

Extension of Gauchat (2012)—Politicization of Science
in the Public Sphere: A Study of Public Trust in the
United States, 1974 to 2021 [Draft]
Tables

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Table 1. Descriptive Statistics, General Social Survey 1974 to 2021 ($N = 36,079$)

Variable	Mean	SD	Min	Max
Confidence in Science	0.445		0	1
Female	0.538		0	1
Non-White	0.182		0	1
Education (years)	13.206	3.041	0	20
High School	0.512		0	1
Bachelor	0.166		0	1
Graduate	0.084		0	1
South	0.341		0	1
Church Attendance	3.698	2.703	0	8
Family Income	0.024	0.997	-1.056	4.305
Age	4.531	1.696	1.800	8.900
Independent	0.360		0	1
Republican	0.251		0	1
Moderate	0.378		0	1
Conservative	0.337		0	1
Post-Reagan (1981–2021)	0.798		0	1
Bush (2001–2008)	0.117		0	1
Post-Trump (2017–2021)	0.097		0	1
COVID-19 (2020–2021)	0.060		0	1
Cohort	1950.483	20.864	1885	2003

Note: Family income is measured in constant dollars (base = 1986) and is z -score standardized. The original age variable is decreased by a factor of 10.

Table 2. Logit Models Predicting Public Confidence in Science (I)

	Model 1	Model 2	Model 3
Constant	10.172*** (2.599)	−3.930 (3.675)	10.045*** (2.599)
Year	−0.005*** (0.001)	0.002 (0.002)	−0.005*** (0.001)
Female	−0.290*** (0.023)	−0.292*** (0.023)	−0.292*** (0.023)
Non-White	−0.422*** (0.032)	−0.424*** (0.032)	−0.424*** (0.032)
Education (Years)	0.071*** (0.007)	0.070*** (0.007)	0.070*** (0.007)
High School	−0.015 (0.031)	−0.018 (0.031)	−0.016 (0.031)
Bachelor	0.275*** (0.052)	0.271*** (0.052)	0.274*** (0.052)
Graduate	0.268*** (0.069)	0.262*** (0.069)	0.267*** (0.069)
South	−0.147*** (0.024)	−0.144*** (0.024)	−0.144*** (0.024)
Church Attendance	−0.043*** (0.004)	−0.042*** (0.004)	−0.042*** (0.004)
Family Income	0.109*** (0.013)	0.110*** (0.013)	0.109*** (0.013)
Age	−0.343*** (0.039)	−0.351*** (0.039)	−0.352*** (0.039)
Age ²	0.031*** (0.004)	0.032*** (0.004)	0.032*** (0.004)
Independent	−0.081*** (0.027)	−0.074*** (0.027)	−0.076*** (0.027)
Republican	−0.016 (0.031)	0.008 (0.032)	0.000 (0.031)
Moderate	−0.217*** (0.029)	8.971** (4.077)	−0.135** (0.059)
Conservative	−0.207*** (0.031)	31.860*** (4.258)	0.042 (0.063)
Post-Reagan (1981–2021)	−0.050 (0.038)	−0.055 (0.038)	0.069 (0.058)
Bush (2001–2008)	−0.041 (0.037)	−0.038 (0.037)	0.024 (0.067)
Post-Trump (2017–2021)	0.140** (0.065)	0.139** (0.065)	0.428*** (0.111)
Year × Moderate		−0.005** (0.002)	
Year × Conservative		−0.016*** (0.002)	

	Model 1	Model 2	Model 3
Moderate \times Post-Reagan			−0.092 (0.069)
Moderate \times Bush			0.003 (0.088)
Moderate \times Post-Trump			−0.311** (0.145)
Conservative \times Post-Reagan			−0.266*** (0.072)
Conservative \times Bush			−0.193** (0.090)
Conservative \times Post-Trump			−0.528*** (0.149)
Including Year 2021	No	No	No
AIC	44597.317	44539.579	44568.878
BIC	44765.950	44725.075	44788.100
Log Likelihood	−22278.659	−22247.790	−22258.439
Num. obs.	33916	33916	33916

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Note: Numbers in parentheses represent standard errors. The reference category for political party affiliation is Democrat. The reference category for political ideology is liberal. Age² is a squared term.

