# Median Voters' Happiness Cycles in the United States Along the Nation's Principal Political Fault Line

Brian J. L. Berry[1] · Rubia R. Valente[2] · Adam Okulicz-Kozaryn[3]

## Abstract

Data from the General Social Survey are used to examine the political polarization in the United States, by examining presidential periods from 1972 to 2018. Our findings indicate that there has been an increased correlation between party identification and ideological identification, resulting in a steady shift towards the extremes. Furthermore, we explore how subjective wellbeing plays a role in driving this polarization. American politics is polarized between happy conservative Republicans and unhappy liberal Democrats. Oscillating in the "happiness gap" between these extremes are median voters whose happiness, low on average, falls the longer in power the party of the opposing ideology. It is the rise and fall of median voters' unhappiness that drives the regime change between the two major political parties in the United States.

✉ Rubia R. Valente
rubia.valente@baruch.cuny.edu

Brian J. L. Berry
bjlobley@gmail.com

Adam Okulicz-Kozaryn
adam.okulicz.kozaryn@gmail.com

[1] School of Economic, Political and Policy Sciences, The University of Texas at Dallas, 800 West Campbell Road, GR 31, Richardson, TX 75080, USA

[2] Austin W. Marxe School of Public and International Affairs, Baruch College, 135 East 22Nd Street, 422, New York, NY 10010, USA

[3] Department of Public Policy and Administration, Rutgers University – Camden, 311 North Fifth Street, Camden, NJ 08102, USA

## Introduction: the Gap

The popular press has been quick to proclaim that there is a "happiness gap" in American politics: Republicans are happier than Democrats; conservatives are happier than liberals (Montgomery, 2008; Taylor et al., 2006). The gap is said to have been produced by a "Big Sort"[1] (Bishop & Cushing, 2008; Bishop, 2009; Fiorina & Abrams, 2008; Fiorina et al., 2008; Abramowitz & Saunders, 2008; Levendusky, 2009; Johnston et al., 2016) that is the outcome of the confrontation of two political cultures, competitive individualism and egalitarian collectivism, that are committed to the conflicting core values of ordered liberty and social justice (Marietta, 2012) and that separate party and ideology along the nation's principal "political fault line" (Brooks, 2008). In-group preference theory explains this "Big Sort" as a naturally occurring phenomenon that is simply the result of humans being naturally attracted to others like themselves and being happier among their in-group. The concern is that the political parties have been taken over by ideological extremes that otherwise might have become third party movements, and legislative consensus on significant reforms has vanished (Haidt, 2022; Layman et al., 2006). The United States has reached record-high levels of polarization (Abramowitz & Saunders, 2008), yet this polarization should not have been a surprise. We confirm in what follows not only that the correlation between party identification and ideological identification has increased steadily since 1972, leading to an increasingly tight relationship between party and ideological identification (Abramowitz & Saunders, 2008), but that there has been an equally steady shift to the extremes along this relationship. Furthermore, we examine how "the median voter" (Holcombe, 2006), the so called "Independent" voters with moderate political beliefs, play an important role in this polarization and how their happiness oscillates between these extremes driving political change between the two major political parties—using happiness significantly advances our understanding of regime change between the two major parties.

   The paper is organized as follows: first we discuss political polarization in the United States and how happiness levels can influence polarization. We then present the data and how we employ the General Social Survey to show that polarization has increased steadily since 1972 with an equally steady shift to the extremes. We then examine how the "median voter" fits into this scenario using the same dataset, discuss our findings, and conclude by providing directions for future research.

## Why Polarization?

The American electorate has changed significantly in recent years. Democrats have been moving to the left, whereas Republicans have been moving to the right of the political spectrum. An important contributor for this growing division is the

---

[1] People sorting themselves in communities based on like-mindedness.

increased educational attainment among the American population. Education is strongly correlated with ideological awareness and sophistication (Campbell et al., 1980; Smith, 1980; Abramowitz & Saunders, 2008). Individuals at the upper societal level, with the highest levels of education, have been moving to the extremes resulting in an unprecedented division between voters within parties in the last decades (Poole & Rosenthal 1998, 2001; Stonecash et al., 2003). Some have argued that the growing polarization among the upper classes resonated and led to a division observed among the general public (Abramowitz & Saunders, 1998; Hetherington 2001; Layman & Carsey, 2002), while others have claimed that political beliefs of the mass public has not changed since the 1950s (Fiorina et al., 2008). A growing literature nonetheless has found that the political belief of Democratic and Republican voters has diverged significantly in the last decades (Abramowitz & Saunders, 1998; Hetherington 2001; Jacobson, 2004, 2005; Jelen & Wilcox, 2003; Layman & Carsey, 2002; Lindaman & Haider-Markel, 2002; White, 2003), which largely reflect a difference in religious beliefs and practices and psychological orientations (Layman, 1997, 2001; Layman & Carmines, 1997; Jost 2006). The emergence of social media platforms and how they target people based on political inclination, has increased people's consumption of material that reaffirms their beliefs, widening the political divide in recent years. Concurrently, in group preference or homophily (love of the same) theory posits that humans have a preference for other humans who are like themselves–ingroups typically contain similar persons (Fowler & Christakis, 2008, McPherson et al., 2001; Putnam, 2007; Smelser et al., 1999; Tajfel, 1982; Tajfel et al., 1971). The need to belong would also play a significant role in sorting people based on political affinity (Baumeister & Leary, 1995). Thus, people would be drawn and more likely to move to the extremes as they become more exposed to those with similar beliefs and attitudes.

## Subjective Well-Being[2] and Political Polarization

There's a lack of research exploring happiness and political polarization specifically. Most studies focus on the reasons driving voting behavior and electoral outcomes (Autor et al. 2017; Frey et al. 2018; Enke, 2020; Knowles & Tropp, 2018). Recently, scholars started to point and emphasize how a strong sense of discontent, or unhappiness, among certain sectors of the U.S. population led to the election of Donald Trump in 2016 (Herrin et al., 2018). Trump seems to have tapped into increased feelings of life dissatisfaction, especially among white working-class voters outside of large urban areas (Florida, 2018). Is it possible that this unhappiness is also driving polarization in the United States? Ward et al. 2021 argue that SWB can be a common psychological pathway to electoral choice. In this article, we argue that there's reason to posit that happiness might be an important factor driving polarization as well.

---

[2] We use subjective well-being and happiness interchangeably in this article.

Explanations for polarization by party and ideology are to be found not only among political scientists, but also in the work of cultural anthropologists and political psychologists. Culture (the "collective programming of the mind" (Hofstede, 1980) is what transmits values and sets priorities for sorting out and implementing one code of behavior as opposed to others. For example, the fact that conservative Republicans enjoy better health status than other Americans, even when controlling for age, sex, income, etc., and are happier, for it, probably reflects the core value of individual responsibility (Subramanian & Perkins, 2010).[3]

Prioritizing involves emotional commitment, with roots in the values that are learned during socialization, when a child becomes committed to a particular paradigm, a set of beliefs about the world that guides and legitimates subsequent action — either the core values of the societal mainstream or values in opposition to them (Lane, 2000). Through the process of legitimation, core values translate into ideology and ideology drives politics (Jost et al., 2009). Party ideology thus serves as a proxy for the broader influence of culture on happiness. Napier and Jost (2008 p. 265) write:

> "political conservatism is a system-justifying ideology that is associated with the endorsement of a fairly wide range of rationalizations of current social, economic, and political institutions and arrangements … the endorsement of system-justifying beliefs is generally associated with high personal satisfaction, as well as increased positive affect and decreased negative affect."

