.9% of the variance. The scree plot suggested a two factor solution would be most parsimonious, with one dominant factor. The same analysis was conducted, constrained to a two-factor solution. These two factors accounted for 38.3% of the variance (with eigenvalues of 4.58 and 3.10).

Inspection of the rotated factor loadings suggested that Factor 1 was most strongly related to this concept of *Conventionalism*, with high-loading items that reflected a concern for morality and yearning for better days of the past (e.g., “A good leader understands that we need to maintain traditions”). High-loading items on Factor 2 were mostly reverse-coded items.

Table 2. Factor Analysis of Authoritarian Submission Items

Please rate your agreement with the following statements	Factor Loading
Leaders need to be followed for the good of society.	.69
If I break one of my society's rules, I am hurting the values I believe in.	.62
Some leaders just know what needs to be done.	.57
I feel better knowing that there are people out there to lead me.	.56
No principal is more sacred than obedience.	.51
The world would be better if we did what the appropriate authorities tell us to do.	.50
To achieve positive change, we need to do what the right people want us to do.	.49
Organizations function best when there is a strong leader.	.48
We desperately need a mighty leader.	.48
Our chief want in life is somebody to make us do what we should.	.46
Respect for authority is one of the most important virtues children should learn.	.46
Alpha	.81
<i>M(SD)</i>	3.99 (0.80)
Range of scores	2.18 – 6.91

Items that had factor loadings of .40 or lower were removed from the scale in an effort to improve internal validity and reliability. The remaining 9 items were subjected to an exploratory factor analysis constrained to a one-factor solution, which yielded factor loadings of between .40 and .71.

This refined Conventionalism scale was found to be reliable ($\alpha = .81$). Responses tended toward theoretical midpoint of the scale ($M = 4.03$, $SD = .89$) and varied between 2.00 and 6.89. The final Conventionalism scale consisted of 9 strongly interrelated items reflecting strong adherence to established societal traditions (see Table 3).

Construction of the Pure Authoritarianism scale. The three refined subscales were combined to form a 30 item, refined Pure Authoritarianism scale. These items were subjected to an exploratory principal axis factor analysis constrained to a one-factor solution, which yielded factor loadings of between .30 and .62. A series of bivariate correlations shows the subscales to be moderately related. The Authoritarian Aggression and Conventionalism subscales had the weakest relationship ($r = .42$). The Authoritarian Submission and Conventionalism subscales have the strongest relationship (.60, see Table 4).

This refined Pure Authoritarianism scale was found to be reliable ($\alpha = .90$). Responses tended toward just below the theoretical midpoint of the scale ($M = 3.67$, $SD = .68$) and varied between 2.12 and 5.28. Compared with scores on the RWA scale, the mean is closer to the theoretical midpoint of the scale, though the range is more restricted.

Table 3. Factor Analysis of Conventionalism Items

Please rate your agreement with the following statements	Factor Loading
A good leader understands that we need to maintain traditions.	.71
We should try to recreate the good old days, when we had leaders we could believe in.	.67
We need a leader that stands for traditional values.	.67
We should preserve customs that are embedded in our society.	.64
Our societal heritage needs to be safeguarded.	.59
Society is crumbling because people lack moral values.	.55
People should emulate great leaders from the past.	.48
I would prefer to live in a specific time in the past when more people were good.	.46
It's best to "stick to the straight and narrow" by following examples set by good role models.	.40
Alpha	.81
<i>M(SD)</i>	4.03 (0.89)
Range of scores	2.00 – 6.89

Table 4. Bivariate Correlations Between Pure Authoritarianism, Pure Authoritarianism Subscales, Right Wing Authoritarianism and Ideology

	PA	AA	AS	C	RWA	Ideology
PA	1					
AA	.81***	1				
AS	.87***	.55***	1			
C	.80***	.42***	.60***	1		
RWA	.50***	.34***	.42***	.49***	1	
Ideology	.29**	.23*	.21**	.31**	.35***	1

* $p < .05$. ** $p < .01$. *** $p < .001$.

$n = 196$

PA = Pure Authoritarianism, AA= Authoritarian Aggression, AS = Authoritarian Submission, C = Conventionalism , RWA = Right Wing Authoritarianism

The final scale consisted of 30 interrelated items reflecting strong aggression on behalf of authority figures, submission to personally accepted authorities, and strong adherence to established societal traditions.

All of the items in the final Pure Authoritarianism scale were positively coded, meaning that agreement with each item was taken as part of an indicator of authoritarianism. Altemeyer meticulously made sure that approximately half of the items in any incarnation of his RWA scale were negatively coded. He did this in an effort to curb acquiescence, the tendency to agree with everything in a scale (Altemeyer, 1996). Because the PA scale does not have any reverse coded items, people who tend to do this will slightly confound the results. Future studies using this scale should attempt to add negatively worded items in an effort to prevent this type of confound.

