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## AMERICA'S LIBERAL SOCIAL CLIMATE AND TRENDS CHANGE IN 283 GENERAL SOCIAL SURVEY VARIABLES BETWEEN AND WITHIN US BIRTH COHORTS, 1972–2018

MICHAEL HOUT  \*

**Abstract** The late James A. Davis characterized American public opinion in the Reagan era as “conservative weather” amidst a liberalizing “climate.” By climate, he meant differences between cohorts, while the weather referred to trends within cohorts. Thirty years later, the public opinion climate continues to get more liberal, as each successive cohort continues to be more liberal, on balance, than the ones that came before them. Recent weather complements that by being quite liberal, too. Specifically, 62 percent of variables analyzed were more liberal in recent birth cohorts than they were in the oldest ones, but just 5 percent were more conservative (some did not differ among cohorts, and some were neither liberal nor conservative). Within cohorts, recent measurements were more liberal than early measurements for 51 percent of the variables and more conservative for 11 percent

Social science progresses, mostly, via intensive studies of specific outcomes and the relevant explanatory variables, selected to advance knowledge by adding descriptive information or by testing hypotheses. Sometimes, though, a broader view comparing many variables at once helps. Broad analyses can answer questions such as “Is social change accelerating or slowing down?” or “Are attitudes getting more liberal or conservative?” or reach conclusions about society as a whole.

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The late James A. Davis, founder of the General Social Survey (GSS), was a master of the broad perspective. In a pair of influential papers (Davis 1980, 1992), he characterized long-term trends via cohort replacement as “social climate” and within-cohort changes as “social weather.” Davis (1980) concluded that America’s climate was becoming gradually more liberal through cohort replacement, though conservative weather countered that in the short run. Davis (1992) wondered if the liberal drift had “plateaued.” Tom W. Smith (1990) anticipated Davis’s (1992) conclusions about a liberal plateau in his analysis of 455 trends compiled from many sources, the earliest beginning in 1937. Ellis and Stimson (2012) also conducted broad analyses, and their conclusions about the nation’s “mood” echoed Davis’s finding of conservative weather in the Reagan era (also see Manza, Heerwig, and McCabe 2012; Stimson 2012). In a different kind of broad analysis, Dangelis, Hardy, and Cutler (2007) countered the stereotype that aging makes people’s views rigid by analyzing within-cohort change at midlife and beyond.

The “climate” and “mood” researchers focused on the political lean of trends. This paper takes the same approach. Polarization research also compares trends but conditions on people’s partisan identification or ideological lean (DiMaggio, Evans, and Bryson 1996; Baldassarri and Park 2020). Polarization, though important, is beyond the scope of this analysis.

My aim is to update Davis (1992), adding years and variables; I extend the timeline to 2018, add cohorts who have become adults since 1990, and include all GSS questions asked four or more times over a span of at least twenty years (a total of 283 outcome variables). Davis focused on attitudes; I add behaviors and identities, a majority of which turn out to have a political lean. To root out spurious change, I adjust trends for the covariates gender, race-ethnicity, education, immigration, and geography.

This new and extended evidence shows that change in *both* the social climate and social weather in the United States have been mostly liberal over the last half century. Specifically, Americans born in the 1980s and 1990s are more liberal than those born before 1930 were on 60 percent of the 283 outcome variables and more conservative on only 5 percent. Within-cohort trends leaned liberal for 48 percent of variables and conservative on only 11 percent. The rest of the variables either had no political lean (29 percent) or did not change (6 percent between cohorts and 12 percent of within cohorts).

## Data and Methods

### THE GENERAL SOCIAL SURVEY (GSS)

The GSS consists of 32 cross-sectional surveys representative of adults living in US households. Interviews were mostly face-to-face (some by phone).

Until 2002, interviews were all in English; since then respondents have chosen between English and Spanish. The response rate fell from 80 to 60 percent over time. Please refer to [Smith et al. \(2019\)](#) and the GSS website ([gss.norc.org](http://gss.norc.org)) for more methodological details.

The goal is to consider the broadest possible pool of trends, so I selected questions that were asked at least four times over a span of at least twenty years. I dropped questions that asked about other people—parents, spouses, or siblings. Gender, race-ethnicity, education, immigration, and geography entered the analysis as covariates. That left 312 questions for analysis as outcome variables. Some were combined in various ways, leaving 283 variables for analysis. Coding details are in three Appendix tables (see [Appendix tables A1–A3](#)). I also reversed the coding of about 30 variables to aid interpretation, for example, flipping prayer so “several times a day” got the highest and “never” the lowest score. Finally, [Smith \(1988\)](#) listed over 40 slight changes of wording or context that can complicate interpretation. He proposed several remedies, and I followed most of his recommendations. The most important recommendation I did not take concerned racial attitudes. Until 1978, Black respondents were not asked some questions. Smith suggested dropping Black respondents; instead, I started those time series in 1978. Stata code for all transformations and statistical analyses are included in the [Supplementary Material](#). The number of observations ranged from 3,476 to 64,426.

#### QUANTIFYING CHANGE ACROSS PERIODS AND COHORTS

The analytical goal was to compare variables between and within cohorts, following Davis. I quantified both types of change by regressing each outcome on dummy variables for survey years and birth cohorts, with and without control variables (“covariates”). But as the number of cohorts (118) far exceeded the number of surveys (32), cohort differences might exceed period differences as an artifact. To eliminate that risk, I combined some years of birth so that cohort and period both have 32 categories.<sup>1</sup>

Formally, for outcome variable  $Y_{ki}$  ( $i = 1, \dots, N$ ;  $k = 1, \dots, 283$ ), consider seven models:

$$Y_{ki} = \alpha_{1k} + \sum_j \gamma_{1kj} Cohort_{ij} + u_{1ki} \quad (1)$$

1. Fitting *linear* trends to years and cohorts ([Firebaugh 1989](#)) would equalize degrees of freedom at one, of course, but theory predicts nonlinear change under some pretty general conditions ([Fischer 1978](#); [Baldassarri and Park 2020](#)). Thus, a linear model must be used with caution, if at all.

$$Y_{ki} = \alpha_{2k} + \sum_t \beta_{2kt} Year_{it} + u_{2ki} \quad (2)$$

$$Y_{ki} = \alpha_{3k} + \sum_t \beta_{3kt} Year_{it} + \sum_j \gamma_{3kj} Cohort_{ij} + u_{3ki} \quad (3)$$

$$Y_{ki} = \alpha_{4k} + \sum_x \delta_{4kx} X_{ix} + u_{4ki} \quad (4)$$

$$Y_{ki} = \alpha_{5k} + \sum_j \gamma_{5kj} Cohort_{ij} + \sum_x \delta_{5kx} X_{ix} + u_{5ki} \quad (5)$$

$$Y_{ki} = \alpha_{6k} + \sum_t \beta_{6kt} Year_{it} + \sum_x \delta_{6kx} X_{ix} + u_{6ki} \quad (6)$$

$$Y_{ki} = \alpha_{7k} + \sum_t \beta_{7kt} Year_{it} + \sum_j \gamma_{7kj} Cohort_{ij} + \sum_x \delta_{7kx} X_{ix} + u_{7ki} \quad (7)$$

where the  $X$ s in equations (4)–(7) stand for five covariates: gender, race-ethnicity, education, immigration status, current rural-urban residence, and current region. I treated all covariates as categorical variables.

To get a uniform measure of fit, I used ordinary least squares (OLS) for each outcome variable<sup>2</sup>; its  $R^2$  measures fit. From the  $R^2_{kq}$ s (where  $q$  indexes the equation from which it was derived), I calculated:

$$(P + C) = Period\ plus\ cohort_k = \sqrt{R^2_{k3}} \quad (8)$$

$$(P + C | X) = Period\ plus\ cohort\ with\ covariates_k = \sqrt{R^2_{k7} - R^2_{k4}} \quad (9)$$

$$(C | P) = Net\ cohort_k = \sqrt{R^2_{k3} - R^2_{k2}} \quad (10)$$

$$(C | P, X) = Net\ cohort\ with\ covariates_k = \sqrt{R^2_{k7} - R^2_{k6}} \quad (11)$$

$$(P | C) = Net\ period_k = \sqrt{R^2_{k3} - R^2_{k1}} \quad (12)$$

$$(P | C, X) = Net\ period\ with\ covariates_k = \sqrt{R^2_{k7} - R^2_{k5}} \quad (13)$$

The quantities in (9)–(13) resemble the “multiple partial correlation” in [Blalock \(1979, p. 488\)](#), but he divided each by one minus the baseline.

Conspicuously missing from the covariates is age. With cohort and period central to the model, adding age creates both a linear and a logical dependency ([Mason et al. 1973](#); [Fosse and Winship 2019](#)). Scholars disagree on how to handle this dependency. [Davis \(1992\)](#) described changes between and within cohorts without separating period and age differences within cohorts (as did [Dangelis, Hardy, and Cutler \[2007\]](#), though they emphasized age over period). Yet some accounting for age is necessary.

2. For each regression I weighted cases by the product of the GSS sampling weights for Black oversamples in the 1980s (oversamp) and initial nonresponses since 2006 (wtssnr).

Age differences, net of period and cohort, reveal themselves in the interaction between period and cohort (Fienberg and Mason 1979).<sup>3</sup> If the interaction is small, relative to its degrees of freedom, the excluded age effects are ignorable. If the interaction is significant, then we should look there for age patterns. The period-cohort interaction was significant ( $p < 0.01$ ) for 25 of 283 outcomes (9 percent).<sup>4</sup> Table 1 includes nine of them; the rest are listed in Appendix table A4.

## Results

### COHORT AND PERIOD COMPONENTS

All 283 variables in this analysis changed significantly ( $p < 0.05$ ) either between or within cohorts; both cohort and period were significant for most variables. Figure 1 shows the components defined in equations 8–13. The y-axis shows Rs because they have twice the spread and less than half the skew of the  $R^2$ s.<sup>5</sup> The median Rs for the period-plus-cohort model was 0.18, the highest quarter ranged from 0.21 to 0.59, and the lowest quarter ranged from 0.06 to 0.13. Adjusting for covariates barely changed the distribution of Rs, implying that demographics other than cohort accounted for very little change.

Differences between cohorts generally exceeded differences within cohorts; the cohort boxes, adjacent-value lines, and outliers in figure 1 reach higher than the corresponding period boxes, lines, and outliers. Net cohort change exceeded the net period change for 195 of the 283 variables (69 percent). Table 1 lists the variables that changed the most, ranked by the P + C model, and outliers from figure 1. Among variables that changed the most, cohort change exceeded period change in 23 of 25 variables. Even among the period outliers in figure 1, cohort change exceeded period change for nine of the 17 variables.

The four biggest changes were behaviors: retiring, reading a newspaper, using a computer, and marrying. Each had substantial cohort and period components; retiring and marrying included an age-related period-by-cohort interaction. I will discuss these four variables in detail below. The rest of the top-10 changes were approving of gay marriage, civil liberties for a hypothetical gay man, children in the household, the morality of same-sex sex, civil liberties for a hypothetical atheist, and working full time.

