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

Presentation of Figures

Clemens Stefan Heithecker

Tilburg University
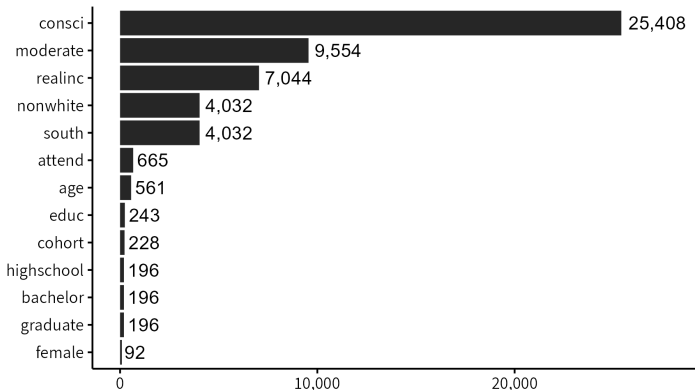
June 4, 2022

Contents

Missing Values

Missing Values Summary (1)

Number of Missing Values
Plot only shows variables with missing values
(Total number of observations: 68,846)

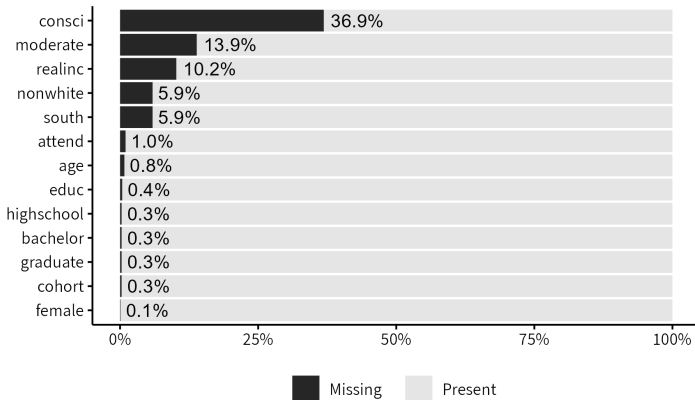| Variable	Count
consci	25,408
moderate	9,554
realinc	7,044
nonwhite	4,032
south	4,032
attend	665
age	561
educ	243
cohort	228
highschool	196
bachelor	196
graduate	196
female	92

0   10,000   20,000

GSS 2021 (4,032 observations) did not include "race" and "region" variables.

Missing Values Summary (2)

Fraction of Missing Values
Plot only shows variables with missing values

consci	36.9%
moderate	13.9%
realinc	10.2%
nonwhite	5.9%
south	5.9%
attend	1.0%
age	0.8%
educ	0.4%
highschool	0.3%
bachelor	0.3%
graduate	0.3%
cohort	0.3%
female	0.1%

0%   25%   50%   75%   100%

■ Missing   ▢ Present

GSS 2021 (4,032 observations) did not include "race" and "region" variables.

Comparison of Data With(out) Missing Income Values
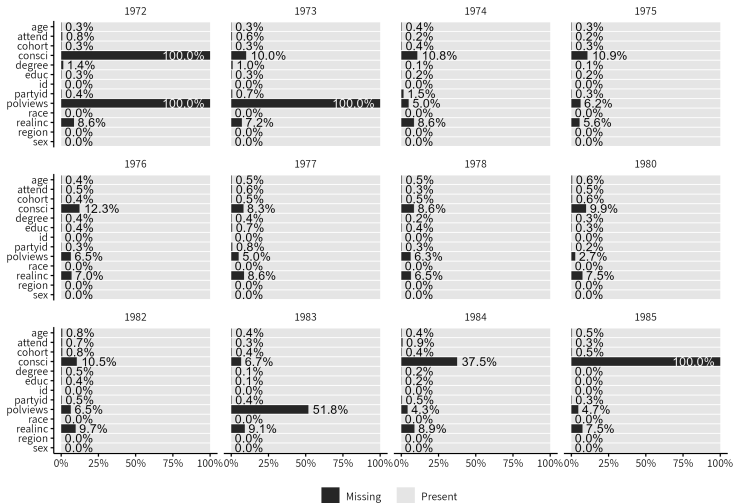