Validation of Pure Authoritarianism

Convergent validity of Pure Authoritarianism. The Pure Authoritarianism scale was designed to measure authoritarianism in the same way that RWA measures authoritarianism, but with less overt ideological references. As such, PA and RWA should be related, but moderately, showing they are not measuring precisely the same concept. If PA's subscales have all become more ideologically neutral, they should be evenly related to RWA. If some scales have become more ideologically neutral and some have not, those that have not become more ideologically neutral should be more strongly related to RWA, as RWA is also not ideologically neutral (Altemeyer, 1996).

In an effort to examine the convergent validity of Pure Authoritarianism, a series of bivariate correlations (See Table 4) between the refined overall PA scale and its

subscales were conducted. Unless otherwise noted, all of the correlations are significant at the $p < .001$ level. These correlations showed that while the overall scale was moderately correlated with RWA ($r = .50$), the Conventionalism subscale was the most strongly related to RWA ($r = .49$) and the Authoritarian Aggression subscale was only weakly related to RWA ($r = .34$). These relationships to the RWA may also be influenced by the strong intercorrelation of these subscales. The moderate correlation between the PA scale and the RWA scale suggests that they both measure the same underlying concept, supporting the convergent validity of the PA scale.

A standard regression analysis (see Table 5) was conducted upon the refined Pure Authoritarianism subscales to examine their relationships with RWA independent from one-another. The model was statistically significant, with $R^2 = .27$, $F(3, 193) = 24.12$, $p < .001$. However, only Conventionalism significantly contributed to variance in RWA ($\beta = 0.35$, $t = 4.53$, $p < .001$), indicating that as Conventionalism increased, so did RWA. This suggests that the relationship between Conventionalism and RWA is based primarily on an ideological commonality.

Divergent validity of Pure Authoritarianism. The relationship between Conventionalism and RWA could easily be due to ideological biases within the two scales. Van Hiel et al. (2006) suggested that conventionalism is essentially conservatism and has no place within an authoritarianism scale. If this is the case, ideology should be more strongly related to Conventionalism than with Authoritarian Aggression or Authoritarian Submission.

Table 5. Regression Analyses of Pure Authoritarianism subscales predicting Right Wing Authoritarianism and Ideology

	RWA		Ideology	
	R^2	β	R^2	β
	.27**		.33**	
AA		.13		.09
AS		.14		-.04
C		.35**		.30*
	$F = 24.12$		$F = 5.38$	

* $p < .01$. ** $p < .001$

AA = Authoritarian Aggression, AS = Authoritarian Submission,
 C = Conventionalism, RWA = Right Wing Authoritarianism

A series of bivariate correlations between the PA subscales and ideology were conducted (See Table 4). Unless otherwise noted, all of the correlations are significant at the $p < .05$ level. These correlations showed that, while the overall scale was weakly correlated with ideology ($r = .29$), the Conventionalism subscale was most strongly related to ideology ($r = .31$). Again, these relationships may be reflecting the intercorrelation of these subscales.

A standard regression analysis (See Table 5) was conducted upon the refined Pure Authoritarianism subscales to examine their relationships with ideology independent from one-another. The model was statistically significant, with $R^2 = .33$, $F(3, 134) = 5.38$, $p < .001$. Only Conventionalism significantly contributed to variance in ideology ($\beta = 0.30$, $t = 2.77$, $p < .01$), indicating that as Conventionalism increased, so did ideology. Conventionalism has a strong and clear relationship to RWA and Ideology, providing support to the idea that Conventionalism is essentially a form of conservatism. The former relationship is possibly mediated by the latter.

This regression analysis also confirms that, once Conventionalism is controlled for, Authoritarian Aggression and Authoritarian Submission do not correlate with ideology. This suggests that, although Conventionalism plays a role in Altemeyer's (1996) conception of Right-Wing Authoritarianism, it may not be very relevant to a more ideologically neutral measurement of authoritarianism.

The differences in ideology's relationship to PA and RWA suggests that while the two scales measure the same underlying concept, they measure authoritarianism differently, supporting the divergent validity of the PA scale.

Relationship with ideological issues

In an effort to examine the predictive validity of Pure Authoritarianism and its subscales, responses to 54 ideological issue items were compared with each of the subscales separately through a series of hierarchical multiple regression analyses. The previous analyses indicated that the Conventionalism subscale is the only aspect of the Pure Authoritarianism scale that is related to ideology. As such, issue items upon which Conventionalism load strongly are governed more by ideology. Issue items upon which Authoritarian Aggression and Authoritarian Submission load strongly are governed more by authoritarianism. Right Wing Authoritarianism was included in these analyses in an effort to establish divergent validity, distinguishing between issues that are related to RWA scores and issues related to PA scores.

Predicted subscale loadings

Before conducting the multiple regression analyses, each ideological issue item was identified as being expected to be more related to Authoritarian Aggression, Authoritarian Submission, Conventionalism, or not strongly related to any aspect of authoritarianism. Items expected to be more related to Authoritarian Aggression either implicitly represented aggressive attitudes (e.g., “Some people believe that we should spend much less money for defense. Others feel that defense spending should be greatly increased. Where would you place yourself on this scale or haven't you thought much about this?”) or implicitly referenced outgroups that are traditionally the targets of aggression by authorities (e.g., “Some people feel that the government in Washington should make every effort to improve the social and economic position of blacks. Others

feel that the government should not make any special effort to help blacks because they should help themselves. Where would you place yourself on this scale, or haven't you thought much about it?")