3. Fienberg and Mason characterized cohort as the age-period interaction with constraints, but their insight applies equally to age as the interaction of period and cohort.

4. The 0.01 significance level seemed appropriate when doing 283 simultaneous tests.

5. Mean, standard deviation, and skewness were 0.18, 0.08, and 1.45 for the 283 Rs, compared to 0.04, 0.04, and 3.26, respectively, for the  $R^2$ s.

**Table 1. Multiple partial correlations (Rs) by model component for variables that changed the most, by topic**

Rank	Variable	Model component								
		Lean	P+C	P C	C P	P+C X	P C,X	C P,X	P×C   P+C, X	p for P×C
Behaviors, statuses, and identities										
1	Retired	LC	.59	.36	.59	.57	.36	.56	.37	<.01
2	Ever married	LL	.51	.21	.50	.48	.20	.47	.27	<.01
3	Read newspaper	NN	.43	.20	.22	.43	.20	.23	.12	.30
4	Use a computer	NN	.41	.13	.35	.36	.12	.30	.10	.58
7	Children in household	NN	.38	.29	.34	.38	.28	.34	.32	<.01
10	Working full.time	NN	.35	.13	.34	.29	.14	.29	.28	<.01
13	Sex partners (#)	LX	.35	.15	.34	.32	.14	.32	.10	.62
16	Evening at bar	LX	.33	.19	.33	.30	.18	.30	.16	<.01
22	Homeowner	LX	.31	.16	.31	.29	.16	.28	.18	<.01
25	Evening with friends	LX	.31	.17	.31	.28	.17	.28	.16	<.01
26	Living alone	NN	.30	.21	.27	.29	.20	.26	.14	<.01
27	Watched X-rated movie	LL	.30	.15	.29	.27	.14	.26	.12	.38
52	Voted in last election	NN	.24	.14	.24	.28	.13	.27	.13	<.01
Sex and drugs										
5	Approve gay marriage	LL	.40	.23	.23	.39	.22	.22	.12	.40
8	Same-sex sex wrong	LL	.37	.15	.20	.32	.14	.18	.12	.74
11	Legalize marijuana	LL	.35	.19	.18	.33	.19	.16	.14	.12
20	Premarital sex wrong	LL	.32	.07	.29	.29	.07	.26	.12	.44
Gender roles and family values										
12	Male breadwinner	LL	.35	.09	.29	.30	.08	.26	.12	.51
17	Parents marry	LL	.33	.05	.31	.30	.05	.29	.09	.96
18	Political sexism	LL	.33	.09	.27	.23	.07	.19	.12	.57

(continued)

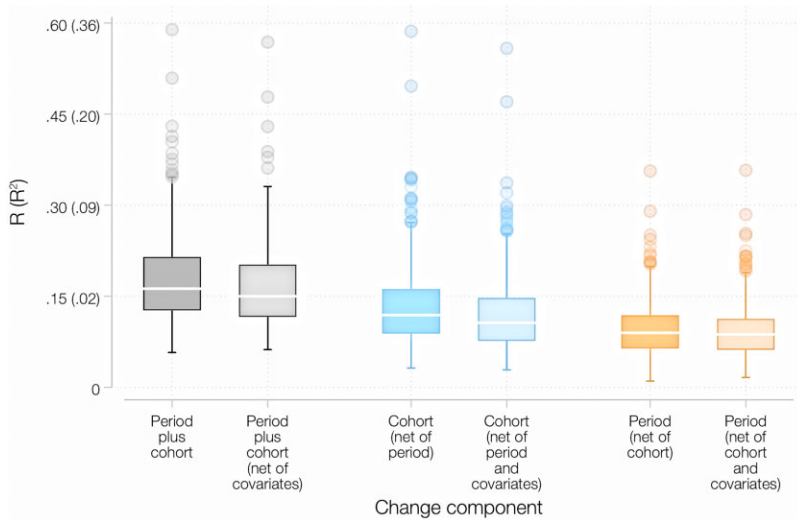
Table 1. Continued

Rank	Variable	Lean	Model component								p for P×C
			P+C	C P	P+C X	P C,X	C P,X	P×C   P+C, X			
Racial attitudes											
14	Whites have no right to exclude Blacks	LL	.35	.16	.24	.25	.12	.18	.12	.12	.76
15	Object if close relative married Black partner	LL	.34	.16	.23	.29	.15	.18	.14	.14	.08
19	OK if Blacks push in	LL	.33	.13	.24	.24	.09	.19	.11	.11	.80
24	Ban housing discrimination	LL	.31	.13	.19	.26	.12	.17	.12	.12	.60
Civil liberties											
6	Gay man	LL	.39	.11	.27	.28	.09	.20	.12	.12	.70
9	Atheist	LL	.36	.04	.31	.26	.04	.24	.11	.11	.82
21	Militarist	LL	.32	.04	.27	.25	.04	.22	.12	.12	.67
23	Communist	LL	.31	.05	.26	.21	.04	.19	.12	.12	.71
Confidence in leaders of institutions											
36	Banks and finance	LL	.28	.22	.13	.26	.22	.13	.15	.15	.01
40	The press	CC	.27	.22	.04	.25	.22	.04	.13	.13	.26
42	US Congress	NN	.27	.25	.11	.26	.25	.11	.13	.13	.16
91	Executive branch	NN	.20	.18	.06	.21	.19	.07	.14	.14	.06
Taxes, spending, and voting											
39	Spending: weapons	LC	.27	.24	.15	.26	.25	.13	.14	.14	.27
53	Taxes on rich too low	CC	.24	.21	.11	.23	.21	.10	.14	.14	.05
67	Spending: defense	LC	.22	.20	.14	.23	.21	.13	.14	.14	.74

NOTE.—R is the multiple correlation coefficient for the P + C model and the multiple partial correlation for the other models. Variables that changed the most are the 25 with the largest Rs from the P+C model (ranks 1–25) and the outliers in figure 1 (may be any rank).

Key: P+C = period plus cohort; P|C = period, net of cohort; C|P = cohort, net of period; P+C|X = period plus cohort, net of covariates; P|C,X = period, net of cohort and covariates; C|P,X = cohort, net of period and covariates; P×C = period-cohort interaction. Lean entries are cohort-period pairs: N = no change, X = No lean, C = conservative lean, L = liberal lean.





**Figure 1. Change over cohorts and periods ( $R$ ) by model component for 283 variables, each measured at least four times over twenty years.**  $R$  is the multiple correlation for the period-plus-cohort model and the multiple partial correlation for model components. In these boxplots, the “boxes” span the interquartile range of  $R$  values for each model component, the horizontal white line shows the median of each set of  $R$  values, the vertical lines span the wider range from the lower to the upper “adjacent values” for the  $R$ s, and the circles show outliers (variables with  $R$ s above the upper adjacent value). Outliers are listed in [table 1](#). The covariates were gender, race-ethnicity, education, immigration status, and geography. Source: author’s calculations from the General Social Surveys, 1972–2018.

The 10 biggest changes were still among the biggest after controlling for covariates. Change net of covariates was notably smaller for the liberal trends in racial attitudes, suggesting that the growth of the Hispanic and Asian populations reduced prejudice. Whites’ attitudes also changed ([Hout and Maggio 2021](#)), just not as much as the P + C model suggests.

Among slow-changing variables (see [Appendix table A4](#)), the racial item about Whites’ and Blacks’ relative wealth changed the least. Happiness, attributing success to luck or hard work, belief in life after death, and confidence in science also changed relatively little. Ranking near the bottom does not imply a variable is unimportant (see [Greeley and Hout 1999](#); [Fischer 2010](#); [Bobo et al. 2012](#); [Firebaugh and Tach 2012](#)).

Conspicuously missing from the top of the list are several issues central to political polarization and partisan sorting ([Baldassarri and Park 2020](#)).

**Table 2. Political lean of trends by type of variable and type of change**

Political lean	Type of variable					
	Opinion or attitude		Behavior, status, or identity		All variables	
	Cohort (%)	Period (%)	Cohort (%)	Period (%)	Cohort (%)	Period (%)
Liberal	62	51	52	34	60	48
Conservative	5	11	3	9	5	11
No trend	7	12	3	16	6	12
No lean	26	26	41	41	29	29
Total (Variables)	100 (224)	100 (224)	100 (58)	100 (58)	100 (282)	100 (282)

NOTE.—Each item's political lean comes from its correlation with political views; the combination of the item's political lean and its direction of change determined the trend's political lean. A liberal trend means that a liberal item increased or a conservative item decreased. A conservative trend means that a conservative item increased or a liberal item decreased. Only 282 items are in the tabulation because one item, political views, was used to classify the political lean of the others.

Abortion ranked 237th overall, gun ownership ranked 124th, gun regulation 251st, help for the poor 167th and 229th (two forms of the question), and health care ranked 149th, 150th, and 227th (asked three ways). Their low rankings are not an artifact. Change and conflict are separate. Future research will have to decide if lack of change promotes conflict or conflict stunts change, but from these results we can say that the liberal drift of Americans' identities and attitudes, especially as reflected in cohort replacement, left several hot issues unmoved.

CLASSIFYING THE POLITICAL LEAN OF TRENDS

In discussing the tension between liberal climate and conservative weather, [Davis \(1980\)](#) used tacit knowledge to classify the political lean of the trends he studied. [Smith \(1990\)](#) used a combination of historical sources and GSS data. I only used GSS data. Specifically, I standardized each variable and regressed it on political views—the respondent's self-placement on a left-right scale from (1) "extremely liberal" to (7) "extremely conservative." Negative regression coefficients identify liberal variables; positive coefficients identify conservative ones. I classified a variable as having no political lean if its regression coefficient was less than 0.03 in absolute value (29 percent of variables). The mean of the coefficients was near zero (-0.003); they spread over a range from -0.28 (voted for the Democrat in the last

presidential election) to 0.29 (voted for the Republican), with a standard deviation of 0.09.

The high and low values of some variables are arbitrary; “strongly agree” is the highest score for some items and the lowest for others to counter some respondents’ tendency to fall into a response set. Thus, the substantive information about variables is in the combination of political lean and the direction it changed. To discern the direction of change for each variable, I took the difference between the variable’s average in the most recent cohorts or periods and its average in the earliest cohorts or periods with data. The most recent cohorts contain the 10 percent of cases born most recently, and the earliest cohorts contain the 10 percent of cases born earliest; recent and early periods are defined analogously.

A trend was liberal if a variable that leaned liberal *increased* or a variable that leaned conservative *decreased*. A trend was conservative if a variable that leaned conservative *increased* or a variable that leaned liberal *decreased*.