There is discontent and feelings of unfairness, on the other hand, among those who feel left out (Wildavsky, 1987; Piketty, 1995; Benabou & Tirole, 2005). At the core is inequality, which conservatives see as the natural outcome of a fair, legitimate meritocratic system (Napier & Jost, 2008) whereas liberals believe it reflects discriminatory exploitation, is socially undesirable because it makes people, including themselves, unhappy, and therefore must be corrected by governmental action (Brooks, 2007). Inequality has increased in the U.S. since 1970 and liberals' unhappiness with it (Napier & Jost, 2008). The result is argued to be a bipolar crystallization: disparate political cultures have strengthened, with political parties taking ownership of social and religious issues that once straddled the political divide (Gelman et al., 2008). DiMaggio et al. (1996) and Di Tella and MacCulloch (2005) relate increased partisanship to polarization and to widening gaps in happiness. Research shows that people are unhappy in polarized societies (Okulicz-Kozaryn, 2010), but is it possible that unhappiness is driving polarization? Recent research found that places that swung most for Trump were those where residents had the lowest levels of improvement in their happiness during the Obama administration, whereas the

---

[3] There are interesting subcultural variations. Podhoretz (2010) asks why American Jews "live rich but vote poor." American Jews, despite their material success in America, vote predominantly for Democrats. Podhoretz says this is because the Democratic Party represents the closest counterparts to the forces on the left that favored Jewish emancipation in Europe. As a result, the American Jewish attitude towards Christian conservatives is most frequently one of contempt. There is a strong echo of the Menshevik Jews who fled to America, with a gradual attenuation of Marxism into social democracy and social democracy into the liberalism that has become the very essence of American Jewish culture.

places that swung most for Clinton had the highest levels of improvements in well-being during the same time (Herrin et al., 2018). These studies suggest that SWB is a powerful high-level marker that should be considered alongside economic explanations of electoral choice to understand political polarization (Ward et al., 2021). Yet, as mentioned, the literature on the role of SWB in explaining polarization and electoral outcomes is scant.[4] And missing in this discussion is the "median voter" (Holcombe, 2006). This leads to our research questions: Does the median voter happiness and vote run counter to the party in power, or is there a different dynamic? Does an increase in party identification and ideology contribute to political polarization? What role does happiness play in these processes? We will explore these questions next.

## Data and method

We begin by postulating our two main research hypotheses:

a) There is an increased correlation between party identification and ideological identification, resulting in a steady political shift towards the extremes.
b) There is a relationship between median voter's happiness and voting behavior driving political polarization in the United States.

The evidence in this paper is derived from the General Social Survey (GSS), which has been conducted by the National Opinion Research Center annually since 1972, except for the years 1979, 1981 and 1992 (a supplement was added in 1992), and biennially beginning in 1994 — a total of 32 surveys in all. For each survey the Roper Center for Public Opinion Research prepares a cumulative dataset that merges previous years of the GSS into a single file, with each year of survey constituting a subfile. The content of each survey changes only slightly as some items are added to or deleted from the interview schedule. Main areas covered in the GSS include socioeconomic status, social mobility, social control, the family, race relations, sex relations, civil liberties, and morality.

In the surveys, the happiness question is:

Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?
Very happy 1
Pretty happy 2
Not too happy 3

---

[4] Few studies have explored the topic. Di Tella and MacCulloch 2005 found that people are happier when their chosen party is in power, while Flavin and Keane (2012) observed that SWB is related to turnover intentions. Goldman et al (2019), found that despair is associate with the county-level Trump vote swing in 2016, while a few studies have found that SWB is correlated with voting intention and outcome in Europe and the US (Herrin et al., 2018; Liberini, Redoano and Proto 2017; Ward 2020).

To facilitate analysis in this paper this scale was reversed from "very happy" 3 to "not too happy" 1.

The GSS also provides information on each respondent's party preference and ideology. The party preference question is:

Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent or what?
Republican (ASK A) 1
Democrat (ASK A) 2
Independent (ASK B) 3
Other (SPECIFY AND ASK B) 4
No preference (ASK B) 8
A. Would you call yourself a strong (Republican/Democrat) or not?
Strong 1
Not very strong 2
B. Do you think of yourself as closer to the Republican or Democratic Party?
Republican 3
Democratic 4
Neither 8

Party affiliation was collapsed into three groups: Republican and leaning Republican (1 + B3). Democrat and leaning Democrat (1 + B4), and Independent (B8). Grouped in this way 35.5% of the survey respondents classified themselves as Republicans, 49.57% as Democrats and 14.88% as Independents.

The GSS respondents' political ideology comes from the question:

We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal —point 1 — to extremely conservative — point 7. Where would you place yourself on this scale?
Extremely liberal 1
Liberal 2
Slightly liberal 3
Moderate, middle of the road 4
Slightly conservative 5
Conservative 6
Extremely conservative 7

Ideology was collapsed into three categories: liberal (1 + 2 + 3), moderate (4), and conservative (5 + 6 + 7). So grouped, the surveys yielded 34.09% conservatives, 38.66% moderates and 27.25% liberals. First, responses to these questions were used to create a set of 3 × 3 matrices, two for each of six "presidential periods" (Nixon-Ford-Carter 1972–1980, Reagan-Bush 1980–1992, Clinton 1992–2000, Bush 2000–2008, Obama 2008–2016, Trump 2016–2020), separating male and female respondents, and with party affiliation in the columns (Republican, Independent, Democrat) and political ideology in the rows (Conservative,

Moderate, Liberal). Party affiliation was derived from the GSS question as Republican (1 + B3), Independent (3 + B8) and Democrat (2 + R4) and political ideology as Conservative (5 + 6 + 7), Moderate (4) and Liberal (1 + 2 + 3).

Entries in the matrices are percentages of responses to the two questions for the observations collected by the surveys conducted during each time-period in question.

## Results

### Shifts to the extremes

The percentage distribution of GSS respondents by party and ideology between 1972 and 2018 is as follows:

|  | Republicans | Independent | Democrat | Sum |
|---|---|---|---|---|
| Conservative | 18.99% | 3.99% | 11.12% | 34.09% |
| Moderate | 11.62% | 7.26% | 19.77% | 38.66% |
| Liberal | 4.95% | 3.68% | 18.67% | 27.25% |
| Sum | 35.55% | 14.88% | 49.57% | 100.00% |

Clearly, party and ideology are not closely related. If they were not related at all but had the same marginal percentage breakdowns, the joint probability of independent events yields a somewhat different subgroup breakdown:

|  | Republicans | Independent | Democrat | Sum |
|---|---|---|---|---|
| Conservative | 12.12% | 5.07% | 16.90% | 34.09% |
| Moderate | 13.74% | 5.75% | 19.16% | 38.66% |
| Liberal | 9.69% | 4.05% | 12.51% | 27.25% |
| Sum | 35.55% | 14.88% | 49.57% | 100.00% |

The difference between these tables (actual minus independent) provides estimates of the extent and location of the relationship between party and ideology:

|  | Republicans | Independent | Democrat | Sum |
|---|---|---|---|---|
| Conservative | +6.89% | -1.08% | -5.78% | 0 |
| Moderate | -2.12% | +1.51% | +0.61% | 0 |
| Liberal | -4.74% | -0.42% | +5.16% | 0 |
| Sum | 0 | 0 | 0 | 0 |

There is a clear shift of 13.53 percentage points to the principal axis, with 12 percentage points of this to the pair of polar extremes, +6.86% conservative Republicans, and +5.16% liberal Democrat. Polarization thus exists along a main axis, but there also are moderate Independents on that axis.

The upper matrix in the Appendix Table 6 summarizes men's responses to the party and ideology questions in the 1972–1980 time period, when presidents Nixon, Ford and Carter occupied the White House. If party and ideology had been highly correlated along a "principal fault line" the responses would have been aligned along the principal diagonal of the matrix, but fully 56.5 per cent of the responses were off-diagonal. If completely independent, which can be measured by the joint probabilities derived from the marginal distribution of party affiliation and political ideology, the proportions would be those expected purely by chance in the middle of the matrix in Appendix Table 6. The third matrix shows the observed minus the random expectations (top matrix minus middle matrix). Only 10.88 per cent of the responses appear on the diagonal, evidence of a weak fault line with mild polarization: 4.22 per cent are greater-than-expected liberal Democrats (LD) and 5.91 per cent greater-than-expected conservatives Republicans (CR), drain away from purely random associations of party preference and ideology to the principal axis. For women in the same time period (Appendix Table 7) only 6.69 per cent of responses were drawn to the diagonal beyond randomness, 2.36 per cent LD and 3.49 per cent CR. Tables 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 in the Appendix provide the same summaries for each of the other five presidential periods.

