

**Sixteen Traits Study:
Antisocial Traits, Religious beliefs and Desired Government Features.**

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Note: This study supercedes a prior write-up of the same data, which inadvertently omitted two of the sixteen dimensions involved. The factor scores are also different.

Introduction.

This study was offered over the author's web site, politicalpsychologyresearch.com, in the spring term, 2007. The subjects were community college students taking psychology classes with a professor friend of the author. The students earned extra credit in their classes for participating. They took three questionnaires, each measuring several traits. They immediately and automatically received, via e-mail, a report with their personal scores on the traits measured. All traits were measured with scales developed by the author over several years. All of the trait measures have had good to excellent reliability and validity data in other studies. Most of the students completed all three questionnaires. The sample sizes varied from correlation to correlation but ranged from 39 to 42. This study is unusual in the large number of items required of the students (92, 151 and 123 respectively for the three questionnaires). It is also unique in the large number of variables studied (16) on a single sample of persons, permitting exploration of the relationships between all of the traits.

Basic Trait Statistics.

The traits measured are presented below, with basic statistics. Reliabilities in this particular study ranged in the 80's and 90's for the most part and in all cases were high enough to reveal significant correlations between variables. All of the scales except scale 13, Direct Participation in Government (by citizens), are discussed in detail in the Political Psychology Research Manual on the Publications page of the author's web site (politicalpsychologyresearch.com). Scale 13 is a new one consisting of items reflecting interest in direct voter participation in government decisions, e.g. about the budget. In all of the scales, items are presented in Likert scale format, 5 options (e.g. Strongly Disagree to Strongly Agree), except the violence-proneness test, which has 4 options.

Trait	Number of items in scale	Sample size	Range of raw scores	Mean	Standard deviation	Alpha or KR-21 reliability
1. Warmongering, 44-item scale	44	42	44-148	88.2	30.0	.96
2. Terrorism endorsement	12	42	12-39	15.4	6.7	.95
3. Violence-	58	42	84-169	199.2	19.7	.96

proneness						
4. Authoritarianism endorsement	29	42	46-101	77.5	14.7	.90
5. Religious fundamentalism	17	40	31-63	43.1	7.1	.87
6. Kindly religious beliefs	13	40	37-65	54.7	6.5	.87
7. Religiousness	3	40	3-15	7.7	3.5	.80
8. Meta religion concept endorsement	3	40	3-15	10.25	3.1	.83
9. Personal valuing of religion	51	40	104-203	160.8	25.9	.90
10. Human rights endorsement	44	39	142-219	189.8	20.2	.94
11. Public democracy endorsement (PDE)	5	39	10-25	21.2	3.6	.76
12. Public school proportional budget endorsement (PBE)	3	39	3-15	10.9	3.3	.82
13. Citizen direct participation in government policy formation (CPG)	6	39	14-30	23.7	4.0	.72
14. Desire for improved government services (IGS)	34	39	106-170	139.6	16.7	.92
15. Positive foreign policy endorsement (PFP)	8	39	20-40	31.5	4.7	.67
16. Sustainable policies and programs endorsement (Sus)	8	39	30-60	47.4	8.7	.90
Age		45	18-40	24.3	5.8	
Gender		45	64% female			
Education		45	3-16 years	13.6	1.9	

Correlations with Age, Gender and Years of Education.

The correlations were generally insignificant between the 16 trait measures and age, gender and education. However, two clusters of correlations *were* significant and of interest. The antisocial traits tended to correlate positively with male gender, as in prior studies. For example, maleness correlated .37* with Warmongering, .35* with Violence-

prone to violence and .34* with Religious Fundamentalism. Males were more likely than females to have elevated scores on these three traits. Years of education was positively correlated with Religiosity (.33*), Endorsement of a Meta-religion (.46**), and Personal Valuing of Religion (.43**).

Correlations between variables.