Items expected to be more related to Authoritarian Submission were either related to the size of government (e.g., "Some people are afraid the government in Washington is getting too powerful for the good of the country and the individual person. Others feel that the government in Washington is not getting too strong. What is your feeling, do you think the government is getting too powerful or do you think the government is not getting too strong?") or related to autonomy (e.g., a rating of feelings toward the concept of "Freedom")

Items expected to be more related to Conventionalism were related to societal norms (e.g., a rating of feelings toward the concepts of "Abortion" or "Sexual Freedom"). Items that did not fit any of these definitions were not classified and were expected to not be related to any aspect of authoritarianism (see Table 6 for more detail).

Analysis of issue items

A series of hierarchical regression analyses were conducted upon all 54 of the ideological issues in an effort to examine their relationships with the refined Pure Authoritarianism subscales and RWA.

Table 6. Expected Relationships Between Pure Authoritarianism Subscales and Issue Items

Ideological Issue Item	AA	AS	C	None
Government Affirmative Action	X			
Government Equal Opportunity	X			
Defense Spending	X			
Government Size		X		
Women Equality		X		
Government Trust		X		
Abortion			X	
Government Insurance				X
Government Jobs				X
Government Services				X
Referent Scale Item	AA	AS	C	None
Law and Order	X			
Racial Equality	X			
Equality	X			
Civil Rights	X			
Discipline		X		
Freedom		X		
Faith in God		X		
Obedience of Children		X		
Religion		X		
Equality of Women		X		

Authority	X	X	
Patriotism	X	X	
Free Abortion			X
Sexual Freedom			X
Social Change			X
Moral Standards			X
Social Stability			X
Feeling			X
Government Price Controls			X
Business			X
Corporate Industry			X
Collective Bargaining			X
Socialized Medicine			X
Private Property			X
Capitalism			X
Social Status			X
Social Planning			X
Free Enterprise			X
Children's Interests			X
Labor Unions			X
United Nations			X

AA = Authoritarian Aggression, AS = Authoritarian Submission, C = Conventionalism,

The analyses were conducted with two-step models. The first step contained only the three PA subscales (Authoritarian Aggression, Authoritarian Submission, and Conventionalism) in an effort to examine relationships between the issue items and the subscales by themselves. The second step also included the RWA scale in an effort to examine any unique relationships between PA subscales and the issue items, distinct from the influence of RWA.

The predicted subscale associations expressed above did not bear out in the results of these analyses. The following is a brief summary of the results in comparison with the predicted results (see Table 7 for more detail).

The Authoritarian Aggression subscale did not predict attitudes referring implicitly to aggression. Instead, the Authoritarian Submission subscale was a significant predictor of both issue items that referred implicitly to aggression. In retrospect, it fits with the definition of Authoritarian Submission for Authoritarian Submission to predict these items, because these aggressive attitudes were on behalf of more government power.

The Authoritarian Aggression subscale did not predict attitudes referring implicitly to outgroups that are traditionally targets of aggression by authorities. Instead, the Right Wing Authoritarianism scale predicted three out of five of these issues. These associations are likely the result of an artifact in the history of the scale's development: the original Fascism scale (Adorno, et. al., 1954) and the subsequent Right Wing Authoritarianism scale (Altemeyer, 1994) were developed to, in part, measure authoritarianism related to prejudicial authorities. The Pure Authoritarianism scale was developed to measure authoritarianism in general.

Table 7. Actual Relationships Between Pure Authoritarianism Subscales, Right Wing Authoritarianism and Issue Items

Ideological Issue Item	PA Subscales			RWA	None
	AA	AS	C		
Government Affirmative Action	X				
Abortion	X			X	
Defense Spending		X			
Government Size			X		
Government Jobs			X		
Women Equality				X	
Government Services				X	
Government Insurance				X	
Government Equal Opportunity					X
Government Trust					X
Referent Scale Item	AA	AS	C	RWA	None
Faith in God	X			X	
Religion	X			X	
Free Abortion	X			X	
Government Price Controls	X	X			
Collective Bargaining		X	X		
Law and Order		X			
Civil Rights		X		X	
Authority		X		X	
Social Planning		X		X	
United Nations		X		X	

Obedience of Children	X		
Private Property		X	X
Socialized Medicine	X		X
Free Enterprise	X		X
Racial Equality			X
Equality			X
Equality of Women			X
Sexual Freedom			X
Social Change			X
Social Stability			X
Labor Unions			X
Freedom			X
Patriotism			X
Moral Standards			X
Feeling			X
Business			X
Corporate Industry			X
Capitalism			X
Social Status			X
Children's Interests			X
Discipline			X

PA = Pure Authoritarianism, AA = Authoritarian Aggression, AS = Authoritarian Submission, C = Conventionalism, RWA = Right Wing Authoritarianism

The Authoritarian Submission subscale did not predict attitudes referring to the size and power of the government. Instead, the Conventionalism subscale predicted two out of four of these issues. These associations are likely the result of the Conventionalism scale's ideologically conservative nature, as these issue items represent a traditionally conservative perspective.