Table 1 summarizes the greater-than-random "draws" to the main diagonal for each revealed in the appendices. By 2016, 28.11 per cent of the male electorate and 22.16 per cent of the female voters had moved from off-diagonal random locations to on-diagonal positions on the principal political axis, and as a result party preference and political ideology had become much more highly aligned.

Figure 1 charts the steady rise of the polar CR and LD positions on this axis for both men and women, men somewhat more rapidly than women. The modest increase in Moderate Independents (MI) ensured that even though party and ideology were becoming more closely aligned, polarization was splitting the axis into its extremes. What is also revealed is that the alignment-and-polarization process is not new but has been under way at least since Richard Nixon was president.

Next, we test our first research hypothesis using OLS regression of political ideology/views on interaction between year and party affiliation in Table 2. The results show that political views are better predicted by party affiliation over time. The interaction is positive indicating that over time, the more strongly Republican, the more extremely conservative view. The same is true for Democrats and liberals.

We also explore how happiness is affected by political ideology and party identification in Table 3. The results confirm that conservatives are happier than liberals, and that Republicans are happier than Democrats.

## The Happiness Gap

What role does happiness play in this polarization? Fig. 2 illustrates a phase-space rendering (Baumol & Benhabib, 1989) of the changes in happiness of conservative Republicans (CR) and liberal Democrats (LD) over the 1972–2018 timespan, as recorded by 32 successive General Social Surveys. The figure reveals that happiness

Table 1 Greater-than-expected diagonal percentages by presidential period, gender and party

| Presidential period | Men | | | | Women | | | |
|---|---|---|---|---|---|---|---|---|
| | Liberal democrat | Moderate independent | Conservative republican | Total % | Liberal democrat | Moderate independent | Conservative republican | Total % |
| 1972–1980 | 4.22 | 0.75 | 5.91 | 10.88 | 2.36 | 0.84 | 3.49 | 6.69 |
| 1980–1992 | 5.07 | 1.35 | 6.79 | | 4.44 | 1.12 | 5.00 | |
| 1992–2000 | 6.12 | 2.00 | 9.10 | | 5.52 | 1.66 | 6.72 | |
| 2000–2008 | 6.83 | 2.52 | 10.25 | | 7.37 | 2.59 | 8.71 | |
| 2008–2016 | 8.98 | 3.73 | 11.31 | | 7.87 | 2.86 | 9.34 | |
| 2016–2018 | 11.56 | 4.28 | 12.27 | 28.11 | 8.47 | 3.54 | 10.15 | 22.16 |
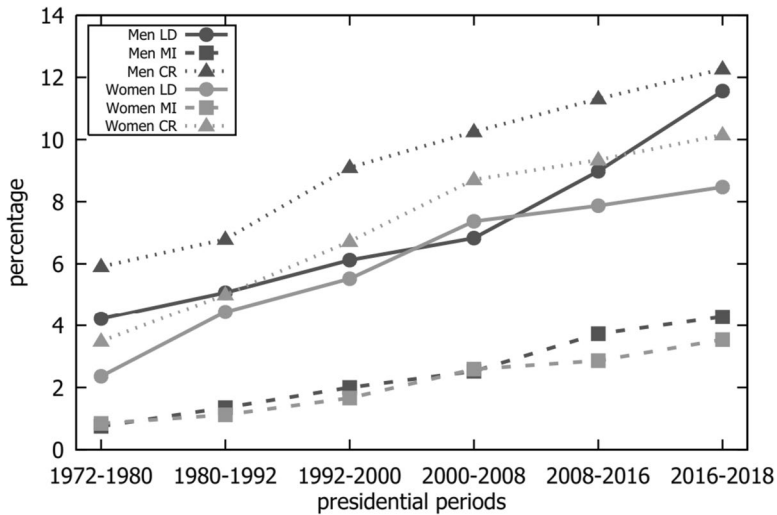
**Fig. 1** Percentage greater than expected by presidential terms

**Table 2** OLS of think of self as liberal to conservative

| Variables | Political ideology (Liberal-conservative) | Political ideology (Liberal-conservative) |
|---|---|---|
| | A1 | A2 |
| Year | -0.02*** | -0.02*** |
| Political party affiliation | -11.06*** | -11.68*** |
| Year * political party affiliation | 0.01*** | 0.01*** |
| Income quantiles | | 0.05*** |
| Highest year of school completed | | -0.04*** |
| Male | | 0.04*** |
| Age | | 0.01*** |
| Race of household = 2, black | | 0.13*** |
| Race of household = 3, American indian | | 0.07 |
| Race of household = 4, asiatic, oriental | | -0.13** |
| Race of household = 5, other, mixed | | 0.00 |
| Constant | 35.83*** | 37.93*** |
| Observations | 55,077 | 40,792 |
| R-squared | 0.135 | 0.153 |

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

cycles up and down along a principal axis. Consistent with the extant literature, there is a clear gap between the ideological extremes of the two parties: there is clear evidence of the Big Sort.

**Table 3** Ols of SWB by political ideology and party identification

| Variables | (1) HH1 | (2) HH2 | (1) H1 | (2) H2 |
|---|---|---|---|---|
| Republican | 0.14*** | 0.09*** | | |
| Democrat | 0.02** | 0.02* | | |
| Conservative | | | 0.08*** | 0.05*** |
| Liberal | | | -0.02** | -0.02*** |
| Income quantiles | | 0.08*** | | 0.08*** |
| Highest year of school completed | | 0.01*** | | 0.01*** |
| Male | | -0.04*** | | -0.04*** |
| Age | | 0.00*** | | 0.00*** |
| Race of household = 2, black | | -0.11*** | | -0.13*** |
| Race of household = 3, american indian | | 0.02 | | 0.02 |
| Race of household = 4, asiatic, oriental | | -0.06** | | -0.06** |
| Race of household = 5, other, mixed, | | -0.04** | | -0.04** |
| Constant | 2.13*** | 1.86*** | 2.17*** | 1.89*** |
| Yr dummies | y | y | y | y |
| Observations | 59,697 | 41,507 | 53,599 | 39,443 |
| R-squared | 0.009 | 0.055 | 0.004 | 0.054 |

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The phase-space plot's axis (an "attractor") in Fig. 2 provides an initial suggestion of an "equilibrium or limit time path of a stable dynamic system" (Baumol & Benhabib, 1989, p. 91). When the data reveal a closed loop, the limit path is a cycle, which implies an endogenous causal process.

## The Middle Ground

Polarization is not the end of the story, however: there is a middle ground. The national exit polls also show an Independent vote that ranges from 37 to 57 percent for Democrats and 39 to 56 percent for Republicans, each high when the other is low. Between 1972 and 2018 this Independent vote cycled up and down along the nation's principal political axis, reaching a high point for Democrats when Obama was elected and falling to lows in the Nixon and Reagan second terms (Fig. 3). Independent votes for Republicans were at their highest during the Carter and Reagan presidencies and lowest under G. W. Bush (Fig. 4).