Data Without Missing Values vs. Data with Missing Income Values
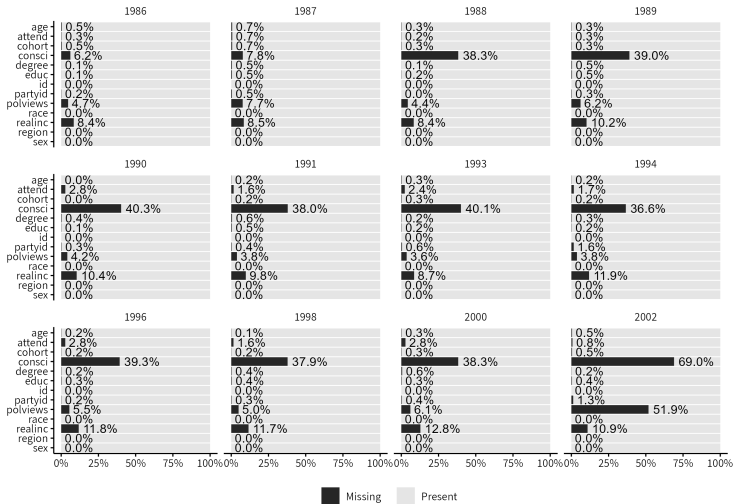Plot only shows binary dummy variables

Missing Values by Year (1)
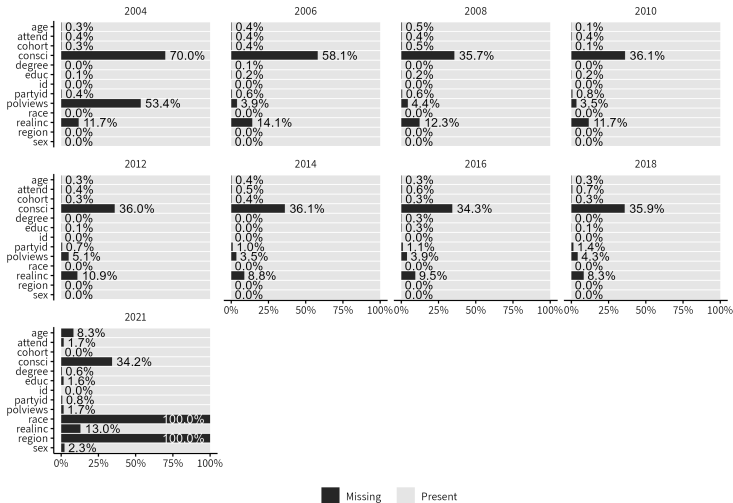

Fraction of Missing Values (1)

Missing Values by Year (2)

Fraction of Missing Values (2)

Missing Values by Year (3)
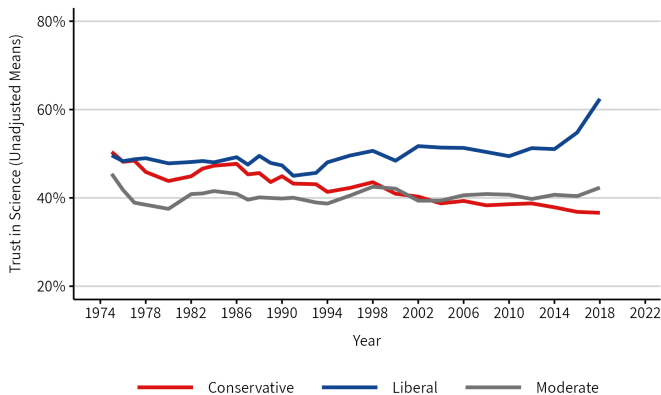

Fraction of Missing Values (3)

Aggregate Statistics

Confidence in Science by Political Ideology Over Time (1)

Cleaned Sample

Public Trust in Science for Each Survey Year by Political Ideology
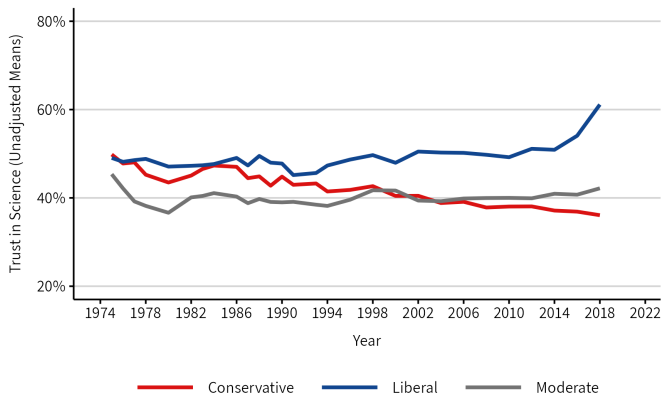Three-period moving averages for each group to smooth the patterns overtime

Confidence in Science by Political Ideology Over Time (2)