The Conventionalism subscale did not predict attitudes referring to religion and related topics. Instead, the Authoritarian Aggression subscale predicted three out of five of these issues. These associations are likely the result of the aggressive nature of the current state of religious discourse.

Religious and morally conservative issue items. Three issue items showed strong relationships with Authoritarian Aggression: an opinion question about abortion rights (higher scores meaning support for abortion rights) and two feelings questions about the terms "Faith in God" and "Religion" (higher scores meaning agreement with the term). For the opinion question about abortion rights, the initial model was statistically significant, with $R^2 = .06$, $F(3, 191) = 4.04$; $p < .01$. Once RWA was added, the model continued to be statistically significant, with $R^2 = .24$, $F(3, 190) = 14.96$; $p < .001$. In the final model, RWA significantly contributed the most to variance in opinions about abortion rights ($\beta = -0.50$, $t = -6.70$, $p < .001$), indicating that as RWA increased, ideological stances for abortion rights lowered. Authoritarian Aggression also significantly contributed to variance in opinions about abortion rights ($\beta = 0.21$, $t = 2.73$, $p < .01$), indicating that as Authoritarian Aggression increased, ideological stances for abortion rights also increased.

The feelings questions about the phrases “*Faith in God*” and “*Religion*” both had similar results to the above: the model was statistically significant before and after RWA was added in each of these analyses (see Table 8 for more detail). In the final model, RWA significantly contributed the most to variance in feelings about “*Faith in God*” and “*Religion*”, but Authoritarian Aggression also significantly contributed to variance in feelings about “*Faith in God*” and “*Religion*.”

The above analyses suggest that, once the influence of RWA is accounted for, Authoritarian Aggression is related to negative feelings about religion and positive attitudes toward abortion. These results are the opposite of those typically seen in the authoritarianism literature. Altemeyer (1996) has demonstrated repeatedly that increased authoritarianism is related to high religiosity and negative views of abortion.

Strong state defense issue items. Two issue items showed strong, independent relationships with Authoritarian Submission: an opinion question about defense spending (higher scores meaning supporting increased defense spending) and feelings about the term “Law and Order” (higher scores meaning agreement with the term; see Table 9 for more detail). For the opinion question about defense spending, the initial model was statistically significant, with $R^2 = .08$, $F(3, 189) = 5.24$; $p < .01$. Once RWA was added, the change in the model was not statistically significant ($p = .55$). In the final model, only Authoritarian Submission significantly contributed to variance in opinions about defense spending ($\beta = 0.25$, $t = 2.60$, $p < .01$), indicating that as Authoritarian Submission increased, ideological stances for defense spending also increased.

Table 8. Hierarchical Multiple Regression with Religious and Morally Conservative Issue Items

	Abortion Rights		“Faith in God”		“Religion”	
	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$
Block 1		.06**		.07**		.05*
AA	.21 (.08)**		.27 (.17)***		.25(.17)	
AS	-.14 (.11)		.02 (.22)		0(.21)	
C	.07 (.09)		-.10 (.18)		-.07 (.18)	
Block 2		.18***		.13***		.07***
RWA	-.50 (.07)***		-.43 (.15)***		-.30 (.14)***	
Total R^2		.24***		.20***		.11***
F		14.96		12.22		6.15

Note: All betas listed are from model 2 analysis.

* $p < .05$. ** $p < .01$. *** $p < .001$.

For Abortion Rights, higher scores represent support for abortion rights.

For “Faith in God” and “Religion”, higher scores represent agreement with that term.

AA = Authoritarian Aggression, AS = Authoritarian Submission,

C = Conventionalism, RWA = Right Wing Authoritarianism

Table 9. Hierarchical Multiple Regression with Strong State Defense Issue Items

	Defense Spending		“Law and Order”	
	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$
Block 1		.08**		.05*
AA	.01 (.12)		-.04 (.13)	
AS	.25 (.15)**		-.20 (.16)*	
C	.01 (.10)		.09 (.14)	
Block 2		.00		.01
RWA	.05		-.10 (.11)	
Total R^2		.06**		.04
F		4.00		2.85

Note: All betas listed are from model 2 analysis.

* $p < .05$. ** $p < .01$.

For Defense Spending, higher scores represent support of higher defense spending.

For “Law and Order” higher scores represent agreement with the concept of Law and Order.