This evidence supports political scientists' "median voter" hypothesis that rests on election alternatives being arrayed along a single political spectrum from right to left (Hotelling, 1929) as well as the part that argues that election outcomes are consistent with the preferences of the median voter (Holcombe, 2006). The first question we ask is therefore whether the cycling of electoral outcomes is correlated with swings in the happiness of Independent voters. Do median voters
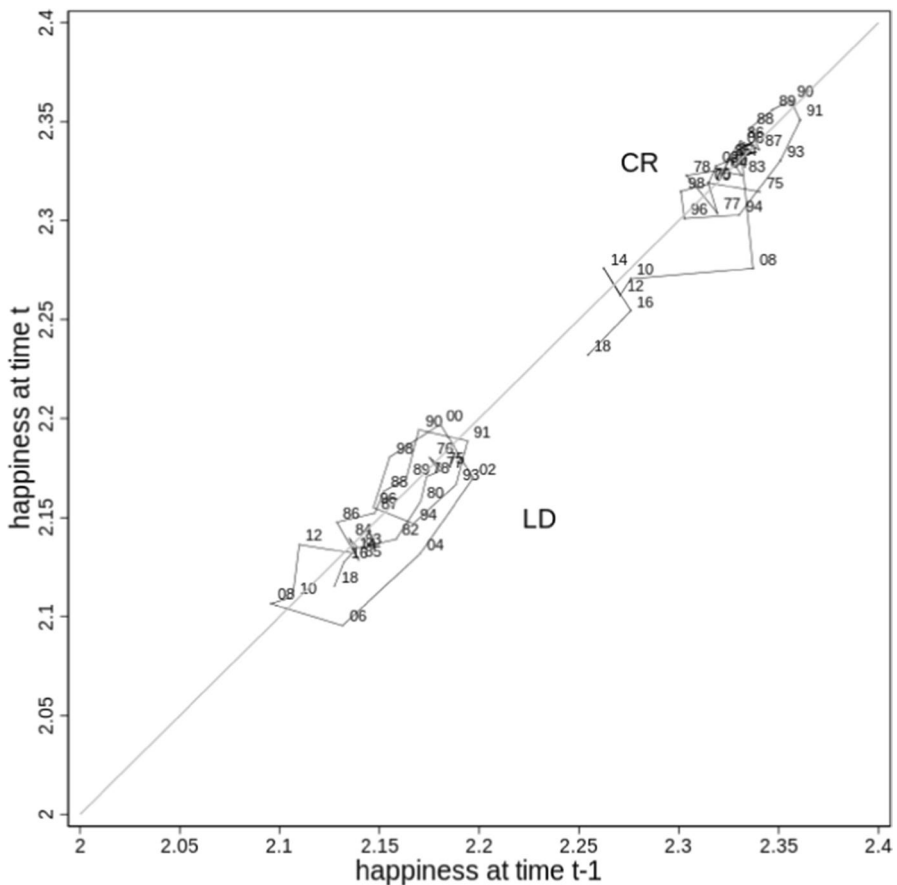
**Fig. 2** Smoothed average happiness scores for conservative Republicans (CR) and liberal Democrats (LD) from 1972—2018 plotted in t/t-1 phase space. The data come from the 32 successive General Social Surveys described in Appendix A, smoothed with a 5-survey moving average (2 lags each forward and back, plus the present term). Survey years are dated by two digits, i.e., 91 is 1991, etc. The CR are top right and are tightly clustered, except for the recent lag during the Obama presidency (2010–2016). The LD shows wider cycling, with the lower values during the G. W. Bush presidency (2006–2008)

become unhappier the greater the longevity of the party in power, leading to vote swings, as implied by Merrill et al. (2008), or is there some other dynamic at work, or perhaps no relationship at all? To provide insights we examine the varying levels of happiness of different ideological subgroups of Independent voters over the 1972–2018 timespan.

First, the GSS tells us that over the 1972–2018 period Independent voters of all ideological persuasions were unhappier than Republicans and slightly less happy than Democrats. Across all three party preferences, conservatives were happier than moderates who in turn were slightly happier than liberals. At the extremes, the average happiness score of conservative Republicans was 2.33 while that of liberal Democrats was 2.15, as shown in Table 4.
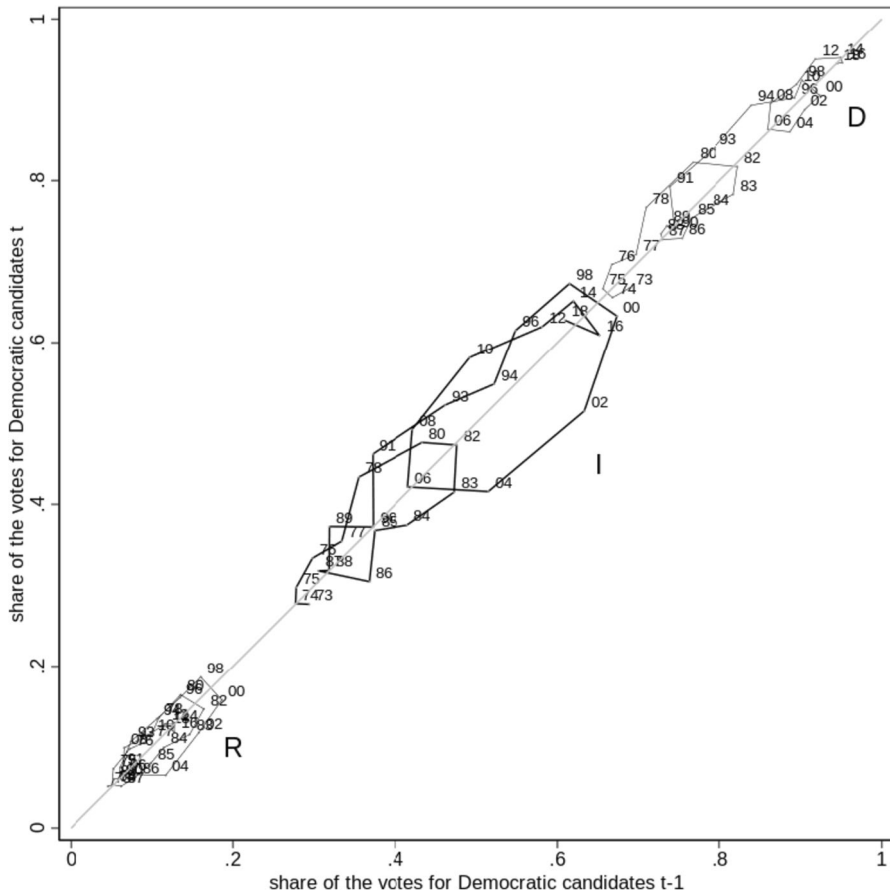
**Fig. 3** Shares of the votes of Democrats, Independents and Republican voters for Democratic candidates 1972–2018 plotted in t|t-1 phase space. The data are smoothed using the same process as in Fig. 1. The plot reveals a single political spectrum with three non-overlapping blocks cycling along it

Information on the accompanying dynamics can be gleaned from three phase space diagrams, Figs. 5, 6 and 7. What these diagrams reveal is the volatility of the happiness of the three ideological subgroups of Independent voters, a greater than that of the CR and LD extremes, which is consistent with the greater overall levels of unhappiness of the Independent voters. Liberal Independents plunged to the lowest levels of happiness during the G. W. Bush presidency (Fig. 5), moderate Independents cycled in a range overlapping the higher happiness levels of the LIs (Fig. 6) and conservative Independents maintained higher happiness levels that peaked during Ronald Raegan's first term in office (Fig. 7). Together, the subgroups of Independent voters' happiness scores range over and above those of the liberal Democrats but do not rise to that of the conservative Republicans.