The Pearson product moment correlations between the variables are presented below, with effects of age, gender and education partialled out. Correlations of .34 are significant at the .05 level. Correlations of .40 are significant at the .01 level.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	War	Ter	Viol	Aut	Rfun	Krel	Rgns	Meta	PVal	HRts	PDE	PBE	CPG	IGS	PFP	Sus
War	1.00	.54	.69	.56	.41	-.63	-.18	-.11	-.08	-.54	-.36	-.25	-.44	-.45	-.55	-.53
Ter	.54	1.00	.68	.03	.28	-.63	-.02	.01	-.02	-.62	-.58	-.17	-.28	-.49	-.34	-.32
Viol	.69	.68	1.00	.36	.41	-.67	-.08	-.05	-.06	-.57	-.57	-.29	-.39	-.45	-.38	-.40
Aut	.56	.03	.36	1.00	.57	-.18	.12	-.11	.24	-.43	-.16	-.25	-.35	-.30	-.38	-.37
Rfun	.41	.28	.41	.57	1.00	-.09	.50	.05	.50	-.28	-.38	-.32	-.11	-.09	-.31	-.26
Krel	-.63	-.63	-.67	-.18	-.09	1.00	.43	.25	.37	.65	.22	.15	.36	.58	.34	.43
Rgns	-.18	-.02	-.08	.12	.50	.43	1.00	.41	.81	.03	-.31	-.06	.45	.21	-.13	.07
Meta	-.11	.01	-.05	-.11	.05	.25	.41	1.00	.66	.13	-.41	.10	.09	.21	.02	.08
PVal	-.08	-.02	-.06	.24	.50	.37	.81	.66	1.00	-.05	-.45	-.09	.26	.18	-.11	-.01
HRts	-.54	-.62	-.57	-.43	-.28	.65	.03	.13	-.05	1.00	.32	.19	.37	.71	.60	.72
PDE	-.36	-.58	-.57	-.16	-.38	.22	-.31	-.41	-.45	.32	1.00	.01	.26	.08	.13	.13
PBE	-.25	-.17	-.29	-.25	-.32	.15	-.06	.10	-.09	.19	.01	1.00	.25	.03	-.04	-.05
CPG	-.44	-.28	-.39	-.35	-.11	.36	.45	.09	.26	.37	.26	.25	1.00	.19	.14	.21
IGS	-.45	-.49	-.45	-.30	-.09	.58	.21	.21	.18	.71	.08	.03	.19	1.00	.56	.71
PFP	-.55	-.34	-.38	-.38	-.31	.34	-.13	-.02	-.11	.60	.13	-.04	.14	.56	1.00	.71
Sus	-.53	-.32	-.40	-.37	-.26	.43	.07	.08	-.01	.72	.13	-.05	.21	.71	.71	1.00

Specific Trait Correlates:

The relationship between each of the 16 traits and the remaining 15 traits can be summarized by studying each row or column in the correlation matrix. Below, the term "strongly" is used to refer to correlations of .60 and above, the term "moderately" for correlations between .45 and .59, and "mildly" for correlations of .34 to .44.

1. Warmongering is associated:

Strongly with higher violence-prone, and lower Kindly Religious Beliefs.

Moderately with higher Terrorism endorsement and Authoritarianism endorsement, and lower Human Rights endorsement, Desire for Government Services, a Positive Foreign Policy and Sustainable Policies and Programs.

Mildly with higher Religious Fundamentalism, and lower Public Democracy Endorsement, Citizen Participation in Government, and desired Government services.

2. Terrorism Endorsement is associated:

Strongly with higher Violence-Proneness, lower Kindly Religious Beliefs and lower Human Rights endorsement.