At the individual level, political views are hardly fixed. In the GSS panel, the correlation between people’s political views in a given year and the same people’s views two years earlier was only 0.62 compared to 0.81 for party identification (author’s calculations). Americans are more likely to mix liberal and conservative views than toe a party line (Kinder and Kalmoe 2017). But here we only ask political views to capture the political leans of other variables; it definitely suffices for that purpose.

#### LIBERAL AND CONSERVATIVE TRENDS

The United States is a more liberal country now than 50 years ago, as liberal trends far outnumbered conservative ones. Recent cohorts were more liberal than early ones on 60 percent of GSS variables of all kinds and 62 percent more liberal on opinions and attitudes (see table 2). They were more conservative on only 5 percent of variables (7 percent of variables did not change and 26 percent had no political lean). In recent years, Americans had more liberal opinions and attitudes; half (51 percent) of the GSS’s opinion and attitude variables moved in a liberal direction, and just 11 percent became more conservative (12 percent of variables did not change and, again, 26 percent had no political lean). Behaviors, statuses, and identities changed, too. Though non-attitudinal variables tend to be less political than attitudes (41 percent have no political lean), recent cohorts were more liberal than older ones on 52 percent of nonattitudinal variables and more conservative on just 3 percent.

In Davis’s terms, both the climate (cohort) and the weather (period) were decidedly liberal over the long run from 1972 to 2018, compared to the comparatively short span of five years available to Davis (1980). Davis did not misread the data; many trends reversed in the 1990s and later. Details will

come in the next section. From the literature, we know that worries about inflation, taxes, and crime leveled off by 1990 and some even reversed (Manza, Heerwig, and McCabe 2012), while attitudes toward sex, drugs, and race became more liberal (Fischer and Hout 2006; Bobo et al. 2012; Marsden 2012). Some of the biggest changes, though, had little political lean; Americans of all political views used computers more and read newspapers less. To appreciate these kinds of specifics, we need to examine cohort and period trends for individual variables.

#### DETAILS FOR 18 IMPORTANT TRENDS

Figures 2 and 3 show details of cohort and period change for 18 selected variables. I selected variables that show different patterns of change and highlight several substantive points. The data points are the predictive margins (Williams 2012) for each combination of cohort and period, standardized and adjusted for the covariates in the full model. Standardizing makes vertical cohort gaps and slopes with respect to period comparable to each other and across variables, at the cost of removing information about levels. That is, popular and unpopular items alike have means of zero. To assist in reading the charts, I smoothed the data.<sup>6</sup> Cohorts are represented by colored lines.<sup>7</sup> Selected cohorts, spaced 12 years apart, follow the spectrum from violet (born 1906) to red (born 1996). Pale gray lines fill in the rest of the cohorts.<sup>8</sup> A solid black line highlights the 1954 cohort; 18 years old in the first GSS and 64 years old in 2018, it represents the baby boomers in this analysis.

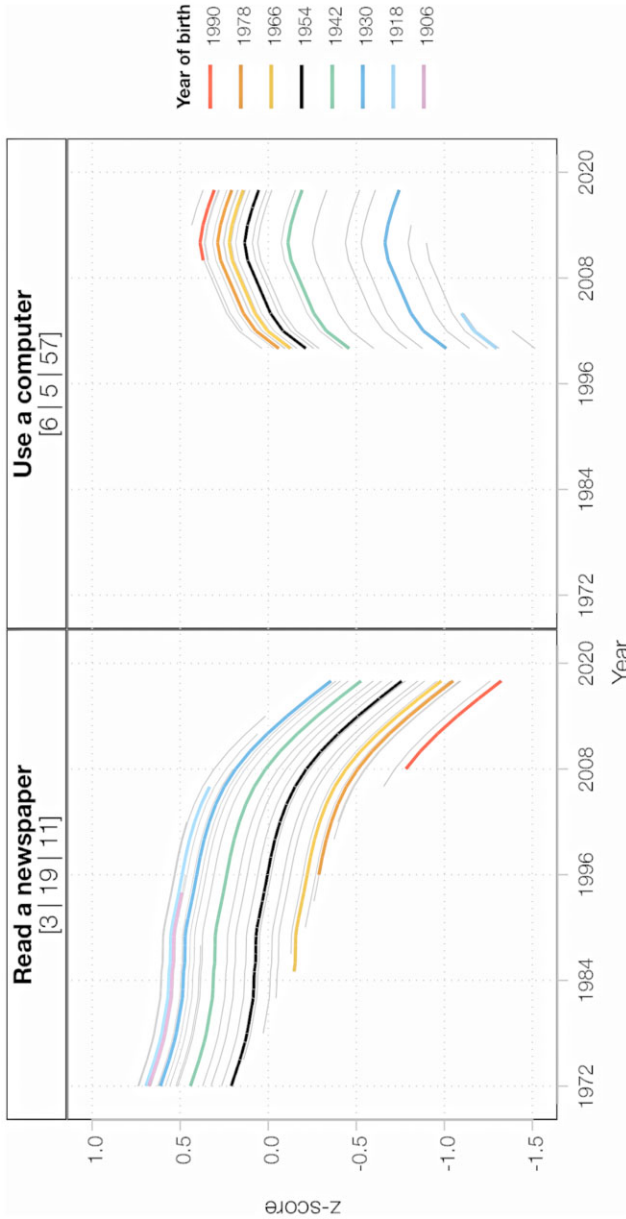
The pace of cohort change is visible in the vertical distances among cohort lines; big cohort differences put space between lines, and small cohort differences yield lines that nearly touch. Cohort succession is evident in the vertical distance between cohorts present in 1972 and gone before 2018 and cohorts that first appeared after 1972 and continued through 2018. Within-cohort change in a variable is evident in the tilt and wiggle of the lines. Within-cohort change combines period and aging influences on the cohort.

Technology changed society in many ways, including the historic decline of newspaper reading and related rise of computer use (the third and fourth biggest changes, overall, as seen in the ranks of overall, cohort, and period change, shown in square brackets beneath each label). Computers rose and newspaper readership declined both between and within cohorts. Newspaper reading began its decline with the 1925 cohort and continued almost linearly to the most recent (1996) cohort. Within cohorts, newspaper readership

6. Locally estimated regression (lowess) removes noise from trends (Cleveland 1993). For long trends, I used a bandwidth of 0.5; for shorter trends, I used 0.9.

7. Cohorts are represented by different line patterns in the printed version.

8. The printed version deletes the pale gray lines.



**Figure 2. Predictive margins (in standard deviation units) of newspaper reading and computer use by year and year of birth: Adults in households, 1972–2018.** The question about using a computer was first asked in 2000. The covariates were gender, race-ethnicity, education, immigration status, and geography. Trends were smoothed by locally estimated (lowess) regression using a bandwidth of 0.5 for newspapers and 0.9 for computers. Only some cohorts are listed in the legend to reduce clutter; cohorts not listed in the legend are shown with pale gray lines in the figure in the online version of the article. The small numbers in the caption bar are the variable’s rank with respect to the period-plus-cohort model, net cohort, and net period, with covariates. Source: author’s calculations from the General Social Surveys.

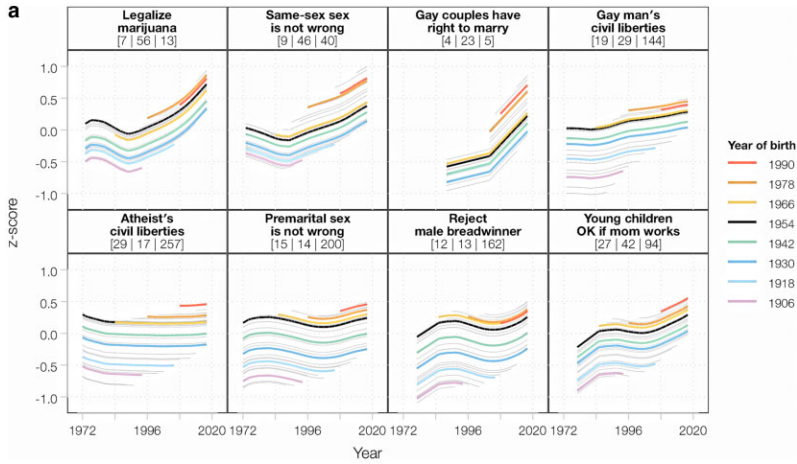
changed little until the millennium, then declined precipitously 2000–2018. Computer use was already widespread when the GSS first asked about it in 2000, so cohorts born before 1918 were unobservable before the first measurement.<sup>9</sup> Each successive cohort from 1918 to 1966 used computers more; cohort change continued to the last cohort (1996) but at a slower pace. Within-cohort change between 2000 and 2018 was less than most cohort differences but still amounted to about 0.5 standard deviations.

In the 1960s, journalists coined the expression “generation gap” to contrast baby boomers’ very liberal attitudes about drugs, sex, music, hair, clothes, and the Vietnam War with those of their parents. Fifty years later those gaps stand out as some of the biggest cohort differences in the GSS. The point, now as then, was to compare cohorts, not literally individuals with their parents. And the vertical distance between the baby boomers, represented here by the 1954 cohort (solid black line), and their parents’ cohort, represented here by the 1930 cohort (dark blue or short-dashed line), shows the legacy of the generation gap.

Legalizing marijuana was the quintessential generation gap issue in that the 1954 cohort took a far more liberal stance than the 1930 cohort, and subsequent cohorts did not move much beyond the boomers. When the GSS first asked if using marijuana should be legal in 1973, it was illegal everywhere in the country. Only 20 percent of all adults favored legalizing it, but half of the 1954 cohort favored legalizing it. People born after the 1950s differ little (in a given year) from the 1954 cohort. Conservative weather shows clearly, too, as through the 1980s support for legalizing marijuana fell in all cohorts. The weather turned liberal in the 1990s, perhaps in response to the notion of “medical marijuana” (Felson, Adamczyk, and Thomas 2019). Between 1987 and 2018, support rose 50 percentage points from 17 percent in favor to 67 percent in favor, ranking marijuana 13th among period trends.

Sex was another generation-gap theme. Four of the next five panels show Americans’ views on aspects of sex and sexuality between and within cohorts. These four items make clear that by 2018 Americans thought very differently about sex and sexuality than American adults did in the 1970s. In the early 1970s, few Americans of any generation accepted same-sex sex (Andersen and Fetner 2008), but the generation gap was substantial (DellaPosta 2018). In the years before the 1906 cohort passed away, their views of same-sex sex were one-half of a standard deviation more negative than were the views of the 1954 cohort; after the 1990 cohort entered adulthood, their views were a half standard deviation more positive than the 1954 cohort, netting a full standard deviation change from 1906 to 1990. So, cohort replacement was instrumental to the growing acceptance of sexual minorities. Within-cohort trends were substantial as well. Amidst the conservative weather of the 1970s and

9. Because the GSS top-codes age at 89 years to avoid disclosing the oldest respondents’ identities, we lose sight of cohorts when they reach 89.