More detailed inspection of the graphs yields further insights into the links between unhappiness and regime change. The Merrill-Grofman-Brunell thesis, a
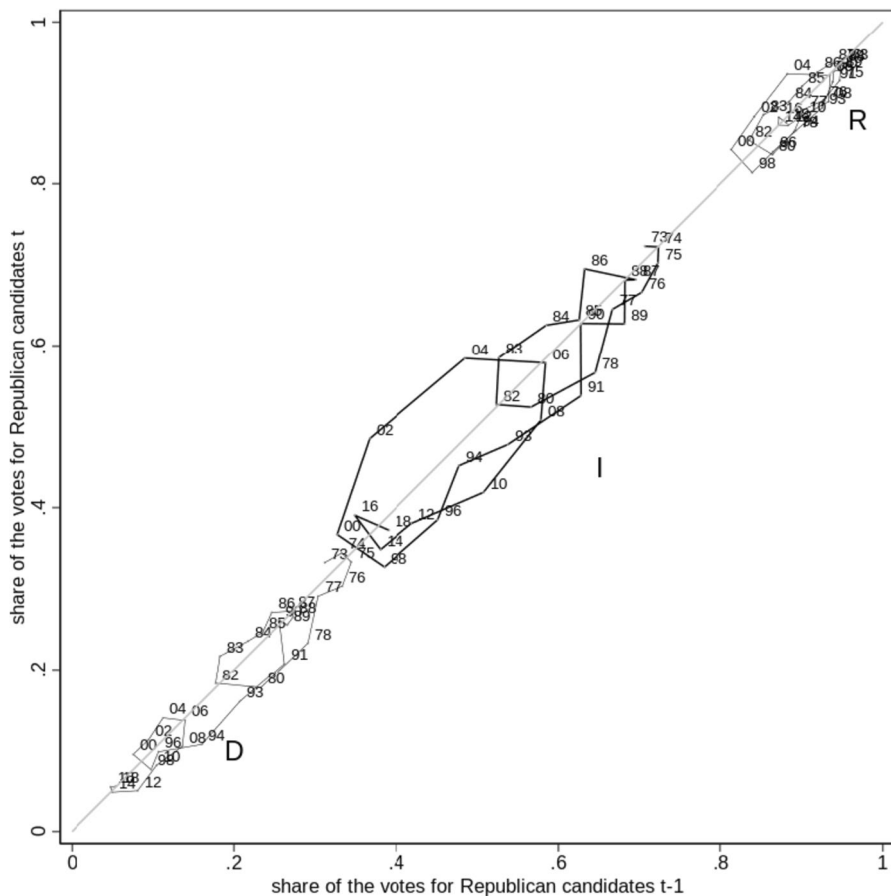
**Fig. 4** Shares of the votes of Republican, Independent and Democrats voters for Republican candidates 1972–2018, plotted t|t-1 phase space. The data are smoothed using the same process as in Fig. 1. There is much greater variability in the Republican vote shares, as evidenced by the wider cycling along the nation's political axis than in Fig. 2

| **Table 4** Average happiness scores by party and ideology, 1972–2018 | | Republicans | Independent | Democrat |
|---|---|---|---|---|
| | Conservative | 2.33 | 2.15 | 2.18 |
| | Moderate | 2.25 | 2.14 | 2.16 |
| | Liberal | 2.22 | 2.11 | 2.15 |

component of their voter party interaction model, is "that voters near the center of the voter distribution and hence the median voter—move away from the position of the party in power, by an amount proportional to the distance between the median voter and the party's position. In other words, swing voters including the median voter may react negatively to politics implemented by the party in power". Evidence
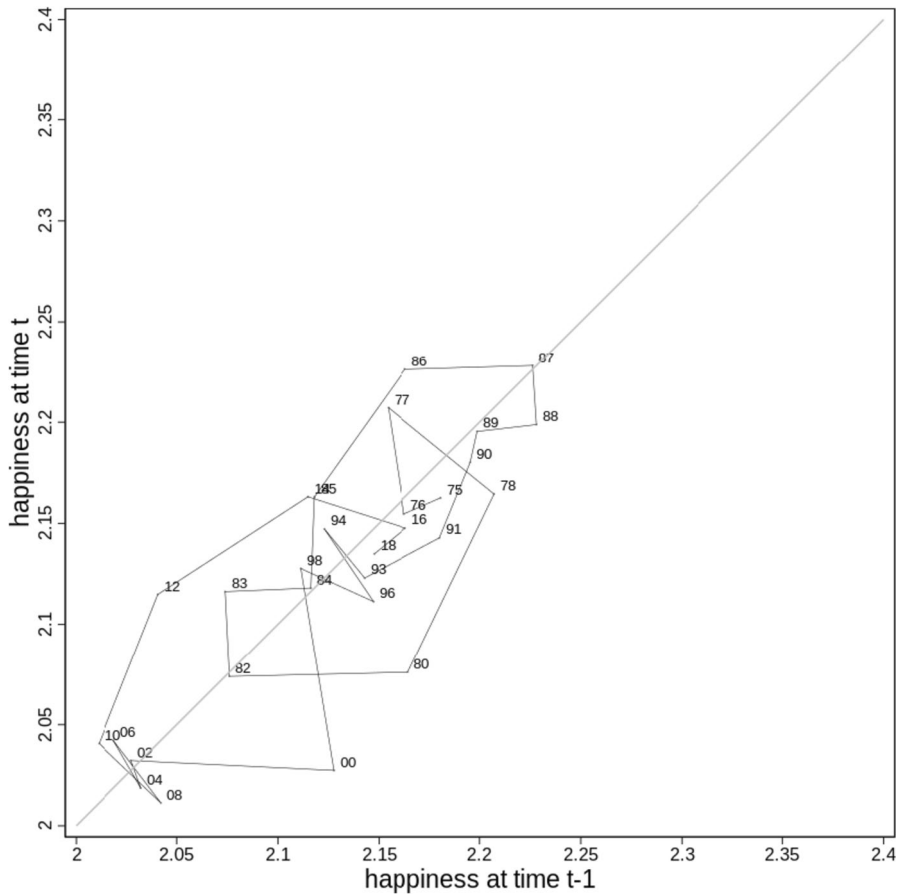
**Fig. 5** Variations in the happiness of liberal Independents in t|t-1 phase space, with data smoothed consistent with Fig. 1

in support of this thesis is to be found in Figs. 5, 6 and 7, revealing that increased unhappiness goes hand in hand with the incumbency of the opposing ideology. Liberal and moderate Independents joined with liberal Democrats in their unhappiness during the conservative Reagan and G. W. Bush presidencies. Conservative Independents and conservative Republicans shared extreme unhappiness during the Obama administration, and to a lesser extent during the George H. W. Bush presidency as he retreated from Reagan's conservative principles. At the other extreme, liberals and moderates were at their happiest after Carter replaced the Nixon-Ford administration and as the Reagan-Bush presidency drew to an end. Conservatives' happiness was greatest after Reagan was elected and Democrats were ousted from office.

Table 5 summarizes these findings. There are two ideologically differentiated groups of responses. Liberal Independents shared surging happiness with liberal
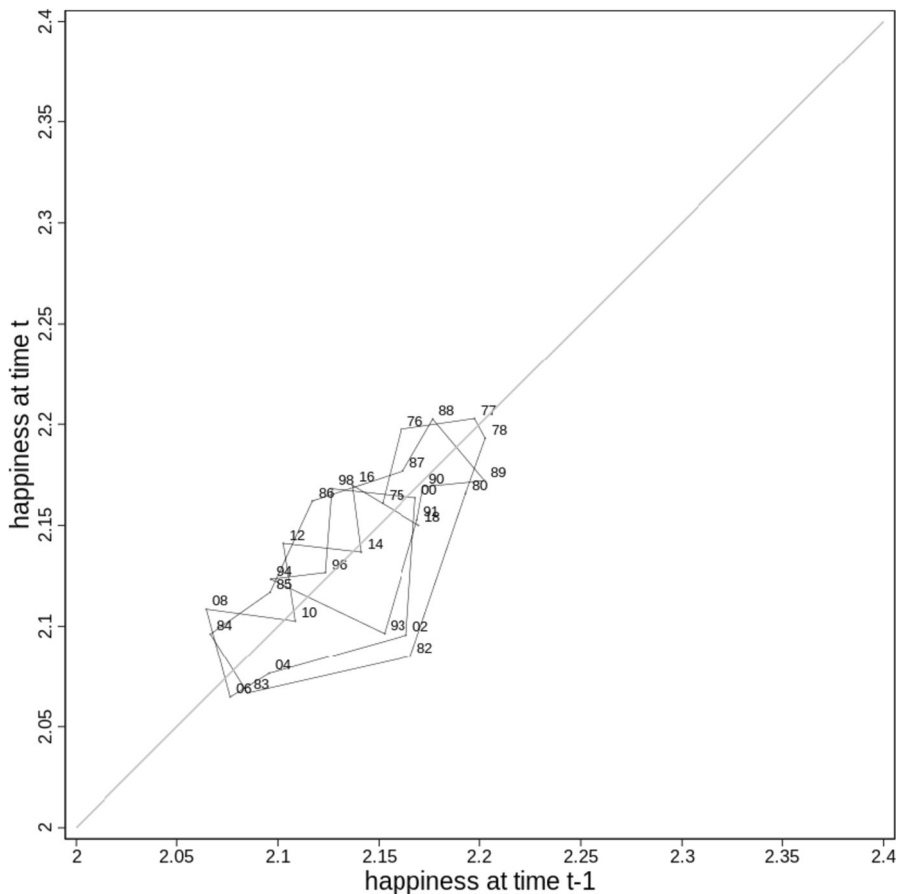
**Fig. 6** Variations in the happiness of moderate Independents in t|t-1 phase space, with data smoothed consistent with Fig. 1