AA = Authoritarian Aggression, AS = Authoritarian Submission,

C = Conventionalism, RWA = Right Wing Authoritarianism

For the feelings question about “Law and Order”, the initial model was statistically significant, with $R^2 = .05$, $F(3, 193) = 2.85$; $p < .05$. Once RWA was added, the change in the model was not statistically significant ($p = .22$). In the final model, only Authoritarian Submission significantly contributed to variance in feelings about “Law and Order” ($\beta = -.20$, $t = -2.12$, $p < .05$), indicating that as Authoritarian Submission increased, negative feelings about “Law and Order” decreased.

The above analyses suggest that Authoritarian Submission is related to positive feelings about a strong central government that keeps its citizens in order.

Expansive government and social program issue items. Two issue items showed strong, independent relationships with Authoritarian Submission: an opinion question about size of government (higher scores meaning that the government is not getting too big) and an opinion question about government jobs (higher responses meaning the government should be providing jobs; See Table 10 for more detail). For the opinion question about government jobs, the initial model approached statistical significance, with $R^2 = .04$, $F(3, 193) = 1.85$; $p = .06$. Once RWA was added, the change in the model was not statistically significant ($p = .91$). In the final model, only Conventionalism significantly contributed to variance in opinions about government jobs ($\beta = -.19$, $t = -2.01$, $p < .05$), indicating that as Conventionalism increased, ideological stances for government jobs decreased.

Table 10. Hierarchical Multiple Regression with Expansive Government and Social Program Issue Items

	Government Jobs		Government Size	
	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$
Block 1		.04†		.03†
AA	.13 (.17)		.07 (.05)	
AS	.13 (.21)		.17 (.06) †	
C	-.19 (.18)*		-.19 (.05)*	
Block 2		.00		.00
RWA	.01 (.14)		-.06 (.04)	
Total R^2		.02		.02
F		1.85		1.77

Note: All betas listed are from model 2 analysis.

† $p < .1$. * $p < .05$.

For Government Jobs, higher scores represent support for the belief that the government is not getting to big.

For Government Size, higher scores represent support for the belief that the government should be providing jobs for people.

AA = Authoritarian Aggression, AS = Authoritarian Submission,
C = Conventionalism, RWA = Right Wing Authoritarianism

For the opinion question about government size, the initial model approached statistical significance, with $R^2 = .03$, $F(3, 189) = 1.77$; $p = .09$. Once RWA was added, the change in the model was not statistically significant ($p = .48$). In the final model, only Conventionalism significantly contributed to variance in opinions about government size ($\beta = -.19$, $t = -2.02$, $p < .05$), indicating that as Conventionalism increased, ideological stances for government size decreased.

The above analyses suggest that Conventionalism is related to negative feelings about an expansive government that provides for its citizens.

Equality issue items. Three issue items showed strong, independent relationships with RWA: one opinion question about women's equality (higher scores meaning a woman's place is in the home) and two feelings questions about the term "*Equality*" and "*Equality of Women*" (higher scores meaning agreement with the term; see Table 11 for more detail). For the opinion question about women's equality, the initial model was not statistically significant ($p = .29$). Once RWA was added, the model was statistically significant, with $R^2 = .16$, $F(4, 192) = 8.73$; $p < .001$. In the final model, only RWA significantly contributed to variance in opinions about women's equality ($\beta = .43$, $t = 5.53$, $p < .001$), indicating that as RWA increased, ideological stances against women's equality increased.

Table 11. Hierarchical Multiple Regression with Equality Issue Items

	Women's Equality		"Equality of Women"		"Equality"	
	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$
Block 1		.02		.02		.01
AA	-.04 (.10)		.06 (.11)		.07 (.13)	
AS	-.05 (.12)		-.08 (.13)		-.04 (.16)	
C	-.03 (.11)		-.03 (.11)		.03 (.14)	
Block 2		.14***		.09***		.03*
RWA	.43 (.09)***		.36 (.09)***		.20 (.11)*	
Total R^2		.16***		.10***		.04†
F		8.73		6.18		1.96

Note: All betas listed are from model 2 analysis.

† $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

For Women's Equality, higher scores represent support for the idea that a woman's place is in the home.

For "Equality of Women" and "Equality", higher scores represent agreement with that term.

AA = Authoritarian Aggression, AS = Authoritarian Submission,

C = Conventionalism, RWA = Right Wing Authoritarianism

For the feelings question about “*Equality of Women*”, the initial model was not statistically significant ($p = .24$). Once RWA was added, the model was statistically significant, with $R^2 = .10$, $F(4, 192) = 6.18$; $p < .001$. In the final model, only RWA significantly contributed to variance in feelings about “*Equality of Women*” ($\beta = .36$, $t = 4.48$, $p < .001$), indicating that as RWA increased, negative feelings about “*Equality of Women*” increased.

For the feelings question about “*Equality*”, the initial model was not statistically significant ($p = .55$). Once RWA was added, the model approached statistical significance, with $R^2 = .04$, $F(4, 192) = 1.96$; $p < .1$. In the final model, only RWA significantly contributed to variance in feelings about “*Equality*” ($\beta = .20$, $t = 2.39$, $p < .05$), indicating that as RWA increased, negative feelings about “*Equality*” increased.