- Moderately with higher Warmongering, and lower Public Democracy endorsement, and Desired Government Services.
Mildly with lower Positive Foreign Policy endorsement.
3. Violence-Proneness is associated:
 - Strongly with higher Warmongering, Terrorism endorsement, and lower Kindly Religious Beliefs.
 - Moderately with lower Human Rights Endorsement, and Public Democracy endorsement.
 - Mildly with higher Religious Fundamentalism, lower endorsement of Citizen Participation in Government, a Positive Foreign Policy, and Sustainable Policies and Programs.
 4. Authoritarianism Endorsement is associated:
 - Moderately with higher Warmongering and Religious Fundamentalism.
 - Mildly with higher Violence-Proneness, lower endorsement of Human Rights, Citizen Participation in Government, a Positive Foreign Policy, and Sustainable Policies and Programs.
 5. Religious Fundamentalism is associated:
 - Moderately with higher Authoritarianism endorsement, Religiousness and Valuing of Religion.
 - Mildly with higher Warmongering, Violence-Proneness and lower endorsement of Public Democracy.
 6. Kindly Religious Beliefs are associated:
 - Strongly with lower Warmongering, Terrorism endorsement and Violence-Proneness, and with higher Human Rights endorsement.
 - Moderately with lower Desire for Improved Government Services.
 - Mildly with higher Religiousness, Personal Valuing of Religion, Citizen Participation in Government, endorsement of a Positive Foreign Policy, and Sustainable Policies and Programs.
 7. Religiousness is associated:
 - Strongly with higher Personal Valuing of Religion.
 - Moderately with higher Kindly Religious Beliefs, Meta-Religion endorsement and Citizen Participation in Government.
 - Mildly with lower endorsement of Public Democracy.
 8. Meta-Religion Endorsement is associated:
 - Strongly with higher Personal Valuing of Religion.
 - Mildly with higher Religiousness, and lower endorsement of Public Democracy.
 9. Personal Valuing of Religion is associated:
 - Strongly with higher Religiousness and endorsement of a Meta-Religion.

- Moderately with higher Religious Fundamentalism and lower endorsement of Public Democracy.
10. Human Rights Endorsement is associated:
 - Strongly with higher Kindly Religious Beliefs, Improved Government Services endorsement, Positive Foreign Policy Endorsement and Sustainable Policies and Programs endorsement and lower Terrorism endorsement.
 - Moderately with lower Warmongering endorsement and Violence Proneness.
 - Mildly with higher Citizen Participation in Government and lower Authoritarianism endorsement.
 11. Public Democracy Endorsement if associated:
 - Moderately with lower Terrorism Endorsement, Violence-Proneness, and Valuing Religion Personally.
 - Mildly with higher Kindly Religious Beliefs, and lower Warmongering, Religious Fundamentalism, and Meta-Religion Endorsement.
 12. Public School Proportional Budget endorsement is associated:
 - None of the other variables to a statistically significant level in this study.
 13. Citizen Direct Participation in Government is associated:
 - Moderately with higher Religiousness.
 - Mildly with higher Kindly Religious Beliefs, and Human Rights Endorsement, and lower Warmongering, Violence Proneness, and Authoritarianism.
 14. Desire for Improved Government Services endorsement is associated:
 - Moderately with higher Kindly Religious Beliefs and Positive Foreign Policy Endorsement, and lower Warmongering, Terrorism Endorsement, and Violence Proneness.
 15. Positive Foreign Policy Endorsement is associated:
 - Moderately with higher Desire for Improved Government Services, and lower Warmongering.
 - Mildly with higher Kindly Religious Beliefs and lower Terrorism Endorsement, Violence-Proneness and Authoritarianism Endorsement.
 16. Sustainable Policies and Programs endorsement is associated:
 - Strongly with higher Improved Government Services endorsement, Positive Foreign Policy endorsement, and Human Rights endorsement.
 - Moderately with lower Warmongering endorsement and Violence Proneness, and higher Kindly Religious Beliefs.

Discussion of correlations between variables.

For the most part, these correlations are consistent with those in other prior studies by the author. One exception is the correlation between Kindly Religious Beliefs

and Religiousness, which is .43 in this study but was insignificant in a prior study. While the present sample of persons is not large, the author has found that community college students in some respects are close to a random sample. For example, their mean scores on Big Five personality traits were almost identical to those of a national sample of tens of thousands. Thus, overall, the relationships between the variables in this study are considered likely to represent what would be found in a large random sample of the U.S. population.

Initially, just two items were used to measure Citizen Participation in Government. These two items had low reliability (.33) but correlated significantly with several other variables, suggesting that an improved measure of the trait might be worth developing. These items reflected direct interest in voting on government policy decisions. They correlated significantly with Warmongering (-.38), Terrorism (-.55), Violence Proneness (-.49), Kindly Religious Beliefs (.49), and Public Democracy Endorsement (.51). The 6-item measure used in the present study has a higher reliability but a broader meaning, trust in citizen participation in government in a broader sense than just policy decision-making.

Factor Analysis.