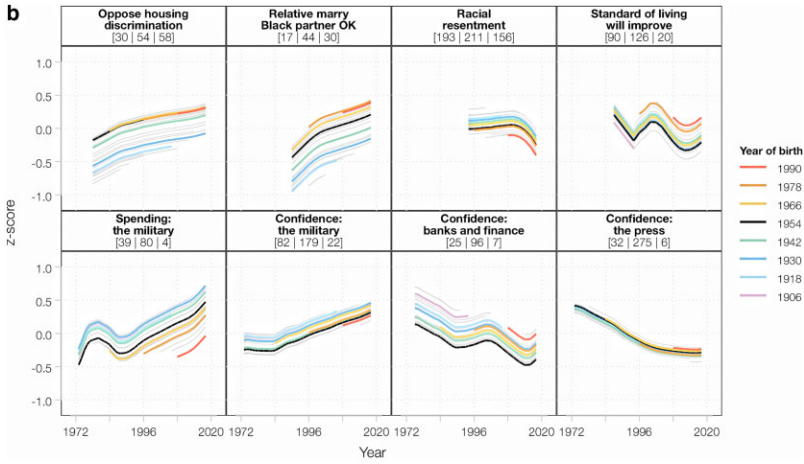
**Figure 3a. Predictive margins (in standard deviation units) of 16 variables chosen to illustrate different patterns of change by year and year of birth: Adults in households, 1972–2018.** The covariates were gender, race-ethnicity, education, immigration status, and geography. Trends were smoothed by locally estimated (lowess) regression using a bandwidth of 0.5 for newspapers and 0.9 for computers. Only some cohorts are listed in the legend to reduce clutter; cohorts not listed in the legend are shown with pale gray lines in the figure in the online version of the article. The small numbers in the caption bar are the variable’s rank with respect to the period-plus-cohort with covariates, net cohort with covariates, and net period with covariates models. Source: author’s calculations from the General Social Surveys.

1980s, more people saw same-sex sex as immoral; then their views “evolved” (as President Obama phrased it). The within-cohort average increased one standard deviation unit through 2018, which works out to 30 percentage points more saying same-sex sex is “not wrong at all” in 2018 than in 1990.

Gay marriage was not on the GSS until 1988, missing that conservative weather, but it shows a mix of cohort and period differences after 1988 even stronger than those for same-sex sex, ranking fourth in total change and fifth in net period change.

Support for a hypothetical gay man’s civil liberties also grew through cohort replacement, though millennials were less distinctively supportive of free speech than they were of marriage rights.<sup>10</sup> Within cohorts, we see no change (Davis 2012). Support for an atheist’s rights (fifth panel) closely resembles the gay man’s, suggesting that perhaps both trends say more about

10. Each civil liberties index combines questions that ask about canceling a speech, removing a book from the public library, and firing a college professor.



**Figure 3b. Predictive margins (in standard deviation units) of 16 variables chosen to illustrate different patterns of change by year and year of birth: Adults in households, 1972–2018.** The covariates were gender, race-ethnicity, education, immigration status, and geography. Trends were smoothed by locally estimated (lowess) regression using a bandwidth of 0.5 for newspapers and 0.9 for computers. Only some cohorts are listed in the legend to reduce clutter; cohorts not listed in the legend are shown with pale gray lines in the figure in the online version of the article. The small numbers in the caption bar are the variable’s rank with respect to the period-plus-cohort with covariates, net cohort with covariates, and net period with covariates models. Source: author’s calculations from the General Social Surveys.

civil liberties than they do about sexual or religious identity. Other variables temper that reading, though. Support for the civil liberties of communists, people who want the military to govern, and racists changed less (Davis 2012); millennials tended to support a hypothetical racist’s rights slightly less than earlier cohorts did (data not shown). Given the other ways Americans accepted sexual minorities and rejected religion in the last 25 years (Chaves and Anderson 2012), the most defensible reading of these two trends is that sexual and secular minorities received especially positive attention while racists tested the “seemingly relentless progress” for free speech (Davis 2012).

Heterosexuals talked of a sexual revolution, even before Americans’ views of same-sex sex changed. The GSS asked questions about the morality of sex between teenagers, sex “before marriage,” and extramarital sex. Premarital sex changed more than the other two, ranking 14th in cohort change. In the early 1970s, 62 percent of Americans born before 1915 thought premarital sex was always wrong, but 51 percent of the 1954 cohort thought it was not wrong at all. Attitudes to premarital sex, once formed, persisted;



within-cohort change was insignificant. Subsequent cohorts adopted the liberal views of the boomers; cohort change after 1954 was not significant (in contrast to the ongoing change in attitudes regarding same-sex sex). Attitudes about sex between teenagers changed much less (ranked 54th), and extramarital sex (not shown in the figure) was actually *less* accepted over time; in 2018, 84 percent viewed extramarital sex as “always wrong,” up from 69 percent in 1976.

Second-wave feminism contributed to the generation gap. Each successive cohort through 1966 rejected the male breadwinner stereotype more than the one before it. They also expressed more confidence that preschool children can bond with their working mothers. Then, the gender revolution “stalled” (England 2010); cohorts born since 1967 (a 30-year span) held very similar views. Cohort succession far exceed within-cohort change (the breadwinner variable ranked 13th in net cohort change and 162nd in period change). Translating the new roles into action, working full-time (not in the figure) rose from cohort to cohort until it, too, stalled out for cohorts born since 1967 (England, Levine, and Mishel 2020). Within cohorts, trends bucked the conservative weather, increasing through the mid-1980s. Then feminist attitudes stalled or retreated a bit before rising to their highest points in the last decade. Several other gender role variables in the GSS show muted versions of these patterns (not shown).

Measuring racism is one of the biggest challenges in opinion research. Terms change, some people hide what they really think, and indigenous people and other people of color have joined Black Americans in the struggle for inclusion. The GSS includes about 30 measures ranging from prejudices to “distance feelings” and “racial resentments” as well as opinions about whether and how to redress racial inequalities (Bobo et al. 2012).

Trends in racial attitudes have been mostly liberal over the last 50 years, despite the way appalling events in recent years have put some Whites’ racial resentments in the open for all to see (Moberg, Krysan, and Christianson 2019). The GSS contained 14 measures of racial attitudes in the 1970s. Most were already quite liberal by 1980, and several were dropped in favor of measures that resonated with contemporary debates (Moberg, Krysan, and Christianson 2019). While Americans resisted affirmative action and school integration (Bobo et al. 2012), they increasingly opposed housing discrimination across both cohorts and periods, as shown in the leftmost panel of the top row of figure 3B. Opposition increased from the 1918 to the 1954 cohort before stalling; cohorts born 1960–1996 were no more likely to oppose discrimination than the 1954 cohort was. Within cohorts, opposition grew slowly but steadily, rising about one-half of a standard deviation in 40 years.

Americans also increased their acceptance of close relatives marrying a Black partner. Reactions were about one standard deviation more positive among Americans born in the latest compared to the earliest cohorts. Within cohorts, positive reactions grew as well; the average response increased

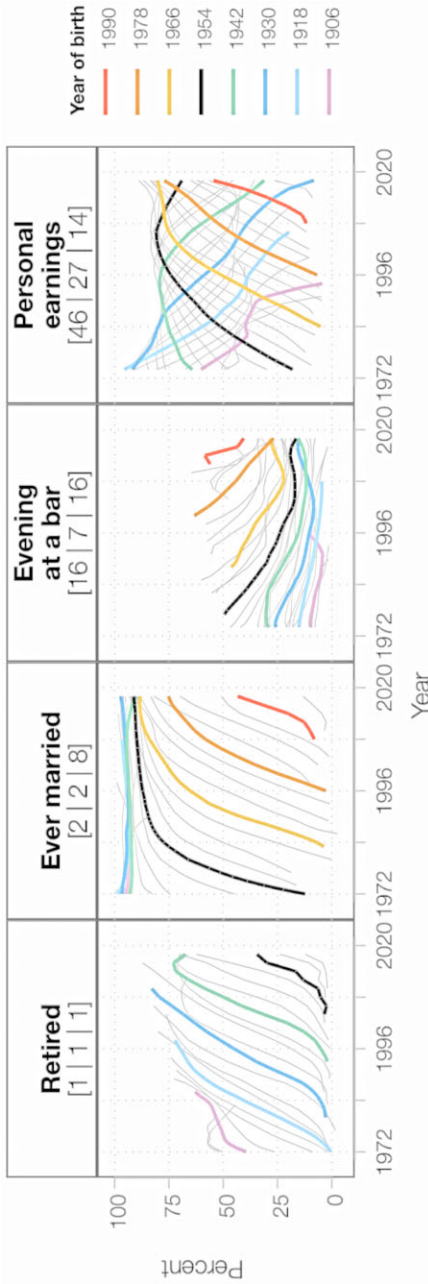
about 0.25 standard deviations in the early 1990s and at a significantly slower pace of only 0.33 standard deviations since 1996.

Racial resentment changed little and late (Kinder and Sears 1981; Simmons and Bobo 2018; Hout and Maggio 2021). The wording is complex: “Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same without special favors.”<sup>11</sup> While most racial attitudes showed less racial tension over time, until very recently Americans expressed the same (high) level of resentment over time, with a slight liberal tilt downward across cohorts. Since 2014 (or maybe 2012), resentment decreased by 0.3 standard deviations. Further research (Hout and Maggio 2021) shows that Whites who identified as Democrats or Independents expressed substantially less resentment, while White Republicans held on to theirs. This variable changed little relative to others discussed here; it ranked 193rd in period-plus-cohort change, but its implications may prove to be important, especially if racial resentment follows the pattern on gay issues, where Democrats and liberals moved first but Republicans and conservatives followed (Baldassarri and Park 2020).

None of the biggest changes refer to the historic rise in economic inequality during this period (Ellis and Stimson [2012] also found stable economic attitudes). The closest thing to a substantial inequality trend was economic expectations, which ranked 20th in net period change (just 90th overall). Cohort differences were small and changed direction; the midcentury cohort of 1954 was least optimistic. Within cohorts, Americans were quite optimistic about their standard of living in 1987 (the first time it was asked), one-half of a standard deviation less optimistic in 1994 (the second time), back up to their original optimism by 2000, then steadily more pessimistic through 2012, that is, before, during, and after the Great Recession, finally showing signs of recovery 2014–2018. The Great Recession altered several socioeconomic attitudes that had changed little before 2008 (Smith and Schapiro 2017).

The last row begins with spending on “the military, arms, and defense.” As the Vietnam War was winding down, only 11 percent of Americans thought the military budget was too low; the oldest cohorts were slightly more in favor of more spending than the baby boomers. As time went on, new cohorts entered adulthood and each successive cohort supported military spending slightly less than the one before. The secular trend was very favorable to military spending, though. Calls for more military spending quickly rose in the late 1970s, spiked in 1980 (at 60 percent saying “too little”), only to fall again in the mid-1980s. After the fall of the Soviet Union in 1989 and the first Gulf War in 1990, Americans once again felt the nation was spending too little on the military and defense, and still do. Confidence in military leadership also grew after 1990, rising more or less linearly 1990–2018.