The above analyses suggest that RWA is related to negative feelings about an expansive government that provides for its citizens. A small number of other items also had variance accounted for them by RWA in a regression analysis (See Appendix E), including feelings questions about “*Free Abortion*” and “*Sexual Freedom*”, but these are relationships that would be expected as indicated in the RWA literature (Altemeyer, 1996).

Discussion

The above analyses demonstrate that authoritarianism can be distinguished from ideology, but that a core aspect of authoritarianism is rooted in ideology. As a response to the strong historical relationship between authoritarianism and conservatism (Stone, 1980, Altemeyer, 1996), the Pure Authoritarianism scale was developed as a measure of authoritarianism that is distinct from ideology in an effort to use this measure to examine the relationship between authoritarianism and ideology. The Pure Authoritarianism scale was refined and the resulting scale was found to be internally reliable with moderate correlations between the overall scale and each subscale. The Pure Authoritarianism scale satisfactorily had a moderate relationship to previous measures of authoritarianism, demonstrating convergent validity with other authoritarianism measures. The Pure Authoritarianism scale demonstrated divergent validity by having a different relationship with ideology than other measures of authoritarianism. The above analyses provide support that the Pure Authoritarianism scale is psychometrically reliable and conceptually valid scale and can be used to measure authoritarianism more distinctly from ideology than past measures.

A feature of this scale is that the three concepts underlying authoritarianism, Authoritarian Aggression, Authoritarian Submission, and Conventionalism are measured by their own subscales and can be compared with ideology independently. Authoritarian Aggression and Submission were both less related to ideology than was Conventionalism, which has previously been called essentially conservatism (Stone, 1980). When

Conventionalism was accounted for, Authoritarian Aggression and Submission did not discernibly relate to ideology.

The different ideological natures of the subscales were used to distinguish between ideological issues that are fundamentally related to authoritarianism and those that are more broadly ideologically based. Although the predicted relationships between the subscales and issue items did not bear out, each scale had a relationship with a set of issue items appropriate to their definitions. Authoritarian Aggression was related to volatile items that opposed abortion. Authoritarian Submission was related to items that favored a strong central authority. Conventionalism was related to traditionally conservative items that relating to the size and power of the government. However, these relationships and groupings are post hoc explanations and future studies will need to be conducted to confirm them. They do suggest that, unlike many previous measures (Eysenck, 1954, Rokeach, 1960), this measure would be able to identify authoritarians that are ideologically liberal by the separation of Conventionalism from the rest of the scale. Separating the overall scale into each subscale gives Pure Authoritarianism flexibility to include, not include, or control for Conventionalism as a proxy for conservatism.

This distinction between Conventionalism and the other two aspects of authoritarianism in the above findings are supported by Stenner's (2005) association of authoritarianism with an inability to deal with complexity and conservatism with an inability to deal with uncertainty. Authoritarian Aggression and Authoritarian Submission informs people of what to do and who to listen to, reducing complexity.

Conventionalism provides those that have an inability to deal with uncertainty with a tradition to tell them about the world, reducing their uncertainty.

The flexibility of the inclusion of Conventionalism as a proxy for conservatism could allow the measurement of authoritarians that hold liberal or “left-wing” political ideology. For example, Oyamoto, Borgida, and Fisher (2006) examined the relationship between authoritarianism, egalitarian values, and attitudes toward immigrant and noted that despite finding a weak negative correlation between egalitarianism and authoritarianism, there were some authoritarians that endorsed egalitarian values. This suggests that egalitarian and thereby liberal authoritarians exist, and the Pure Authoritarianism scale makes identifying these liberal authoritarians easier. However, it should be noted that the moderate correlations seen between Conventionalism and both Authoritarian Aggression and Authoritarian Submission, indicates that in the population sampled from in this study, authoritarians tended to be more conservative. As the proportion of liberal authoritarians in a sample increases, these correlations should get smaller and eventually become negative.

PA’s improvement upon RWA’s accessibility and specificity suggests an evolution of the measurement of authoritarianism. This and future studies using PA, will allow measurement of authoritarianism in ideologically liberal populations and further the examination of the relationship between authoritarianism and ideology, two controversial areas that have never been adequately explored. PA is also able to separately examine the three core components of authoritarianism, Authoritarian Aggression, Authoritarian Submission, and Conservatism (Altemeyer, 1996). The

constellations of relationships between these aspects is another area that has yet to be explored adequately. Work by Van Hiel et al. (2006) indicates that this distinction could be used to examine how authoritarianism manifests differently in different populations.

Conclusions drawn from this study should be weighed against the three point measure of ideology used and the limited undergraduate college student sample. For a more detailed examination of this new measure, further research should include a broad ideological scale (measured on at least a five point Likert scale) and a more diverse sample (including specifically liberal and conservative populations of all ages). Other authoritarianism scales and measures of personality such as the “Big Five” could be used in future studies to continue to validate and refine this scale and to better describe authoritarians identified by this measure. A future study could further examine the relationship between different aspects of authoritarianism and perceived threat by examining the impact of perceived threat (and interactions with authoritarian predispositions; Feldman & Stenner, 1997) upon the individual subscales of the Pure Authoritarianism scale. With further improvements, this measure can help better understand authoritarianism, its relationship with ideology and how the two interact to influence social behavior. Through understanding how people relate to authority, we can better prepare for times when the powerful attempt to influence the less powerful inappropriately and hopefully prevent future tragedies committed by citizens on behalf of those who govern them.