Pre-Cleaned Sample Including Missing Values

Public Trust in Science for Each Survey Year by Political Ideology
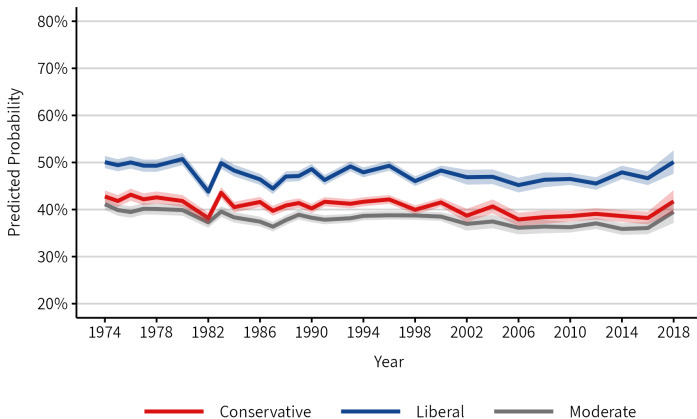Three-period moving averages for each group to smooth the patterns overtime

Predictive Analysis

Predicted Trust in Science, *Excluding* 2021 (1)

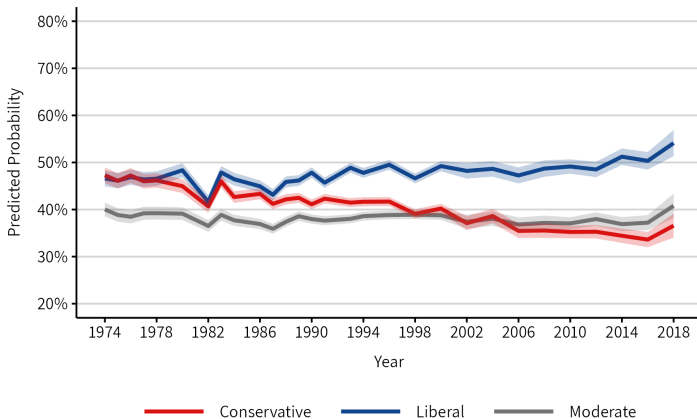**Predicted Probability of Sharing "a great deal" of Confidence in Science**
Model 1 (Excluding 2020/2021)

Predicted Trust in Science, *Excluding* 2021 (2)

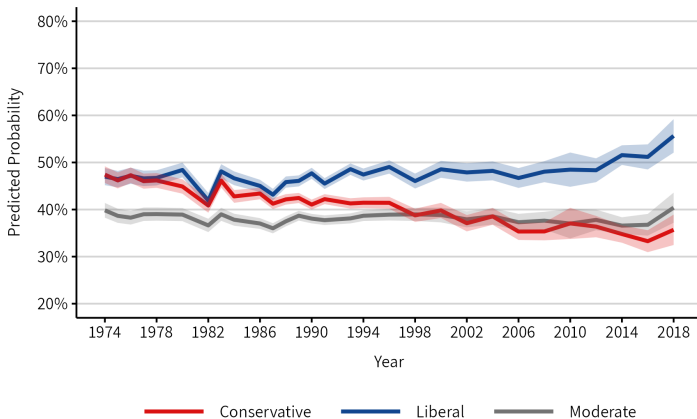**Predicted Probability of Sharing "a great deal" of Confidence in Science**
Model 2 (Excluding 2020/2021)

Predicted Probability of Sharing "a great deal" of Confidence in Science
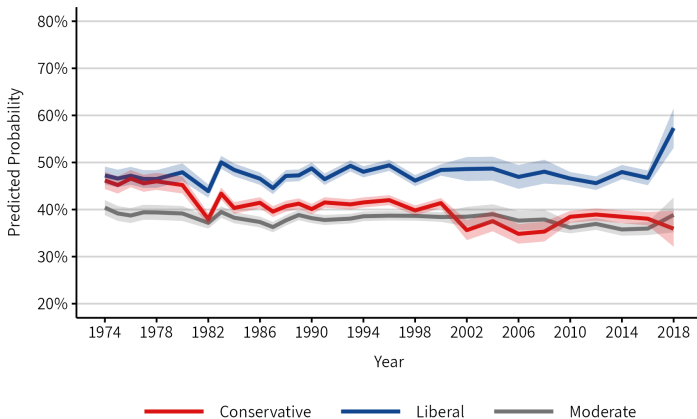Model 2 Variation (Excluding 2020/2021)

Predicted Trust in Science, *Excluding* 2021 (4)