11. The odd grammar is in the question. Responses ranged from strongly agree to strongly disagree on a five-point scale.



**Figure 4. Marginal percentages of three life events and personal earnings by year and year of birth: Adults in households, 1972–2018.** The covariates were gender, race-ethnicity, education, immigration status, and geography. Trends were smoothed by locally estimated (lowess) regression using a bandwidth of 0.5 for newspapers and 0.9 for computers. Only some cohorts are listed in the legend to reduce clutter; cohorts not listed in the legend are shown with pale gray lines in the figure in the online version of the article. The small numbers in the caption bar are the variable’s rank with respect to the period-plus-cohort model, net cohort, and net period, with covariates. Personal earnings were rescaled to the 0–100 range using a linear transformation; 0 corresponds to \$17,000 and 100 corresponds to \$58,000 (in 2018 dollars). Source: author’s calculations from the General Social Surveys.

The military was an exception. Americans lost confidence in the leadership of most major institutions over the last 50 years—medicine and science were also exempted (Smith 2012). Confidence in the management of banks and financial institutions fell sharply from 1973 to 1989, rebounded through the 1990s, fell from 2002 to 2012, and showed the slightest hint of recovery in 2018. Confidence in the press plummeted from 1973 to 2018, until almost half of adults now say they have “hardly any” confidence in people running the press. Confidence in people running television fell steadily, too (Smith 2012).

In summary, the social climate of the last 50 years, as reflected in differences among cohorts stripped of the influence of the times and covariates, was decidedly liberal. On a wide array of major social issues, notably drugs, sex, sexuality, gender roles, and race, cohorts that reached adulthood recently were more liberal than were cohorts born before World War II. The changes were far from uniform, though. Millennials were substantially more liberal than baby boomers on sexuality, some aspects of race, and religion (Hout and Fischer 2014). But on feminism and some other aspects of race, millennials resembled baby boomers.

Period change was less prevalent, overall, than cohort change. Mass acceptance of sexual minorities increased dramatically in the last 25 years, and the Great Recession affected people's economic expectations and confidence in banks. The half century has been hard on political institutions and the media. While liberal change predominated, the rising support of military leadership and spending plus the erosion of confidence in media were three conservative trends.

#### TRENDS OR THE LIFE CYCLE?

Intracohort change blends period and aging effects (Dangelis, Hardy, and Cutler 2007). For the variables with strong age-specific patterns, ignoring age is a problem, but you cannot just add age to the regression model. The interaction between period and cohort ( $P \times C$ ) includes age effects (if any). The  $P \times C$  term was significant for 25 outcomes, as shown in Appendix table A4. Figure 4 illustrates how that works for four outcomes: being retired, ever marrying, having a social evening at a bar, and personal earnings.<sup>12</sup> The first two are major mileposts of the life cycle. They also rank #1 and #2 on the  $P + C$  model. The third is an indirectly age-graded behavior that reflects influences that are themselves age-related, thus inducing an age pattern to social life. Personal earnings rise then fall with age, yielding the complex lattice in the figure.

A couple of methodological notes: For several period-cohort combinations of several binary variables, ordinary least squares (OLS) generated marginal percentages below zero or above one. To avoid that, I replaced OLS with logit regression for this part of the analysis. As in figure 3, the margins have been

12. They are three of the seven variables with  $F$  over 2.00. The other four with  $F$  over 2.00 are children in the household, working full-time, homeowner, and family income.

adjusted for the covariates, then smoothed. Unlike figures 2 and 3, I did not standardize the percentages. To compare earnings to percentages, I mapped the predictive margins for earnings onto the 0–100 scale using the formula  $\hat{Y}_{ct} = 100(\hat{Y}_{ct} - 17)/(52 - 17)$ , where  $\hat{Y}_{ct}$  is the predictive margin for cohort  $c$  and time period  $t$ , 52 is slightly more than the maximum of  $\hat{Y}_{ct}$ , and 17 is slightly less than the minimum of  $\hat{Y}_{ct}$ .

Retirement had, by 1972, evolved from a luxury available to few into a phase of life most Americans could expect to experience (Costa 1998). The leftmost panel of figure 4 shows the percentage of Americans 50 years old and over who were retired, by year and year of birth. Very few Americans in any cohort were retired at 50, but in each cohort retirement rose sharply once it started up, then leveled off when the cohort approached 75 percent retired. The lines differ by cohort. The 1906 cohort reached 64 percent retired. The 1918 cohort eventually reached 75 percent retired; 16 percent were retired by age 60, and 56 percent were retired by age 70. In the 1930 cohort, 21 percent were retired by 60 and 58 percent by 70; in the 1942 cohort, 21 percent were retired by 60 and 66 percent were retired by 70; in the 1954 cohort, 17 percent were retired by 60.

Marriage once marked the transition to adulthood for Americans, but recent cohorts have postponed it more and more (Goldstein and Kenney 2001; Fischer and Hout 2006). Over 95 percent of adults born before 1943 were married at least once when the GSS began. Cohorts born since 1950 were young enough for the GSS to reveal how age affected marriage. At age 24, 56 percent of the 1954 cohort was already married at least once (the year was 1978), 42 percent of the 1966 cohort was (in 1990), 35 percent of the 1978 cohort was (in 2002), and only 20 percent of the 1990 cohort was (in 2014). Differences were just as pronounced at age 34, as 83 percent of the 1954 cohort had married by 1988 while 67 percent of the 1978 cohort had married by 2012.

Other demographic and behavioral variables show similar patterns of change and interaction. Age affected living with children, living alone, having a first birth, and getting divorced in ways that predictably altered their period-cohort patterns.

Spending a social evening in a bar, with neighbors, or with friends all follow the demographic patterns and show signs of age inflection, even if age is not a direct influence on them the way it is on retiring, marrying, and so on. The third panel of figure 4 uses going to a bar for illustration. Each successive cohort experienced a sharp decline as they aged, though of course they hit each age in different years. Cohort differences, though muted, were significant. Consistent with the delay of marriage and childbearing, the recent cohorts were more likely to go out to a bar at age 30 than were previous cohorts.

At midlife, work and parenting dominate. Personal earnings cycle up then down. Earnings are the product of wages and hours. While wages tend to rise throughout the life course, hours rise and fall. The 1954 cohort, highlighted in black as in all figures, is the only one with enough exposure

both young and old to show the cycle clearly. The personal earnings of people born in 1954 rose from a standardized value of 20 (on a 0–100 scale) in 1974<sup>13</sup> to 81 in 2006, then down to 68 in 2018. Earnings for the cohort born in 1942 rose from 64 (on the 0–100 scale) in 1974 to 79 in 1994, then declined to 31 in 2018. Cohorts born before 1942 were only seen in declining years; cohorts born after 1954, only in increasing years. Of course, gender was a major factor in both wages and hours throughout this period. These predictive margins remove the additive component of gender and other covariates; separating personal earnings by gender makes a useful extension of these results (England, Levine, and Mishel 2020).

Some readers might be concerned that life cycle effects are so pervasive that they compromise all the results herein. But the period-by-cohort interaction was significant for only 9 percent of variables (see [Appendix table A4](#) to see which ones).

## Conclusions

America's liberal climate of public opinion, behavior, and identity, discovered in the first five GSSs by Davis (1980), persisted through 2018, though the pace of liberal change slowed for many outcomes. Davis characterized conservative trends during the 1970s and 1980s as “weather” that he predicted would pass, and it did. Acceptance of sexual minorities and marijuana led to a liberal turn in the social weather since 1990. Overall, of 283 trends analyzed here, recent cohorts were more liberal than earlier cohorts on 62 percent of opinions and attitudes; they were more conservative on only 6 percent of them. Within cohorts, trends were also markedly liberal; 51 percent leaned liberal, while just 11 percent leaned conservative.<sup>14</sup>

Such consistently liberal results are surprising given conservatives' many wins in elections, legislation, and policy during this time. The contradiction hints that American politics may not respond to public opinion efficiently. But an analysis like this one cannot resolve that issue. Many of the liberal trends in the GSS are not factors in elections. Issues like sexual freedom and gender roles may be in the background of political identities, but candidates and policies seldom address them directly. Meanwhile, several variables that predict votes well, variables like gun ownership, abortion, and ideas about law enforcement, changed little between or within cohorts. Among the political variables, party identification shifted slightly but steadily toward the Republicans from 1972 to 2004 (Manza, Heerwig, and McCabe 2012); it ranked 261st in overall change. That small change had a lot of political

13. The earnings question was not asked until 1974.

14. A total of 26 percent of variables have no political lean, 7 percent showed no change across cohorts, and 12 percent showed no period change.

leverage, though. Among other things, it helped raise the correlation between party identification and political views from a modest 0.21 in the 1970s to the polarized value of 0.51 in recent years (my calculations).

This study has its limitations. The 283 variables here are broad but not a random sample of opinions. The GSS shows its roots in the early 1970s by covering issues controversial then more thoroughly than issues that emerged later. Yet the trends considered here captured most of the major changes in American society, some in the form of year-to-year changes, more as differences among birth cohorts. Computer technology, race, sex, sexuality, and marijuana all feature in the top two dozen changes. Race, sex, and marijuana have roots in the “generation gap” of the 1960s; that they continue to change is kind of remarkable. Technology and sexuality emerged more recently. The stalled gender revolution (England 2010; Pedulla and Thébaud 2015; England, Levine, and Mishel 2020), mostly documented in labor force and economic data, shows up here in a variety of gender role attitudes that changed a great deal through 2000 and, like the labor force variables, stalled in the last 20 years. Gender attitudes also changed across cohorts born in the first 60 years of the twentieth century, but, again, not among cohorts born in the last 40 years of the century (Pedulla and Thébaud 2015). Issues of immigration, climate, health care, and the validity of science were among the variables included in the analysis even though they were not measured in the same depth as gender and racial issues. They got little attention in my analysis because trends in none of these issues emerged as leading or prototypical.

Some of the most researched issues changed less than the variables covered here. For example, the decline of identification with organized religion (Hout and Fischer 2002), ranked 63rd, is now a widely accepted fact of life. Putnam’s (1995) discovery of declining social connection, as represented by the voluntary associations that were the hallmark of American social life from the 1850s to the 1980s, was originally based on the GSS variable memnum and its parts. As Putnam argued, it had implications for American democracy and culture that ran far deeper than its ranking of 241st out of 283 suggests. Alwin’s (1988) analysis of desirable traits in children showed the decline of obedience (ranked 122nd overall) and the rise of thinking for one’s self (ranked 181st) as desirable traits. It could well be a factor in the baby boomers’ embrace of various forms of personal freedom and free expression, as it was in their rejection of organized religion but not beliefs (Hout and Fischer 2014). Once so many parents embraced having children think for themselves, no change implies that its consensus held, though “hard work” (ranked 102nd) challenged “think-self” in recent cohorts. In sum, a statistical metric of change is no substitute for the sociologist’s assessment of substantive significance.