Table 3. Logit Models Predicting Public Confidence in Science (II)

	Model 4	Model 5	Model 6
Constant	14.371*** (2.581)	−8.700** (3.487)	14.020*** (2.578)
Year	−0.007*** (0.001)	0.004** (0.002)	−0.007*** (0.001)
Female	−0.289*** (0.022)	−0.293*** (0.022)	−0.293*** (0.022)
Education (years)	0.078*** (0.006)	0.078*** (0.006)	0.079*** (0.006)
High School	0.009 (0.030)	0.004 (0.030)	0.005 (0.030)
Bachelor	0.304*** (0.050)	0.292*** (0.050)	0.290*** (0.050)
Graduate	0.279*** (0.065)	0.262*** (0.066)	0.260*** (0.066)
Church Attendance	−0.055*** (0.004)	−0.053*** (0.004)	−0.054*** (0.004)
Family Income	0.137*** (0.012)	0.137*** (0.012)	0.136*** (0.012)
Age	−0.362*** (0.037)	−0.375*** (0.038)	−0.373*** (0.038)
Age ²	0.035*** (0.004)	0.036*** (0.004)	0.036*** (0.004)
Independent	−0.061** (0.026)	−0.043* (0.026)	−0.040 (0.026)
Republican	0.018 (0.030)	0.058* (0.030)	0.053* (0.030)
Moderate	−0.256*** (0.028)	20.897*** (3.671)	−0.115* (0.059)
Conservative	−0.269*** (0.030)	45.225*** (3.833)	0.051 (0.063)
Post-Reagan (1981–2021)	−0.069* (0.038)	−0.076** (0.038)	0.046 (0.058)
Bush (2001–2008)	−0.045 (0.037)	−0.040 (0.037)	0.032 (0.067)
Post-Trump (2017–2021)	0.125* (0.064)	0.124* (0.065)	0.414*** (0.111)
COVID-19 (2020–2021)	0.150** (0.072)	0.145** (0.073)	0.642*** (0.135)
Year × Moderate		−0.011*** (0.002)	
Year × Conservative		−0.023*** (0.002)	
Moderate × Post-Reagan			−0.098 (0.069)

	Model 4	Model 5	Model 6
Moderate \times Bush			−0.011 (0.088)
Moderate \times Post-Trump			−0.322** (0.144)
Moderate \times COVID-19			−0.579*** (0.181)
Conservative \times Post-Reagan			−0.256*** (0.072)
Conservative \times Bush			−0.210** (0.089)
Conservative \times Post-Trump			−0.516*** (0.149)
Conservative \times COVID-19			−0.875*** (0.187)
Including Year 2021	Yes	Yes	Yes
AIC	47517.387	47379.057	47353.256
BIC	47678.763	47557.420	47582.580
Log Likelihood	−23739.694	−23668.528	−23649.628
Num. obs.	36079	36079	36079

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Note: The variables "Non-White" and "South" are excluded from models 4, 5, and 6. Numbers in parentheses represent standard errors. The reference category for political party affiliation is Democrat. The reference category for political ideology is liberal. Age² is a squared term.