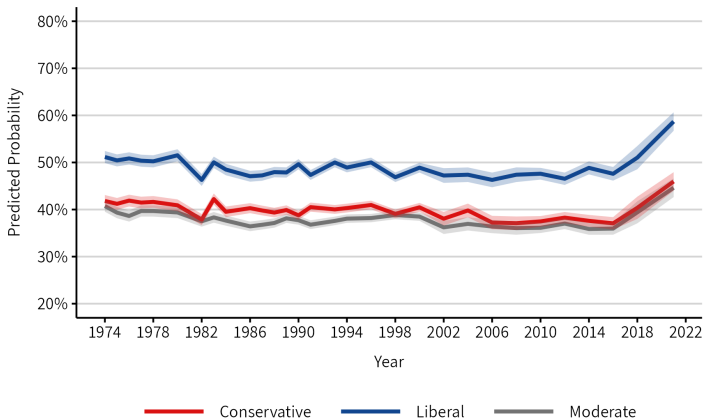**Predicted Probability of Sharing "a great deal" of Confidence in Science**
Model 3 (Excluding 2020/2021)

Conservative · Liberal · Moderate

Predicted Trust in Science, *Including* 2021 (1)

Predicted Probability of Sharing "a great deal" of Confidence in Science
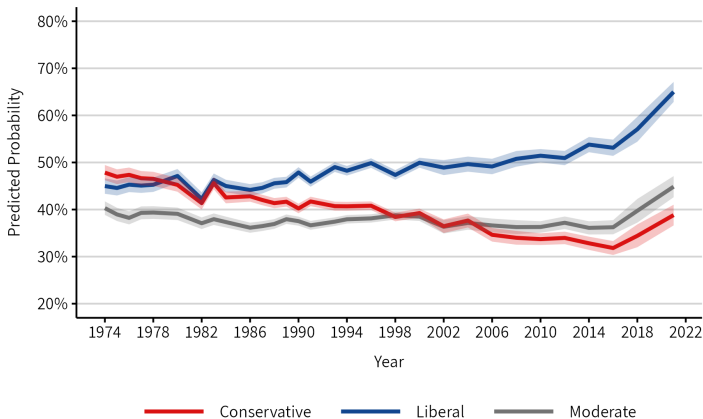Model 4 (Including 2020/2021)

Predicted Trust in Science, *Including* 2021 (2)

Predicted Probability of Sharing "a great deal" of Confidence in Science
Model 5 (Including 2020/2021)

Predicted Trust in Science, *Including* 2021 (3)

Predicted Probability of Sharing "a great deal" of Confidence in Science
Model 5 Variation (Including 2020/2021)

Predicted Trust in Science, *Including* 2021 (4)

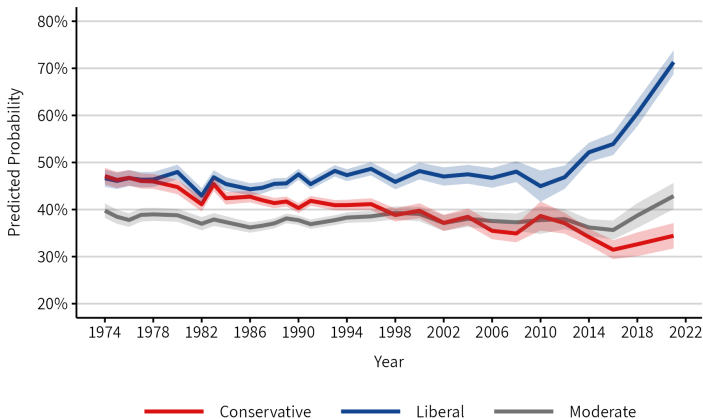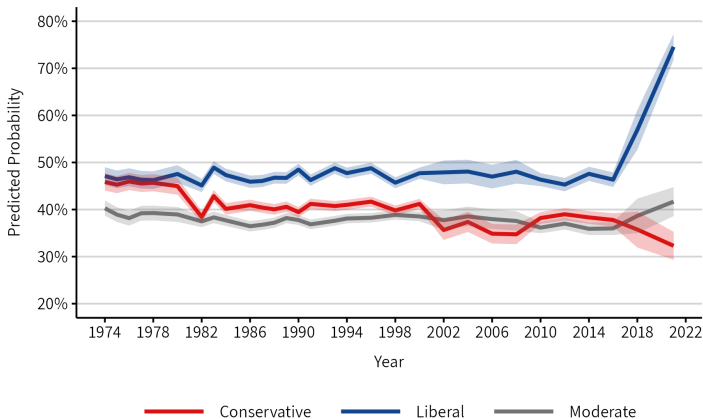**Predicted Probability of Sharing "a great deal" of Confidence in Science**
Model 6 (Including 2020/2021)

Appendix

Please find the data sets, scripts, and other supporting files and documents in the project's GitHub repository at https://github.com/clemensheithecker/bachelor-thesis.

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