Democrats during the post-Nixon/Ford presidency of Carter and as the Reagan/Bush presidencies drew to an end. Maximum unhappiness occurred during Reagan and G. W. Bush presidencies. Self-named "moderate" Independents also followed this pattern, consistent with the ideological drift of this group. At the other extreme conservative Independents and conservative Republicans were happiest when the conservative Ronald Reagan was in office and have been at their unhappiest during the left-wing presidency of Barack Obama.

These results suggest that happiness level for liberals is greatest when conservative regimes approach their end but for conservatives it is at its peak when a conservative is president. Unhappiness soars for both groups when the White House is occupied by a president of the opposite ideology. Mounting unhappiness with the party in power thus lies at the heart of periodicities in political realignment (Schlesinger, 1939). Incumbents lose vote share over time (Samuels, 2004):
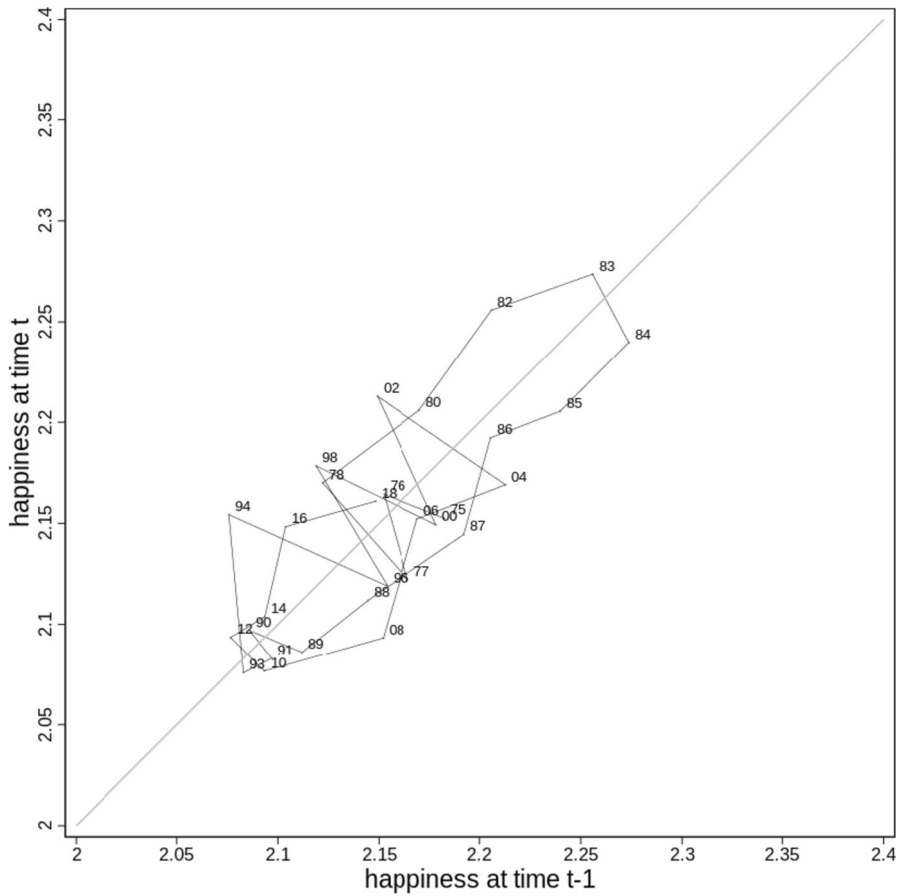
**Fig. 7** Variations in happiness of conservatives Independents in t|t-1 phase space, with data smoothed consistent with Fig. 1

**Table 5** Happiness highs and lows 1972–2018 by party, ideology and presidency

| Respondents' Ideology | Happiness | |
|---|---|---|
| | Highest | Lowest |
| Liberal | Carter | GHW Bush |
| Democrats | GHW Bush | Reagan |
| Liberal | Reagan 2 | G. H. W. Bush |
| Independent | Carter | Reagan 1 |
| Moderate | Carter | G. W. Bush |
| Independent | G. W. Bush | Reagan 1 |
| Conservative | Reagan 1 | Obama |
| Independent | | G. H. W. Bush |
| Conservative | Reagan 1 | Obama |
| Republican | | |

as easy issues are dealt with, what is left are more intractable problems (Bartels & Zaller, 2001). These accumulate to a "common national mood (that) responds thermostatically to government policy. Mood becomes more conservative under liberal governments, more liberal under conservative regimes" (Stimson, 2015). Thus, subjective well-being seems to be an important factor in driving polarization and election outcomes, and examining happiness significantly advances our understanding of regime change between the two major parties in the United States.

## Limitations

The data source used to examine the relationship between happiness, party identification, and ideology for median voters yields only 32 data points from 1972 to 2018, which is insufficient for in-depth statistical analysis. These results are therefore preliminary, and we leave it to future research to examine our research questions as they pertain to happiness using a different type of data that allows for more in-depth analyses. The dataset employed is also observational, and the findings are descriptive rather than causal. There's the possibility of reverse causation when it comes to happiness and political polarization. In fact, some research has already pointed out that people are unhappy in polarized societies (Okulicz-Kozaryn, 2010). Therefore, it's important that future research should look for natural or quasi experiments to establish that the relationships observed in this study show the same causal patterns and that happiness has a causal effect on political polarization.

Finally, U.S. politics is arguably very country-specific, and the results cannot be generalized elsewhere. Future research should nonetheless study other countries like Brazil, Italy, and others, where political polarization is on the rise to see if happiness plays a similar role in other countries. Research establishing a relationship between subjective wellbeing to political polarization is new, and replications are needed in other contexts to show that these results are not specific to the U.S. political landscape.

## Discussion and Conclusion

The results presented in this article provide support for the assertion that polarization in America has been growing steadily in the last decades. The evidence contradicts those who argue that Americans "seek the center while the parties and candidates hang out on the extremes" (Fiorina et al., 2006, xiii). Our regression analyses show an increasing division in political ideology, accompanied by an increasing and steady shift towards the extremes among all Americans. Is happiness one of the causal processes driving this polarization? The descriptive results seem to indicate that the political polarization at the extremes means that

the critical mood swings are those driven by rising unhappiness among those in the middle: as happiness increases liberal and moderate Independents cast less votes for Democrats: they support their own party most when they are the unhappiest — the greater the perceptions of unfairness the greater the misery and the greater the party support (Brooks, 2008). On the other hand, the vote share of conservative Independents for Democrats remains constant. Conservative Independents are happiest during the early years of Republican administrations but unhappiest as they approach their end. Moderate and liberal Independents are unhappiest in the early stages of Republican administrations, but their happiness grows as the prospect of the replacement of the Republicans by a Democratic administration increases. The greatest volatility in the vote associated with happiness/liberal policy mood is seen among moderate and liberal Independents. The greater their unhappiness the less likely they are to support the Republicans and more likely to vote for Democrats. Not unexpectedly, the elasticity of this vote shift appears to be greater for their Republican vote than for their Democrat support. Importantly, the conservative Independents' vote shares for Republicans and Democrats appear immune to swings in their happiness. It is the vote shares of liberal and moderate Independents that fluctuate. The greater their unhappiness the more likely they are to vote for Democrats.