I have only explicitly mentioned 43 of the 283 variables in the full analysis. Lack of mention does not imply lack of change. Every one of the

variables not mentioned here changed significantly between or within cohorts, or both. The broad coverage of the GSS and the ubiquity of change means that my conclusion that the United States was more liberal in 2018 than in 1972 cannot be dismissed as an artifact of which questions were asked.

## Appendix: Additional Methodological Information and Results

**Table A1. Recoding of covariates in multivariate analyses**

Variable name	GSS mnemonic(s)	New mnemonic	New code	Category label
Gender	sex	—	1	Men
			2	Women
Race	race hispanic ethnic	Race4	1	White (non-Hispanic)
			2	Black (non-Hispanic)
			3	Hispanic
			4	All other
Immigrant status	reg16	USA16	0	Elsewhere
			1	USA
Education	degree educ	Educ5	0	No credentials
			1	High school diploma
			2	Some college
			3	College degree
			4	Advanced degree
Region	region	Region5	1	Northeast
			2	Midwest
			3	South
			4	Mountain
			5	West
Rural-urban	srcbelt	—	1	Large metro: central city
			2	Mid-sized metro: central city
			3	Large metro: suburb
			4	Mid-sized metro: suburb
			5	Other urban
			6	Rural

NOTE.—For data details and GSS mnemonics, see the GSS website (<https://gss.norc.org>) and the GSS cumulative codebook (Smith et al. 2019). New mnemonics refer to the Stata .do file in the [Supplementary Material](#).



**Table A2. Recoding of 11 behaviors, statuses, and identities into 14 dichotomies to use as outcome variables in multivariate analyses**

Variable name	GSS mnemonic(s)	New mnemonic	Category coded:		
			1	0	Condition(s)
Work status	wrkstat	Atwork	1, 2	All other	if less than 5
		Fulltime	1	2-4	
		Retired	5	All other	
		Keephouse	7	All other	
Union household	union	Union	1-3	4	
Household type	hhstype	Livealone	1	All other	
Marital status	marital	Nevermar	5	All other	
Homeowner	owndwel	Owndwell	1	All other	
Lives where grew up	mobile16	Samecity	1	All other	
Religion	relig	None	4	All other	
Voted	votett	Vote	1	2	if last election was tt
Party voted for	prestt	Demvote	1	2, 3, 4	if voted in tt
		Repvote	2	1, 3, 4	if voted in tt
Sexual identity	sexornt	LGBQ	1, 2	3	
Same-sex partner	sexsex	Sexsex	1, 3	2	if male
			2, 3	1	if female

NOTE.—For data details and GSS mnemonics, see the GSS website (<https://gss.norc.org>) and the GSS cumulative codebook (Smith et al. 2019). New mnemonics refer to the Stata .do file in the [Supplementary Material](#).

**Table A3. Transformations of 18 outcome variables as scales, counts, or recodes**

Variable name	GSS mnemonic(s)	New mnemonic	Transformation	Condition(s)
Children at home	babies preteen teens	Numkids	Sum of 3 counts	
Age at first birth	agekdbm	Agekidbom	Recode < 15 to 15 Recode > 50 to 50	
Income	incomett	InIncome18	Transformed as in <a href="#">Hout (2011)</a>	Year tt brackets
Earnings	rincomt t	InRincom18	Transformed as in <a href="#">Hout (2011)</a>	Year tt brackets
Subjective class	class	Class	Recode 5 to missing	
Next generation	kidssol	Kidssol	Recode 6 to missing	
Party identification	partyid	Partyid7	Recode 7 to missing	
Civil liberties	spkgrp colgrp libgrp	civGrp	Sum of pro-liberty responses	grp = atheist, communist, racist, gay man, militarist
Abortion attitude	ab1th abdefect abrape abpoor absingle abnomore	Abscale	Sum of "yes"es	
Ethnicities (#)	ethnum	Ethnum	Recode 4 to zero	
Racial stereotypes	intblks intwhits lazyblks lazywhits wthblks wthwhits	Intel_wb Lazy_wb Wealthy_wb	Difference Difference Difference	

NOTE.—For data details and GSS mnemonics, see the GSS website (<https://gss.norc.umd.edu>) and the GSS cumulative codebook ([Smith et al. 2019](#)). New mnemonics refer to the Stata .do file in the [Supplementary Material](#).

**Table A4. Multiple partial correlations (*R*s) for each model component, sorted from most to least changed**

Rank	Variable	Lean	P+C	P C	C P	P+C X	P C,X	C P,X	P×C P+C,X	<i>p</i> for P×C
1	Retired	LC	.59	.36	.59	.57	.36	.56	.37	<.01
2	Ever married	LL	.51	.21	.50	.48	.20	.47	.27	<.01
3	Read a newspaper	NN	.43	.20	.22	.43	.20	.23	.12	.30
4	Use a computer	NN	.41	.13	.35	.36	.12	.30	.10	.58
5	Allow gay marriage	LL	.40	.23	.23	.39	.22	.22	.12	.40
6	Civil liberties: gay man	LL	.39	.11	.27	.28	.09	.20	.12	.70
7	Children in household	NN	.38	.29	.34	.38	.28	.34	.32	<.01
8	Same-sex sex wrong	LL	.37	.15	.20	.32	.14	.18	.12	.74
9	Civil liberties: atheist	LL	.36	.04	.31	.26	.04	.24	.11	.82
10	Working full time	NN	.35	.13	.34	.29	.14	.29	.28	<.01
11	Legalize marijuana	LL	.35	.19	.18	.33	.19	.16	.14	.12
12	Male breadwinner	LL	.35	.09	.29	.30	.08	.26	.12	.51
13	Sex partners (#)	LX	.35	.15	.34	.32	.14	.32	.10	.62
14	Whites have no right to exclude Blacks	LL	.35	.16	.24	.25	.12	.18	.12	.76
15	Oppose if close relative married Black partner	LL	.34	.16	.23	.29	.15	.18	.14	.08
16	Evening at bar	LX	.33	.19	.33	.30	.18	.30	.16	<.01
17	Parents marry	LL	.33	.05	.31	.30	.05	.29	.09	.96
18	Political sexism	LL	.33	.09	.27	.23	.07	.19	.12	.57
19	OK if Blacks push in	LL	.33	.13	.24	.24	.09	.19	.11	.80
20	Premarital sex wrong	LL	.32	.07	.29	.29	.07	.26	.12	.44
21	Civil liberties: militarist	LL	.32	.04	.27	.25	.04	.22	.12	.67
22	Homeowner	LX	.31	.16	.31	.29	.16	.28	.18	<.01
23	Civil liberties: communist	LL	.31	.05	.26	.21	.04	.19	.12	.71
24	Ban housing discrimination	LL	.31	.13	.19	.26	.12	.17	.12	.60

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
25	Evening with friends	LX	.31	.17	.31	.28	.17	.28	.16	<.01
26	Living alone	NN	.30	.21	.27	.29	.20	.26	.14	<.01
27	Watched X-rated movie	LL	.30	.15	.29	.27	.14	.26	.12	.38
28	Seniors live with adult offspring	LL	.29	.08	.21	.26	.08	.20	.15	.31
29	Protests against gov't	LL	.29	.07	.24	.24	.07	.20	.15	.02
30	Oppose if close relative married Asian partner	LL	.29	.18	.15	.25	.17	.12	.14	.03
31	Free speech for revolutionaries	LL	.29	.10	.20	.26	.10	.19	.14	.07
32	Women suited for politics	LL	.28	.14	.17	.24	.12	.15	.14	.18
33	Pre-Ks OK if mom works	LL	.28	.10	.20	.26	.10	.19	.12	.44
34	Family income	CC	.28	.11	.25	.19	.10	.17	.21	<.01
35	Women working	LL	.28	.08	.24	.21	.07	.18	.12	.47
36	Confidence: banks	LL	.28	.22	.13	.26	.22	.13	.15	.01
37	Vote for female president	LL	.27	.09	.21	.22	.08	.17	.13	.13
38	Object if close relative married Latinx partner	LL	.27	.17	.14	.22	.16	.10	.14	.03
39	Spending: weapons	LC	.27	.24	.15	.26	.25	.13	.14	.27
40	Confidence: the press	CC	.27	.22	.04	.25	.22	.04	.13	.26
41	Subjective health (1-4)	NN	.27	.15	.26	.22	.17	.20	.12	.24
42	Confidence: US Congress	NN	.27	.25	.11	.26	.25	.11	.13	.16
43	Years of military service	LL	.26	.04	.24	.28	.03	.25	.11	.81
44	Not limit pornography	LL	.26	.11	.25	.24	.11	.23	.13	.23
45	Oppose sex education	LL	.25	.05	.23	.20	.05	.19	.13	.15
46	Personal earnings	LC	.25	.19	.24	.22	.16	.21	.22	<.01
47	Unemployed in last 10 years	LL	.25	.14	.24	.24	.12	.23	.13	.70

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
48	Spending: environment (A)	LX	.25	.14	.21	.23	.14	.19	.14	.26
49	Spending: education	LL	.25	.09	.17	.20	.09	.15	.15	.17
50	Gov't help college students	LL	.25	.13	.18	.21	.12	.15	.12	.26
51	Spending: space program	NN	.24	.14	.12	.19	.14	.08	.13	.73
52	Voted in last election	NN	.24	.14	.24	.28	.13	.27	.13	<.01
53	Taxes on rich too low	CC	.24	.21	.11	.23	.21	.10	.14	.05
54	Sex between teens wrong	LL	.24	.09	.21	.23	.09	.20	.12	.49
55	Lives in racially segregated neighborhood	LL	.23	.11	.12	.18	.10	.09	.12	.19
56	Children ok if mom works	LL	.23	.09	.17	.20	.08	.16	.13	.29
57	Gov't spend less	LL	.23	.14	.12	.21	.12	.12	.15	.02
58	Spending: foreign aid	LL	.23	.09	.14	.21	.08	.14	.16	.05
59	Pesticides no threat to environment	LL	.23	.20	.09	.21	.19	.09	.14	.13
60	Why Blacks have less: low IQ	NN	.23	.06	.19	.18	.05	.15	.14	.07
61	Religious person	LL	.23	.04	.21	.23	.04	.22	.10	.39
62	Suicide: incurable disease	LL	.23	.10	.16	.20	.09	.14	.12	.67
63	No religious preference	LL	.23	.05	.16	.22	.05	.16	.09	.84
64	Owens a gun (personally)	LL	.22	.14	.11	.19	.13	.10	.12	.60
65	Reduce immigration	LL	.22	.13	.13	.19	.12	.11	.12	.36
66	Pray often	LL	.22	.10	.22	.23	.09	.22	.11	.53
67	Spending: defense	LC	.22	.20	.14	.23	.21	.13	.14	.74
68	Age at birth of 1st child	NN	.22	.12	.21	.17	.07	.17	.14	<.01
69	Could replace current job	NN	.22	.18	.16	.22	.18	.16	.16	.09
70	Religious preference strong	LL	.22	.06	.20	.21	.05	.19	.10	.61