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Appendix A: The Pure Authoritarianism Scale

The following questions are part of a survey about people's general world perspectives.

Please use the following scale to rate your agreement with the questions below.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

Authoritarian Aggression

- 1) For the best of society we need to get rid of people that are ruining everything.
- 2) If this country's situation is serious enough, the strongest methods would be justified to eliminate the troublemakers.
- 3) If a good leader needs me to enforce a rule necessary to a better world, I will take action.
- 4) Some of those that have hurt us deserve harsh punishment.
- 5) Dangerous people need to be dealt with harshly.
- 6) Society needs to be aggressively defended against threats.
- 7) Those in power must understand that some outrages must have serious consequences.
- 8) Certain groups of people deserve to be toughly sanctioned because they are menaces to society.
- 9) Some types of people need to be prevented from participating in society because they are corrupting forces.
- 10) We need officials that believe that the best way to lead is with a firm hand.

Authoritarian Submission

- 1) We desperately need a mighty leader.
- 2) The world would be better if we did what the appropriate authorities tell us to do.
- 3) Respect for authority is one of the most important virtues children should learn.
- 4) Some leaders just know what needs to be done.
- 5) To achieve positive change, we need to do what the right people want us to do.
- 6) No principal is more sacred than obedience.
- 7) Our chief want in life is somebody to make us do what we should.
- 8) Leaders need to be followed for the good of society.
- 9) If I break one of my society's rules, I am hurting the values I believe in.
- 10) Organizations function best when there is a strong leader.
- 11) I feel better knowing that there are people out there to lead me.

Conventionalism

- 1) It's best to "stick to the straight and narrow" by following examples set by good role models.
- 2) I would prefer to live in a specific time in the past when more people were good.
- 3) We should try to recreate the good old days, when we had leaders we could believe in.
- 4) Society is crumbling because people lack moral values.
- 5) We need a leader that stands for traditional values.
- 6) People should emulate great leaders from the past.
- 7) A good leader understands that we need to maintain traditions.

- 8) We should preserve customs that are embedded in our society.
- 9) Our societal heritage needs to be safeguarded.

- 10) A lot of our rules regarding modesty and sexual behavior are just customs which are not necessarily better or holier than those which other people follow.*
- 11) There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.
- 12) It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds.
- 13) There is absolutely nothing wrong with nudist camps.*
- 14) There is no "ONE right way" to live life; everybody has to create their *own* way.*
- 15) Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.
- 16) Homosexuals and feminists should be praised for being brave enough to defy "traditional family values."*
- 17) The situation in our country is getting so serious, the strongest methods would be justified if they eliminated the troublemakers and got us back to our true path.
- 18) It may be considered old fashioned by some, but having a normal, proper appearance is still the mark of a gentleman and, especially, a lady.
- 19) Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.*

- 20) A “woman’s place” should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.*
- 21) What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.
- 22) People should pay less attention to the Bible and the other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral.*
- 23) The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.
- 24) Our country *needs* free thinkers who will have the courage to defy traditional ways, even if this upsets many people.*
- 25) There is nothing wrong with premarital sexual intercourse.*
- 26) It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material.
- 27) It is wonderful that young people today have greater freedom to protest against things they don’t like, and to make their own “rules” to govern their behavior.*
- 28) What our country *really* needs, instead of more “civil rights,” is a good stiff dose of law and order.

- 29) Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way” things are supposed to be done.*
- 30) Obedience and respect for authority are the most important virtues children should learn.
- 31) Nobody should “stick to the straight and narrow.” Instead, people should break loose and try out lots of different ideas and experiences.*
- 32) Once our government leaders give us the “go ahead,” it will be the duty of every patriotic citizen to help stomp out the rot that is poisoning our country from within.
- 33) We should treat protestors and radicals with open arms and open minds, since new ideas are the lifeblood of progressive change.*
- 34) The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.