These results are important because they indicate the existence of a connection between happiness, political outcome and political polarization for the first time. Historically, scholars have focused on economic motivations as main drivers of voting behavior, but our findings suggest that subjective well-being may be more useful in predicting and understanding electoral outcomes in the U.S. than conventional economic explanations. This preliminary examination can be particularly relevant as governments around the world start to focus beyond GDP and economic measures and use SWB as complementary measures of progress and key objectives of public policy. Subjective well-being data should be considered as an official indicator of national performance to direct and inform public policymaking, and as a key indicator in the evaluation of government programs. Although these are descriptive results, they suggest that using this kind of SWB data to inform and assess public policy may have electoral benefits since it has evident political relevance. Analyzing and measuring happiness may be essential for understanding changes in the political landscape.

A caveat, however, is that Independents pay the least attention to politics and are the least likely to vote (compared to partisans), thus we should be cautious in interpreting these results and more research is needed to explore the link between Independent's happiness and their voting choice. It is important to underscore that the data source used to examine the relationship between happiness, party reference and ideology for median voters, yields only 32 data points from 1972 to 2018, too few for refined statistical analyses. What therefore are discussed in this paper are preliminary findings and research questions that ultimately will need to be resolved by using different kinds of data that permit more refined analyses which we leave to future research.

# Appendix

Distribution of GSS Respondents by Party and Political Ideology by Gender

**Table 6** Distribution of GSS responses 1972–1980, men

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 21.70 | 4.33 | 5.44 | 31.47 |
| Moderate | 20.35 | 5.62 | 8.84 | 34.82 |
| Conservative | 13.49 | 4.04 | 16.18 | 33.71 |
| Total | 55.54 | 13.99 | 30.46 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 17.48 | 4.40 | 9.59 | 31.47 |
| Moderate | 19.34 | 4.87 | 10.61 | 34.82 |
| Conservative | 18.72 | 4.72 | 10.27 | 33.71 |
| Total | 55.54 | 13.99 | 30.46 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +4.22 | -0.07 | -4.15 | |
| Moderate | +1.01 | +0.75 | -1.77 | |
| Conservative | -5.23 | -0.68 | +5.91 | |

**Table 7** Distribution of GSS responses 1972–80, women

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 17.06 | 2.77 | 6.46 | 26.29 |
| Moderate | 25.16 | 6.22 | 12.27 | 43.65 |
| Conservative | 13.70 | 3.34 | 13.03 | 30.06 |
| Total | 55.92 | 12.33 | 31.75 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 14.70 | 3.24 | 8.35 | 26.29 |
| Moderate | 24.41 | 5.38 | 13.86 | 43.65 |
| Conservative | 16.81 | 3.71 | 9.54 | 30.06 |
| Total | 55.92 | 12.33 | 31.75 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +2.36 | -0.47 | -1.89 | |
| Moderate | +0.75 | +0.84 | -1.59 | |
| Conservative | -3.11 | -0.37 | +3.49 | |

**Table 8** Distribution of GSS Responses 1980–92, Men

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 18.26 | 2.79 | 6.26 | 27.32 |
| Moderate | 17.78 | 5.40 | 12.17 | 35.35 |
| Conservative | 12.25 | 3.28 | 21.81 | 37.33 |
| Total | 48.29 | 11.47 | 40.24 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 13.19 | 3.13 | 10.99 | 27.32 |
| Moderate | 17.07 | 4.05 | 14.22 | 35.35 |
| Conservative | 18.03 | 4.28 | 15.02 | 37.33 |
| Total | 48.29 | 11.47 | 40.24 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +5.07 | -0.34 | -4.73 | |
| Moderate | +0.71 | +1.35 | -2.05 | |
| Conservative | -5.78 | -1.00 | +6.79 | |

**Table 9** Distribution of GSS responses 1980–92, women

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 18.92 | 2.31 | 5.63 | 26.86 |
| Moderate | 22.54 | 5.40 | 14.13 | 42.07 |
| Conservative | 12.45 | 2.46 | 16.15 | 31.06 |
| Total | 53.92 | 10.17 | 35.91 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 14.48 | 2.73 | 9.65 | 26.86 |
| Moderate | 22.68 | 4.28 | 15.11 | 42.07 |
| Conservative | 16.75 | 3.16 | 11.15 | 31.06 |
| Total | 53.92 | 10.17 | 35.91 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +4.44 | -0.42 | -4.02 | |
| Moderate | -0.14 | +1.12 | -0.98 | |
| Conservative | -4.30 | -0.70 | +5.00 | |

**Table 10** Distribution of GSS responses 1992–2000, men

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 17.07 | 3.39 | 4.80 | 25.26 |
| Moderate | 16.66 | 7.11 | 11.86 | 35.62 |
| Conservative | 9.62 | 3.85 | 25.65 | 39.12 |
| Total | 43.35 | 14.35 | 42.30 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 10.95 | 3.62 | 10.68 | 25.26 |
| Moderate | 15.44 | 5.11 | 15.07 | 35.62 |
| Conservative | 16.96 | 5.61 | 16.55 | 39.12 |
| Total | 43.35 | 14.35 | 42.30 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +6.12 | -0.23 | -5.88 | |
| Moderate | +1.22 | +2.00 | -3.21 | |
| Conservative | -7.34 | -1.76 | +9.10 | |

**Table 11** Distribution of GSS responses 1992–2000, women

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 19.74 | 3.47 | 4.71 | 27.93 |
| Moderate | 20.21 | 7.52 | 11.53 | 39.26 |
| Conservative | 10.95 | 3.93 | 17.94 | 32.81 |
| Total | 50.90 | 14.92 | 34.18 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 14.22 | 4.17 | 9.55 | 27.93 |
| Moderate | 19.98 | 5.87 | 13.42 | 39.26 |
| Conservative | 16.70 | 4.90 | 11.21 | 32.81 |
| Total | 50.90 | 14.92 | 34.18 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +5.52 | -0.70 | -4.84 | |
| Moderate | +0.23 | +1.66 | -1.89 | |
| Conservative | -5.75 | -0.97 | +6.73 | |

**Table 12** Distribution of GSS responses 2001–2008, men

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 17.95 | 4.65 | 3.18 | 25.78 |
| Moderate | 17.05 | 9.37 | 10.76 | 37.17 |
| Conservative | 8.13 | 4.42 | 24.49 | 37.05 |
| Total | 43.13 | 18.43 | 38.43 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 11.12 | 4.75 | 9.91 | 25.78 |
| Moderate | 16.03 | 6.85 | 14.28 | 37.17 |
| Conservative | 15.98 | 6.83 | 14.24 | 37.05 |
| Total | 43.13 | 18.43 | 38.43 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +6.83 | -0.10 | -6.73 | |
| Moderate | +1.02 | +2.52 | -3.52 | |
| Conservative | -7.85 | -2.41 | +10.25 | |

**Table 13** Distribution of GSS responses 2001–2008, women

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 20.90 | 3.77 | 2.83 | 27.50 |
| Moderate | 19.53 | 9.85 | 10.31 | 39.70 |
| Conservative | 8.78 | 4.65 | 19.37 | 32.80 |
| Total | 49.21 | 18.28 | 32.51 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 13.53 | 5.03 | 8.94 | 27.50 |
| Moderate | 19.54 | 7.26 | 12.91 | 39.70 |
| Conservative | 16.14 | 6.00 | 10.66 | 32.80 |
| Total | 49.21 | 18.28 | 32.51 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +7.37 | -1.26 | -6.11 | |
| Moderate | -0.01 | +2.59 | -2.60 | |
| Conservative | -7.36 | -1.35 | +8.71 | |