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
71	Oppose racial busing	LL	.21	.10	.14	.20	.09	.13	.12	.66
72	Pay differences don't promote prosperity	LL	.21	.15	.14	.18	.14	.11	.12	.41
73	Belief in God changed	LL	.21	.10	.14	.22	.10	.15	.12	.70
74	Birth control ok for teens	LL	.21	.10	.21	.21	.10	.21	.13	.40
75	Finances better or worse?	NN	.21	.17	.17	.20	.18	.15	.12	.04
76	Can advance at work	NN	.21	.08	.20	.20	.08	.20	.11	.63
77	US at war in 10 years	NN	.21	.12	.13	.22	.13	.14	.14	.24
78	Voted for Republican	LL	.21	.18	.07	.19	.17	.06	.13	.24
79	Gov't create new jobs	LL	.21	.12	.12	.19	.11	.12	.13	.30
80	Man hit stranger: defending child	NN	.21	.04	.20	.19	.04	.18	.13	.44
81	Gov't keep prices low	LX	.21	.12	.16	.17	.11	.13	.13	.31
82	Confidence: military	CC	.21	.17	.10	.21	.18	.08	.13	.23
83	Spending: environment (B)	LX	.20	.12	.19	.19	.12	.17	.16	.12
84	Oppose protest meetings	LL	.20	.05	.18	.17	.06	.14	.13	.15
85	View of communism	LC	.20	.14	.16	.18	.14	.14	.14	.14
86	Spending: education	LL	.20	.06	.19	.18	.06	.17	.17	.04
87	Prefer more work hours for more pay or more time off for same pay	NN	.20	.06	.18	.17	.06	.15	.13	.23
88	Keeping house	NN	.20	.11	.11	.14	.10	.06	.12	.04
89	Interested in politics	NN	.20	.06	.20	.20	.05	.20	.12	.25
90	Standard of living improve	NN	.20	.18	.12	.20	.19	.11	.13	.15
91	Confidence: executive branch	NN	.20	.18	.06	.21	.19	.07	.14	.06
92	Vote for black president	LL	.20	.09	.15	.15	.08	.11	.14	.23

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
93	Kids will be better off	LL	.20	.11	.16	.17	.11	.13	.13	.41
94	Spending: space exploration	NN	.20	.13	.12	.17	.12	.09	.14	.58
95	Greenhouse gases no threat to environment	LL	.20	.07	.14	.17	.06	.12	.13	.49
96	Nuclear power not threat to environment	LL	.20	.08	.16	.18	.09	.15	.12	.54
97	Spending: help poor countries	LL	.20	.09	.15	.18	.09	.15	.15	.27
98	Police hit: sworn at	LL	.20	.08	.14	.16	.08	.11	.14	.10
99	World war in 10 years	NN	.19	.16	.08	.20	.17	.07	.15	.12
100	Spiritual person	LX	.19	.06	.19	.19	.06	.19	.10	.13
101	Spending: roads	NN	.19	.14	.16	.18	.14	.15	.11	.26
102	Raise child to work hard	NN	.19	.08	.11	.17	.08	.10	.14	.21
103	Financial satisfaction	LL	.19	.09	.18	.20	.07	.19	.13	<.01
104	Intelligent: Blacks-Whites	LL	.19	.11	.12	.17	.11	.11	.14	.04
105	Allow prayer in school	LL	.19	.08	.17	.17	.09	.16	.14	.18
106	Spending: Blacks	LL	.19	.10	.10	.14	.09	.07	.14	.33
107	Spend less: pensions	LL	.18	.14	.09	.18	.14	.09	.11	.63
108	Confidence: religious	LL	.18	.11	.10	.17	.11	.09	.14	.05
109	People try to be fair	NN	.18	.06	.16	.19	.05	.16	.13	.30
110	Man hit stranger	NN	.18	.08	.17	.15	.09	.13	.14	.11
111	Important that a job be useful to society	NN	.18	.15	.12	.16	.13	.11	.14	.08
112	Industrial air pollution not threat to environment	LL	.18	.11	.12	.16	.11	.11	.12	.53
113	Confidence: labor leaders	LX	.18	.10	.14	.18	.09	.14	.14	.09
114	Why Blacks have less: lack will	LL	.18	.08	.13	.14	.07	.10	.13	.23
115	Follow conscience	LX	.18	.13	.14	.15	.11	.12	.13	.18

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
116	Gov't support industry to save jobs	LL	.18	.13	.10	.16	.12	.08	.10	.94
117	Life only meaningful if you make it so	LC	.18	.14	.13	.17	.15	.11	.13	.06
118	Ever divorced	NN	.18	.12	.15	.19	.13	.15	.17	<.01
119	Confidence: TV	CC	.18	.15	.05	.15	.14	.04	.14	.05
120	Attend religious services	LL	.18	.04	.15	.20	.04	.17	.11	.15
121	Gov't provide jobs for all	LC	.18	.12	.15	.16	.13	.13	.13	.47
122	Raise obedient child	LL	.18	.06	.15	.14	.05	.11	.13	.36
123	Favor black neighborhood	LL	.17	.10	.11	.15	.10	.09	.14	.03
124	Gun in the house	LL	.17	.08	.11	.14	.07	.10	.13	.28
125	Important that a job be interesting	NN	.17	.13	.14	.16	.12	.13	.15	.04
126	Spending: assist Blacks	LL	.17	.10	.12	.13	.10	.07	.15	.51
127	Gov't assist industry	LL	.17	.10	.11	.15	.09	.10	.12	.63
128	People try to be helpful	NN	.17	.10	.15	.17	.09	.15	.12	.41
129	Important that a job provide high income	NN	.17	.05	.15	.17	.05	.15	.14	.22
130	Current occupation: SEI	NN	.17	.12	.14	.11	.05	.11	.10	.64
131	Speaks 2nd language well	LL	.17	.02	.16	.11	.03	.10	.10	.15
132	Men hurt family if overwork	NN	.17	.10	.10	.17	.10	.10	.13	.15
133	Gov't care for the sick	LL	.17	.11	.10	.15	.10	.09	.11	.69
134	Better off than parents	NN	.17	.06	.15	.18	.07	.16	.13	.07
135	Retire if rich enough	NN	.17	.12	.15	.17	.13	.15	.16	.03
136	Civil liberties: racist	LX	.17	.04	.16	.13	.05	.12	.13	.48
137	People can be trusted	NN	.17	.06	.13	.17	.07	.12	.13	.15
138	Taxes on middle class	LL	.16	.10	.11	.16	.09	.11	.13	.03

(continued)



Table A4. Continued

Rank	Variable	Lean	P+C	P C	C P	P+C X	P C,X	C P,X	P×C P+C,X	p for P×C
139	Spending: welfare	LX	.16	.14	.05	.16	.14	.05	.15	.17
140	Belief about God	LL	.16	.04	.13	.17	.04	.14	.09	.87
141	Enjoy work even if didn't need money	NN	.16	.07	.14	.15	.07	.14	.10	.55
142	Object if close relative marry White partner	LL	.16	.09	.11	.14	.08	.09	.14	.10
143	My taxes not too high	LL	.16	.12	.10	.16	.11	.10	.15	.01
144	God cares about people	LL	.16	.03	.15	.17	.02	.15	.12	.29
145	Extramarital sex wrong	LC	.16	.12	.13	.16	.13	.11	.12	.38
146	Gov't reduce income gaps	LX	.16	.09	.14	.15	.09	.12	.12	.38
147	Voted for Democrat	LL	.16	.13	.06	.14	.12	.06	.13	.21
148	Racially segregated work	LL	.16	.09	.08	.12	.07	.07	.16	.12
149	Spending: health care (A)	LC	.16	.13	.08	.16	.13	.08	.15	.09
150	Spending: health care (B)	XX	.16	.15	.06	.16	.14	.06	.16	.11
151	Job satisfaction	LX	.16	.11	.15	.15	.10	.15	.13	.24
152	Blacks work way up	LL	.16	.09	.11	.13	.08	.08	.12	.31
153	Confidence: medicine	NN	.16	.15	.08	.16	.15	.08	.15	<.01
154	Spending: big cities (A)	LC	.16	.12	.11	.14	.11	.10	.15	.20
155	Homemaker as rewarding as paid job	LX	.16	.08	.14	.14	.09	.12	.11	.45
156	Average citizen can affect politics	NN	.15	.10	.14	.15	.10	.14	.13	.11
157	Man hit stranger: drunk	NN	.15	.03	.15	.13	.04	.13	.15	.09
158	Water pollution not threat to environment	LL	.15	.09	.10	.13	.09	.09	.13	.24
159	Gov't reduce income gap	LL	.15	.07	.11	.14	.06	.10	.12	.62
160	Union household	NN	.15	.09	.11	.14	.08	.10	.15	<.01
161	Whites passed over	LL	.15	.08	.10	.13	.07	.09	.14	.09

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
162	Speak 2nd language	LX	.15	.05	.15	.13	.06	.12	.16	.87
163	Confidence: business	LL	.15	.13	.07	.16	.13	.08	.13	.14
164	Feel close to Blacks	LL	.15	.09	.10	.12	.09	.06	.12	.40
165	Important that a job have opportunity to advance	NN	.15	.11	.09	.15	.11	.10	.15	.03
166	Confidence: education	NN	.15	.12	.07	.14	.12	.06	.14	.02
167	Spending: poor	LL	.15	.10	.10	.15	.10	.10	.15	.31
168	Work is often stressful	NN	.15	.10	.12	.15	.10	.12	.15	<.01
169	Gov't responsible: eldercare	LL	.15	.09	.10	.13	.08	.09	.13	.42
170	My work exhausting	NN	.15	.04	.12	.15	.04	.12	.15	.02
171	Vocabulary	NN	.15	.05	.14	.12	.04	.10	.13	.28
172	Children life's greatest joy	XX	.15	.09	.11	.14	.09	.11	.10	.72
173	Police hit: man trying escape	NN	.15	.11	.09	.13	.11	.08	.14	.04
174	Gov't help hi-tech industry	LL	.15	.11	.07	.14	.11	.07	.11	.67
175	Gov't responsive to public	NN	.14	.08	.12	.14	.08	.12	.12	.32
176	Goes hunting	CL	.14	.11	.13	.14	.09	.13	.11	.84
177	Job provide security	NN	.14	.09	.11	.12	.10	.07	.14	.18
178	Social scale: top or bottom	NN	.14	.11	.10	.13	.11	.09	.13	.04
179	Incurable patients should be allowed to die	LL	.14	.06	.12	.13	.06	.11	.12	.56
180	Shotgun in the house	LL	.14	.07	.09	.11	.06	.08	.13	.26
181	Raise child to think for self	XC	.14	.06	.12	.11	.06	.08	.13	.41
182	Spending: child care	LC	.14	.11	.11	.13	.11	.09	.10	.41
183	Rifle in the house	LL	.14	.07	.10	.12	.06	.09	.12	.46
184	Grew up in this place	NN	.14	.11	.13	.13	.06	.12	.13	<.01