Table 4. Average Marginal Effects of Logit Models (I)

	Model 1	Model 2	Model 3
Year	−0.001*** (0.000)	−0.001*** (0.000)	−0.001*** (0.000)
Female	−0.068*** (0.005)	−0.068*** (0.005)	−0.068*** (0.005)
Non-White	−0.098*** (0.007)	−0.098*** (0.007)	−0.098*** (0.007)
Education (Years)	0.016*** (0.002)	0.016*** (0.002)	0.016*** (0.002)
High School	−0.003 (0.007)	−0.004 (0.007)	−0.004 (0.007)
Bachelor	0.064*** (0.012)	0.063*** (0.012)	0.064*** (0.012)
Graduate	0.062*** (0.016)	0.061*** (0.016)	0.062*** (0.016)
South	−0.034*** (0.006)	−0.033*** (0.006)	−0.033*** (0.006)
Church Attendance	−0.010*** (0.001)	−0.010*** (0.001)	−0.010*** (0.001)
Family Income	0.025*** (0.003)	0.025*** (0.003)	0.025*** (0.003)
Age	−0.016*** (0.002)	−0.016*** (0.002)	−0.016*** (0.002)
Independent	−0.019*** (0.006)	−0.017*** (0.006)	−0.018*** (0.006)
Republican	−0.004 (0.007)	0.002 (0.007)	0.000 (0.007)
Moderate	−0.050*** (0.007)	−0.051*** (0.007)	−0.051*** (0.007)
Conservative	−0.048*** (0.007)	−0.049*** (0.007)	−0.049*** (0.007)
Post-Reagan (1981–2021)	−0.012 (0.009)	−0.013 (0.009)	−0.013 (0.009)
Bush (2001–2008)	−0.010 (0.009)	−0.009 (0.009)	−0.009 (0.009)
Post-Trump (2017–2021)	0.032** (0.015)	0.032** (0.015)	0.031** (0.015)
Including Year 2021	No	No	No
AIC	44597.317	44539.579	44568.878
BIC	44765.950	44725.075	44788.100
Log Likelihood	−22278.659	−22247.790	−22258.439
Num. obs.	33916	33916	33916

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table 5. Average Marginal Effects of Logit Models (II)

	Model 4	Model 5	Model 6
Year	−0.002*** (0.000)	−0.002*** (0.000)	−0.002*** (0.000)
Female	−0.067*** (0.005)	−0.068*** (0.005)	−0.068*** (0.005)
Education (Years)	0.018*** (0.001)	0.018*** (0.001)	0.018*** (0.001)
High School	0.002 (0.007)	0.001 (0.007)	0.001 (0.007)
Bachelor	0.071*** (0.012)	0.068*** (0.012)	0.067*** (0.012)
Graduate	0.065*** (0.015)	0.061*** (0.015)	0.060*** (0.015)
Church Attendance	−0.013*** (0.001)	−0.012*** (0.001)	−0.012*** (0.001)
Family Income	0.032*** (0.003)	0.032*** (0.003)	0.031*** (0.003)
Age	−0.011*** (0.002)	−0.012*** (0.002)	−0.012*** (0.002)
Independent	−0.014** (0.006)	−0.010* (0.006)	−0.009 (0.006)
Republican	0.004 (0.007)	0.013* (0.007)	0.012* (0.007)
Moderate	−0.060*** (0.006)	−0.060*** (0.006)	−0.059*** (0.006)
Conservative	−0.063*** (0.007)	−0.064*** (0.007)	−0.063*** (0.007)
Post-Reagan (1981–2021)	−0.016* (0.009)	−0.018** (0.009)	−0.018** (0.009)
Bush (2001–2008)	−0.010 (0.009)	−0.009 (0.009)	−0.010 (0.009)
Post-Trump (2017–2021)	0.029* (0.015)	0.029* (0.015)	0.027* (0.015)
COVID-19 (2020–2021)	0.035** (0.017)	0.034** (0.017)	0.030* (0.017)
Including Year 2021	Yes	Yes	Yes
AIC	47517.387	47379.057	47353.256
BIC	47678.763	47557.420	47582.580
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References

- Davern, Bautista, Freese, Morgan, & Smith. (2021). *General social survey 2021 cross-section* [Dataset and codebook]. NORC ed. Chicago. <https://gss.norc.org>
- Gauchat, G. . (2012). Politicization of science in the public sphere: A study of public trust in the united states, 1974 to 2010. *American Sociological Review*, 77(2), 167–187. <https://doi.org/10.1177/0003122412438225>