While the sample size was not large enough to provide data for a confident factor analysis, an exploratory factor analysis was performed. Principle components analysis with varimax rotation yielded four factors with Eigenvalues of 1 or greater. The factors and their highest loadings are presented below:

Loading/Percent of Variance	Factor and traits loading strongly on it.
1. 36.2%	Pro-civilization factor.
.90	16. Sustainable Policies and Programs endorsement.
.84	15. Positive Foreign Policy endorsement.
.77	14. Improved Government Services endorsement.
.74	10. Human Rights endorsement.
2. 19.6%	Pro-Constructive Government factor.
.80	13. Citizen Participation in Government endorsement (2-item scale).
.70	11. Public Democracy endorsement.
.67	6. Kindly Religious Beliefs endorsement.
-.71	3. Violence-proneness.
-.81	2. Terrorism endorsement.
3. 10.6%	Valuing Religion factor.
.95	9. Personal Valuing of Religion.
.84	7. Religiousness.
.78	8. Meta-religion endorsement.
4. 8.8%	Authoritarian selfishness factor.

.71	4. Authoritarianism endorsement.
.67	5. Religious fundamentalism endorsement.
-.72	12. Proportional Public School Budgeting endorsement.

The first factor appears to be a basic pro-civilization dimension, reflecting respect and concern for the environment and human rights, a desire for improved government services, and a positive, constructive attitude toward other nations.

The second factor is a pro-constructive government factor, reflecting endorsement of direct participation by citizens in government decisions, government serving the best interests of the community overall (as opposed to special interest groups), kindly religious beliefs tolerant of diversity, and eschewing of violence and terrorism.

The third factor is a valuing religion factor, reflecting much personal use of religion as a life guide, frequent religious activity and endorsement of meta-religious practices to unite persons of all faiths around the world.

The final factor is a selfish, authoritarian factor with elements of religious fundamentalism and disapproval of a model of public school budgeting of a proportional nature versus one driven by union contracts.

A rough estimate of the number of persons who hold each of the four factor belief systems can be gleaned by computing the percentage of persons with mean item scores at or above 3.5, as presented below:

Factor	Estimated Percentage Holding Cited Factor (mean item score => 3.5)	Primary Trait in Factor
1. Pro-civilization	100%	16. Sustainability endorsement.
2. Pro constructive government.	89.7%	12. Direct citizen participation in government (2-item scale).
3. Valuing religion.	25.0%	9. Personal Valuing of Religion.
4. Authoritarian selfishness.	Approx. 1%	4. Authoritarianism endorsement.

From these percentages we get a picture of citizens who are predominantly pro-civilization (100%), most of whom favor improved and helpful government both at home and internationally (90%), some of whom find personal value in some form of religion (25%), a tiny minority of whom are authoritatively self-righteous and selfish (approximately 1%).

These percentages are compatible with similar ones on larger samples of persons studied by the author and reported in his web site publications.

Discussion and Conclusion.

The findings of this study suggest that political attitudes, religious beliefs and pro-social/anti-social traits are all rather intimately interwoven. Understanding these complex relationships can enlighten thinking about government activity and planning. The implications for government planning are important, especially in today's political climate of serious problems on many topics, such as religiously colored political campaigns, special interest group control of legislative decisions through lobbyists in the United States, and international problems with terrorism, militarism and warmongering.

The present study suggests that the psychological underpinnings of political attitudes are complex. Two different basic religious orientations tend to be pro-social (Kindly Religious Beliefs) and anti-social (Fundamentalist Beliefs) respectively. Thus, to the extent that religion is allowed to directly influence politics, a nation will be at risk for war if fundamentalism predominates. If kindly religious beliefs predominate, peace will be more likely. Authoritarianism is also directly associated with warmongering and related anti-social traits. To the extent that authoritarian leaders gain control of governments, nations will be at greater risk for conflict.

Fortunately, the strong majority of citizens appear to be pro-social in their beliefs and attitudes. Appealing to the majority of citizens of this type can help politicians guide their nations along peaceful, cooperative courses within their nation and with other nations.

This study was, in effect, a pilot study. While the sample of persons was large enough to obtain reliable measures, one cannot generalize to a national population without larger samples. The plan is to seek funding for a large representative sample of voters in the United States. Data on a large relatively random national sample of adults will permit more confident generalizations to the national population as a whole.