

Confident pluralism & education

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Purpose

This report summarizes the statistical analyses for Tolerance, Humility and Educational Attainment: Does College Attendance Build Capacity for Confident Pluralism? Paper presented at 2023 AERA - Chicago, Illinois

Research questions guiding this project:

1. What are the underlying dimensions of confident pluralism?
2. What is the association between confident pluralism and education?
3. What is the impact of confident pluralism on trust in government?

Exploring the association between education and humility and tolerance

Average humility in political discourse across educational levels

ANOVA section for Humility

Bartlett test of homogeneity of variances for humility was rejected

Bartlett test of homogeneity of variances

data: humility_tot by educ_recoded

Bartlett's K-squared = 92.341, df = 4, p-value < 2.2e-16

Performing Welch's ANOVA test that corrects for heteroscedasticity

Table 1: Table 1 Humility summary statistics

educ_recoded	n	mean	sd	ci	ci_min	ci_max
HS or less	1577	15.42	3.50	0.17	15.25	15.59
AA	616	15.80	3.26	0.26	15.55	16.06
Some college	1012	16.24	3.00	0.19	16.06	16.43
BA	899	16.45	2.69	0.18	16.27	16.63
Grad/prof	886	16.54	2.93	0.19	16.35	16.73

Table 2: Table 2 Tolerance summary statistics

educ_recoded	n	mean	sd	ci	ci_min	ci_max
HS or less	1577	16.18	4.75	0.23	15.95	16.42
AA	616	16.96	4.54	0.36	16.60	17.32
Some college	1012	17.05	4.54	0.28	16.77	17.33
BA	899	17.70	4.51	0.29	17.40	17.99
Grad/prof	886	17.89	4.48	0.30	17.59	18.18

One-way analysis of means (not assuming equal variances)

data: humility_tot and educ_recoded

F = 25.613, num df = 4.0, denom df = 2196.7, p-value < 2.2e-16

The Welch's test was confirmed by Levene's test of homogeneity of variances .

Levene test F(4, 4985) = 16.158 $p < .01$

ANOVA section for Tolerance for political differences

The hypothesis of homogeneity of variances was upheld. Bartlett's test was not significant

Bartlett test of homogeneity of variances

data: tolerance_tot by educ_recoded

Bartlett's K-squared = 5.8703, df = 4, p-value = 0.209

ANOVA results for Tolerance was significant

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
educ_recoded	4	2185	546.3	25.91	<2e-16 ***
Residuals	4985	105128	21.1		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Bonferroni test for tolerance

Pairwise comparisons using t tests with pooled SD

data: confident\$tolerance_tot and confident\$educ_recoded

	HS or less	AA	Some college	BA
AA	0.00361	-	-	-
Some college	3.0e-05	1.00000	-	-
BA	3.8e-14	0.02232	0.02088	-
Grad/prof	< 2e-16	0.00124	0.00073	1.00000

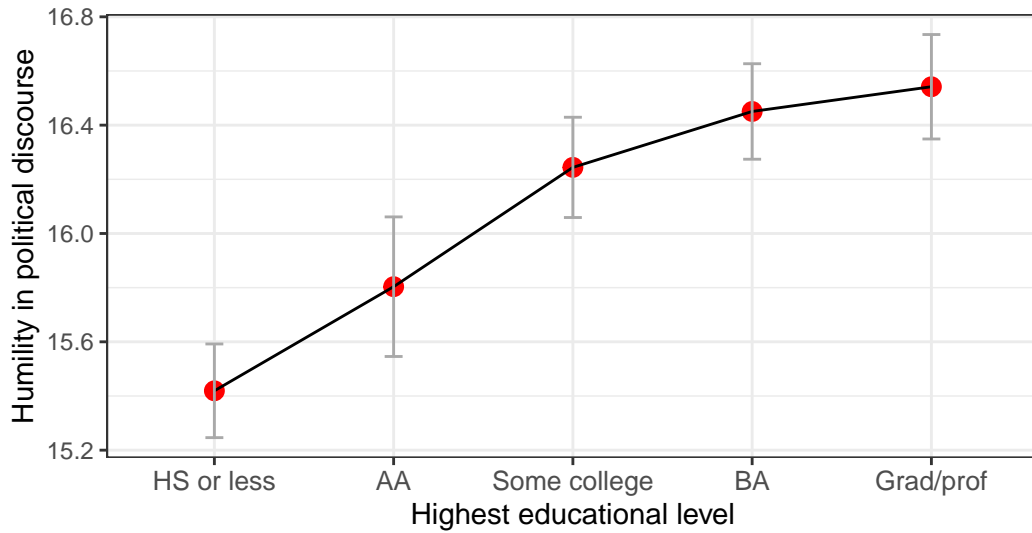
P value adjustment method: bonferroni

Depicting differences in humility in political discourse across educational levels

Humility & education

Figure 1 Average humility by educational level

Mean plot with 95% confidence interval



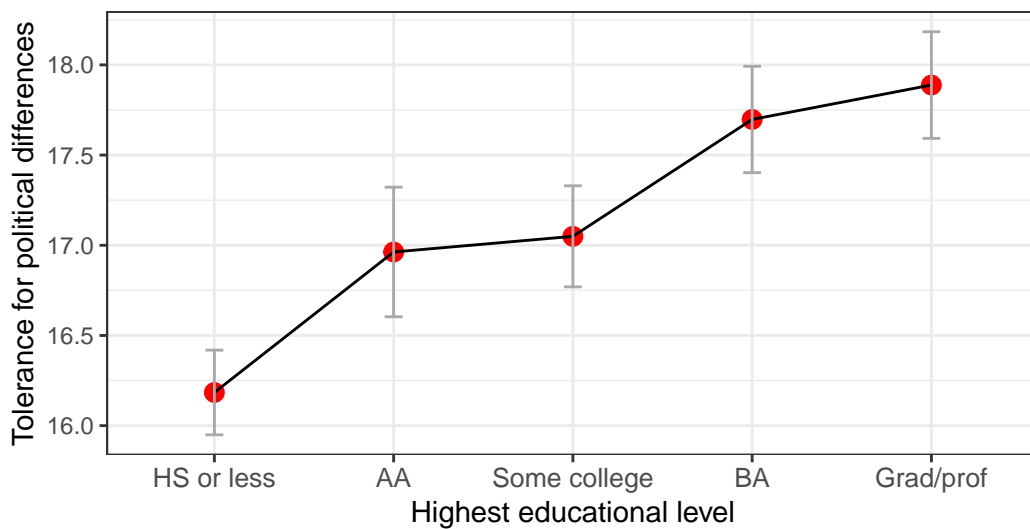
Welch...s $F(4, 2196.7) = 25.61, p < .01$

Differences in tolerance for political differences across educational levels

Tolerance & education

Figure 2 Average tolerance by educational level

Mean plot with 95% confidence interval



$F(4, 4985) = 25.91, p < .01$