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
185	Life serves no purpose	XX	.14	.05	.14	.12	.05	.12	.11	.50
186	Can work independently	LC	.14	.10	.13	.13	.10	.11	.16	<.01
187	Evening with relatives	NN	.14	.06	.13	.13	.05	.11	.13	.10
188	Spending: law enforcement	LL	.14	.07	.10	.14	.07	.10	.15	.31
189	Ideal number of children	LC	.14	.10	.11	.13	.09	.09	.14	.06
190	Afraid to walk at night	NN	.14	.08	.09	.12	.08	.08	.12	.65
191	Do religious activities	LL	.14	.03	.13	.14	.03	.13	.12	.03
192	Important that a job be meaningful	NN	.14	.07	.11	.12	.05	.09	.12	.65
193	Political views	LX	.14	.08	.13	.13	.09	.12	.11	.20
194	Oppose death penalty	LX	.14	.12	.04	.12	.11	.04	.12	.15
195	Good terms: boss-workers	LC	.14	.06	.12	.13	.06	.12	.15	.08
196	Good terms: co-workers	NN	.14	.08	.12	.14	.08	.12	.14	.05
197	Spending: police and law enforcement	LL	.14	.04	.12	.14	.04	.13	.11	.68
198	Spending: unemployment compensation	XL	.13	.11	.09	.13	.10	.10	.12	.49
199	Divorce should be easier	LL	.13	.09	.10	.13	.08	.10	.13	.39
200	Police hit: if hit	NN	.13	.10	.04	.11	.09	.04	.13	.12
201	Spending: social security	LL	.13	.09	.10	.16	.10	.12	.11	.13
202	Spending: parks	LL	.13	.06	.13	.12	.05	.12	.10	.43
203	Police hit: murderer	LL	.13	.09	.06	.11	.08	.04	.13	.36
204	Income gaps too big	LL	.13	.09	.09	.13	.09	.08	.12	.43
205	Gov't solve problems	LX	.13	.10	.11	.13	.10	.10	.13	.45
206	Raise child who helps others	NN	.13	.08	.08	.13	.08	.08	.14	.06
207	Job just way to make money	NN	.13	.05	.12	.12	.06	.10	.11	.34

(continued)

Table A4. Continued

Rank	Variable	Lean	P+C	P C	C P	P+C X	P C,X	C P,X	P×C P+C,X	p for P×C
208	Police hit: adult male	LL	.13	.10	.08	.11	.10	.04	.13	.17
209	Belief in miracles	LC	.13	.08	.11	.14	.08	.12	.15	.01
210	Subjective social class	NN	.13	.07	.12	.16	.04	.14	.14	<.01
211	Watching TV (hours)	NN	.13	.06	.12	.11	.08	.10	.17	<.01
212	Gov't reduce regulations	LX	.13	.09	.11	.13	.09	.12	.11	.72
213	Clergy not influence voters	LL	.13	.09	.09	.13	.10	.09	.13	.15
214	Taxes on poor too low	CC	.13	.08	.08	.11	.08	.08	.13	.04
215	Sexual identity: LGBQ	LL	.13	.03	.12	.13	.03	.12	.10	.64
216	Make extra effort to hire women	XL	.13	.11	.07	.12	.11	.06	.17	.34
217	Evening with neighbors	NN	.13	.12	.09	.12	.11	.09	.16	<.01
218	Worse to convict innocent or free guilty	XL	.13	.08	.10	.11	.07	.09	.13	.39
219	No say in gov't actions	NN	.12	.10	.07	.11	.10	.05	.15	.04
220	Abortion: any reason	LL	.12	.06	.09	.09	.06	.06	.13	.50
221	Hiring preferences: women	LL	.12	.08	.08	.09	.07	.06	.18	.31
222	Gov't help unemployed	XL	.12	.07	.09	.10	.07	.07	.11	.83
223	Raise popular child	CC	.12	.06	.09	.11	.06	.08	.15	.06
224	Churches too much power	LL	.12	.08	.09	.12	.08	.09	.13	.16
225	Reduce workweek to increase number of jobs	CL	.12	.07	.11	.11	.06	.10	.14	.05
226	Lot of average man worse	NN	.12	.12	.03	.14	.12	.07	.13	.42
227	Gov't help sick	LL	.12	.09	.09	.12	.09	.09	.13	.27
228	People can do little to change course of their life	NN	.12	.01	.12	.10	.02	.09	.12	.23
229	Gov't assist the poor	LX	.12	.10	.10	.12	.09	.10	.12	.62
230	Not fair to bear child	NN	.12	.09	.08	.09	.09	.04	.15	.24

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
231	Hiring preferences: Blacks	LL	.12	.07	.08	.10	.06	.06	.12	.33
232	Belief in Bible	LL	.12	.03	.10	.11	.03	.09	.10	.77
233	Lazy: Blacks-Whites	LL	.12	.06	.09	.11	.06	.08	.16	<.01
234	Life exciting or dull	NN	.12	.03	.11	.07	.05	.06	.13	.24
235	Size of workplace	NN	.12	.06	.11	.10	.06	.09	.13	.05
236	Gov't assist Blacks	LL	.12	.08	.07	.10	.08	.05	.12	.45
237	Abortion: scale (0-6)	XC	.12	.09	.09	.11	.10	.05	.13	.52
238	Gov't reduce inequality	LL	.12	.07	.09	.11	.07	.08	.12	.51
239	Had sex: extramarital	XX	.12	.03	.11	.11	.03	.10	.12	.50
240	Inequality benefits rich	XX	.11	.09	.07	.11	.09	.06	.12	.39
241	Belong to organizations (≠)	NN	.11	.05	.10	.14	.06	.11	.14	.13
242	Might lose job	NN	.11	.10	.07	.12	.10	.07	.16	.09
243	Women passed over	CX	.11	.06	.09	.11	.06	.09	.19	.09
244	Important that a job provide short hours	LX	.11	.10	.05	.11	.10	.05	.14	.23
245	Spending: reduce crime	NN	.11	.09	.05	.11	.09	.05	.14	.22
246	A citizen can affect gov't	NN	.11	.06	.09	.11	.07	.09	.11	.68
247	Spending: drug rehab	XL	.11	.10	.05	.11	.10	.05	.15	.36
248	Man hit stranger: defending woman	NN	.11	.04	.10	.09	.03	.09	.14	.22
249	Courts harsh or lenient	NN	.11	.07	.07	.10	.07	.06	.11	.36
250	Confidence: Supreme Court	NN	.11	.09	.06	.11	.10	.05	.14	.04
251	Oppose gun permits	XC	.11	.09	.04	.10	.09	.04	.13	.32
252	Spank child for discipline	LL	.10	.08	.06	.09	.07	.05	.14	.13
253	Born-again experience	LC	.10	.08	.09	.11	.08	.09	.12	.08

(continued)

Table A4. Continued

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
254	Gov't officials interested	NN	.10	.09	.06	.12	.11	.06	.13	.31
255	Why Blacks have less: discrimination	XX	.10	.08	.06	.11	.08	.06	.14	.09
256	Belief in heaven	LL	.10	.02	.09	.11	.03	.10	.15	.01
257	Belief in hell	LX	.10	.03	.09	.11	.04	.10	.13	.11
258	Pistol in the house	LX	.10	.05	.08	.09	.06	.08	.13	.19
259	Ethnicities (#)	NN	.10	.07	.07	.07	.07	.04	.10	.76
260	Spending: mass transit	LL	.10	.08	.06	.09	.07	.06	.12	.11
261	Party identification	XC	.10	.07	.06	.10	.06	.07	.11	.13
262	Why Blacks have less: inferior education	CX	.10	.08	.05	.12	.09	.06	.14	.13
263	Spending: drug addiction	CX	.09	.09	.03	.09	.09	.03	.14	.47
264	Suicide: bankrupt	LL	.09	.04	.06	.08	.03	.06	.12	.66
265	Favor White neighborhood	NN	.09	.07	.05	.09	.07	.05	.13	.24
266	Suicide: dishonored family	LL	.09	.04	.06	.08	.03	.06	.12	.44
267	Spending: big cities (B)	LL	.09	.07	.06	.08	.08	.04	.15	.56
268	Men passed over	XL	.09	.06	.06	.08	.05	.06	.17	.41
269	Spending: science	XL	.09	.06	.07	.08	.05	.06	.11	.23
270	Subjective income	NN	.09	.04	.08	.08	.04	.05	.12	.05
271	Suicide: tired of living	LL	.08	.05	.05	.07	.04	.04	.13	.26
272	Sex: same-sex partner	LL	.08	.05	.06	.08	.05	.06	.11	.78
273	Ever proselytize	LX	.08	.03	.08	.08	.03	.08	.10	.19
274	Man hit stranger: at a protest	NN	.08	.04	.07	.06	.04	.05	.14	.31
275	Confidence: science	LX	.08	.06	.06	.09	.08	.06	.13	.29
276	Spending: green energy	LC	.08	.06	.06	.08	.06	.06	.10	.24

(continued)

**Table A4. Continued**

Rank	Variable	Lean	P + C	P C	C P	P + C X	P C,X	C P,X	P × C P + C,X	p for P × C
277	Man hit stranger: during break in	NN	.07	.06	.05	.07	.05	.05	.14	.28
278	Marital happiness	LL	.07	.04	.05	.08	.05	.06	.15	.33
279	Feel close to Whites	LX	.07	.04	.05	.06	.04	.05	.13	.23
280	Belief in life after death	CC	.07	.06	.04	.06	.05	.04	.13	.08
281	General happiness	LL	.06	.04	.05	.07	.04	.05	.12	.13
282	Success due to luck or hard work	CC	.06	.04	.04	.07	.04	.04	.13	.23
283	Wealthy: Blacks-Whites	NN	.06	.05	.03	.06	.05	.03	.14	.11

NOTE.—R is the multiple correlation coefficient for the P + C model and the multiple partial correlation for the other models. Change ranked according to the P + C model.

Key: P + C = period plus cohort; P|C = period, net of cohort; C|P = cohort, net of period; P + C|X = period plus cohort, net of covariates; P|C,X = period, net of cohort and covariates; C|P,X = cohort, net of period and covariates; P × C = period-cohort interaction. Lean entries are cohort-period pairs: N = no change, X = No lean, C = conservative lean, L = liberal lean.

## Data Availability Statement

REPLICATION CODE is available in the form of a Stata do-file that reads in the public use cumulative file of the General Social Survey. This is available in the [Supplementary Material](#).

## Supplementary Material

**SUPPLEMENTARY MATERIAL** may be found in the online version of this article: <https://doi.org/10.1093/poq/nfab061>.

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