Appendix C: Ideology and Political Affiliation

- 1) Generally speaking, would you consider yourself to be a liberal, a conservative, a moderate, or what, or haven't you thought much about this?
- 2) [If liberal or conservative] Do you consider yourself to be strongly [liberal/conservative] or just [liberal/conservative]?
- 3) [If other than liberal or conservative] Do you think of yourself as closer to liberals or conservatives?
- 4) We are interested in your feelings toward some of our political leaders and other people who are in the news these days. The following questions ask you to rate that person or group using something we call a feeling thermometer. You can choose any number between 1 and 100. The higher the number, the warmer or more favorable you feel toward that person or group; the lower the number, the colder or less favorable you feel toward that person or group.
 - a. Liberals
 - b. Conservatives
 - c. Democrats
 - d. Republicans
 - e. Libertarians
 - f. Socialists
 - g. Nancy Pelosi
 - h. Joe Biden

- i. Barack Obama
- j. George W. Bush
- k. Dick Cheney
- l. Arnold Schwarzenegger

- 5) Some people are afraid the government in Washington is getting too powerful for the good of the country and the individual person. Others feel that the government in Washington is not getting too strong. What is your feeling, do you think the government is getting too powerful or do you think the government is not getting too strong?
- 6) Some people feel there should be a government insurance plan which would cover all medical and hospital expenses for everyone. Others feel that medical expenses should be paid by individuals, and through private insurance plans like Blue Cross. Where would you place yourself on this scale, or haven't you thought much about this?
- 7) Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. Where would you place yourself on this scale, or haven't you thought much about this?
- 8) Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Other people feel that it is important for the government to provide many more services

even if it means an increase in spending. Where would you place yourself on this scale, or haven't you thought much about this?

- 9) Some people feel that the government in Washington should make every effort to improve the social and economic position of blacks. Others feel that the government should not make any special effort to help blacks because they should help themselves. Where would you place yourself on this scale, or haven't you thought much about it?
- 10) Some people feel that if black people are not getting fair treatment in jobs, the government in Washington ought to see to it that they do. Others feel that this is not the federal government's business. Should the government in Washington see to it that black people get fair treatment in jobs or is this not the federal government's business?
- 11) Some people feel that women should have an equal role with men in running business, industry and government. Others feel that women's place is in the home. Where would you place yourself on this scale or haven't you thought much about this?
- 12) Which one of the opinions on this page best agrees with your view?
 - a. By law, abortion should never be permitted.
 - b. The law should permit abortion only in case of rape, incest, or when the woman's life is in danger.

- c. The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established.
- d. By law, a woman should always be able to obtain an abortion as a matter of personal choice.

13) Some people believe that we should spend much less money for defense.

Others feel that defense spending should be greatly increased. Where would you place yourself on this scale or haven't you thought much about this?

14) Over the past year would you say that the economic policies of the federal government have made the nation's economy better, worse, or haven't they made much difference either way?

- a. IF BETTER/WORSE: Would you say the economy is much better/worse or somewhat better/worse?

15) How much of the time do you think you can trust the government in Washington to do what is right: just about always, most of the time or only some of the time?

16) Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?

Appendix D: Referent Scale

1) Ideas confront us on all sides. And these ideas affect our ways of thinking and behaving. The notions *equality* and *moderation*, for example, to some extent affect us and the way we think about ourselves and react to other people. Notions like *love of country* and *women* have rich meanings for us, meanings that are bound up with our beliefs and opinions. Of course, different people will react differently to many concepts. Some people, for instance, will feel positively while others will feel negatively toward a work like Medicare. We would like you to indicate your positive or negative feeling about each of the words or phrases as follows.

1	2	3	4	5	6
Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Agree Strongly	Agree Very Strongly

- a. social stability
- b. feeling
- c. discipline
- d. government price controls
- e. freedom
- f. business
- g. authority
- h. faith in God
- i. free abortion

- j. sexual freedom
- k. corporate industry
- l. obedience of children
- m. collective bargaining
- n. socialized medicine
- o. law and order
- p. racial equality
- q. private property
- r. capitalism
- s. social status
- t. social change
- u. moral standards
- v. patriotism
- w. equality
- x. social planning
- y. free enterprise
- z. civil rights
- aa. religion
- bb. children's interests
- cc. labor unions
- dd. equality of women
- ee. United Nations

Appendix E: Additional RWA-Oriented Regression Tables

Table 1. Hierarchical Multiple Regression with Issue Items Related to Right Wing Authoritarianism

	“Sexual Freedom”		“Social Change”	
	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$
Block 1		.07**		.00
AA	-.11 (.14)		.02 (.13)	
AS	-.12 (.17)		-.12 (.16)	
C	-.09 (.15)		-.05 (.14)	
Block 2		.24***		.05**
RWA	.57 (.12)***		.25 (.11)***	
Total R^2		.29***		.03*
F		20.64		2.56

	“Free Abortion”		“Social Stability”	
	β (SE)	$R^2 \Delta$	β (SE)	$R^2 \Delta$
Block 1		.01		.03
AA	.07 (.19)		-.02 (.14)	
AS	-.02 (.23)		-.07 (.17)	
C	.00 (.20)		.01 (.14)	
Block 2		.10***		.03*
RWA	.38 (.16)***		.20 (.12)*	
Total R^2		.13***		.04*
F		6.91		2.95

Note: all betas listed from model 2 analysis

† $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

For “Sexual Freedom”, “Social Change”, “Free Abortion”, and “Social Stability”, higher scores represent agreement with that term.

PA = Pure Authoritarianism, AA = Authoritarian Aggression, AS = Authoritarian Submission, C = Conventionalism, RWA = Right Wing Authoritarianism