**Table 14** Distribution of GSS responses 2009–2016, men

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 21.58 | 3.22 | 2.91 | 27.71 |
| Moderate | 16.68 | 9.93 | 9.87 | 36.48 |
| Conservative | 7.22 | 3.84 | 24.75 | 35.81 |
| Total | 45.48 | 16.99 | 37.54 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 12.60 | 4.71 | 10.40 | 27.71 |
| Moderate | 16.59 | 6.20 | 13.69 | 36.48 |
| Conservative | 16.29 | 6.08 | 13.44 | 35.81 |
| Total | 45.48 | 16.99 | 37.54 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +8.98 | -1.49 | -7.49 | |
| Moderate | +0.09 | +3.73 | -3.82 | |
| Conservative | -9.07 | -2.24 | +11.31 | |

**Table 15** Distribution of GSS responses 2009–2016, women

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 22.94 | 3.58 | 2.37 | 28.90 |
| Moderate | 21.06 | 9.99 | 9.05 | 40.09 |
| Conservative | 8.13 | 4.22 | 18.67 | 31.01 |
| Total | 52.13 | 17.79 | 30.09 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 15.07 | 5.14 | 8.70 | 28.90 |
| Moderate | 20.90 | 7.13 | 12.06 | 40.09 |
| Conservative | 16.17 | 5.52 | 9.33 | 31.01 |
| Total | 52.13 | 17.79 | 30.09 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +7.87 | -1.56 | -6.33 | |
| Moderate | +0.16 | +2.86 | -3.01 | |
| Conservative | -8.04 | -1.30 | +9.34 | |

**Table 16** Distribution of GSS responses 2016–2018, men

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 24.71 | 2.49 | 2.60 | 29.80 |
| Moderate | 14.54 | 9.97 | 11.53 | 36.03 |
| Conservative | 4.88 | 3.32 | 25.96 | 34.16 |
| Total | 44.13 | 15.78 | 40.08 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 13.15 | 4.70 | 11.94 | 29.80 |
| Moderate | 15.90 | 5.69 | 14.44 | 36.03 |
| Conservative | 15.07 | 5.39 | 13.69 | 34.16 |
| Total | 44.13 | 15.78 | 40.08 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +11.56 | -2.21 | -9.34 | |
| Moderate | -1.36 | +4.28 | -2.91 | |
| Conservative | -10.19 | -2.07 | +12.27 | |

**Table 17** Distribution of GSS responses 2016–2018, women

| Observed % | Democrats | Independents | Republicans | Total |
|---|---|---|---|---|
| Liberal | 23.10 | 3.63 | 2.78 | 29.51 |
| Moderate | 19.06 | 10.37 | 9.70 | 39.12 |
| Conservative | 7.42 | 3.46 | 20.49 | 31.37 |
| Total | 49.58 | 17.45 | 32.97 | 100.00 |
| Expected % | Democrats | Independents | Republicans | Total |
| Liberal | 14.63 | 5.15 | 9.73 | 29.51 |
| Moderate | 19.40 | 6.83 | 12.90 | 39.12 |
| Conservative | 15.55 | 5.47 | 10.34 | 31.37 |
| Total | 49.58 | 17.45 | 32.97 | 100.00 |
| Difference | Democrats | Independents | Republicans | |
| Liberal | +8.47 | -1.52 | -6.95 | |
| Moderate | -0.34 | +3.54 | -3.20 | |
| Conservative | -8.13 | -2.01 | +10.15 | |

Robustness check:

**Table 18** Logit of liberals in A1 and conservatives in A2 (lumping moderates/independents with base case)

| Variables | (1) A1 | (2) A2 |
|---|---|---|
| Year | 0.02*** | -0.03*** |
| Political party affiliation | 16.00*** | -16.79*** |
| C.year#c.partyid | -0.01*** | 0.01*** |
| Income quantiles | | 0.08*** |
| Highest year of school completed | | 0.00 |
| Male | | 0.18*** |
| Age | | 0.01*** |
| Race of household = 2, black | | 0.27*** |
| Race of household = 3, american indian | | 0.08 |
| Race of household = 4, asiatic, oriental | | -0.09 |
| Race of household = 5, other, mixed, not able to observe | | 0.01 |
| Liberal | | |
| Constant | -38.91*** | 57.86*** |
| Observations | 55,077 | 40,792 |

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

**Declarations**

**Conflict of Interest** The authors declare that they have no conflict of interest.

# References

Abramowitz, A. I., & Saunders, K. L. (1998). 'Ideological Realignment in the U.S. Electorate.' *Journal of Politics, 60*(3), 634–652.

Abramowitz, A. I., & Saunders, K. L. (2008). Is polarization a myth? *The Journal of Politics, 70*(02), 542–555.

Autor, D., Dorn, D., Hanson, G., & Majlesi, K. (2017). A note on the effect of rising trade exposure on the 2016 presidential election. *Appendix to "Importing Political Polarization*, 3139–83.

Bartels, L. M., & Zaller, J. (2001). Presidential vote models: A recount. *PS: Political Science and Politics, 34*(1), 9–20.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachmentsas a fundamental human motivation. *Psychological Bulletin, 117*(3), 497.

Baumol, W. J., & Benhabib, J. (1989). Chaos: Significance, mechanism, and economic applications. *The Journal of Economic Perspectives, 3*(1), 77–105.

Benabou, R., & Tirole, J. (2005). Belief in a just world and redistributive politics. *Quarterly Journal of Economic Research, 121*, 699–749.

Bishop, B. (2009). *The big sort: Why the clustering of like-minded America is tearing us apart*. Houghton Mifflin.

Bishop, B., & Cushing, R. (2008). The big sort: Migration, community, and politics in the United States of 'those people'. *Red, blue and purple America: The future of election demographics,* 50–75.

Brooks, A. C. (2008). *Gross national happiness: Why happiness matters for America–and how we can get more of It*. Basic Books.

Brooks, A. C. (2007). The Left's Inequality Obsession. *Wall Street Journal,* A15.

Campbell, A., Converse, P. E., Miller, W. E., & Stokes, D. E. (1980). *The American voter*. University of Chicago Press.

Di Tella, R., & MacCulloch, R. (2005). Partisan social happiness. *The Review of Economic Studies, 72*(2), 367–393.

DiMaggio, P., Evans, J., & Bryson, B. (1996). Have Americans social attitudes become more polarized? *American Journal of Sociology, 120*, 690–755.

Enke, B. (2020). Moral values and voting. *Journal of Political Economy*. Advance online publication. https://doi.org/10.1086/708857

Fiorina, M. P., & Abrams, S. J. (2008). Political polarization in the American public. *Annual Review of Political Science, 11*, 563–588.

Fiorina, M. P., Abrams, S. J., & Pope, J. C. (2006). *Culture war? The myth of a polarized America* (2nd ed.). Pearson Longman.

Fiorina, M. P., Abrams, S. A., & Pope, J. C. (2008). Polarization in the American public: Misconceptions and misreadings. *The Journal of Politics, 70*(02), 556–560. https://doi.org/10.1017/S002238160808050X

Flavin, P., & Keane, M. J. (2012). Life satisfaction and political participation: Evidence from the United States. *Journal of Happiness Studies, 13*, 63–78.

Florida, R. (2018). How unhappiness helped elect Trump. City Lab https://www.bloomberg.com/news/articles/2023-09-29/austin-i-35-highway-expansion-moves-ahead-despite-climate-fears. Accessed 25 Oct 2023

Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. *BMJ, 337*, a2338.

Frey, C. B., Berger, T., & Chen, C. (2018). Political machinery: Did robots swing the 2016 U.S. presidential election? *Oxford Review of Economic Policy, 34*, 418–442.

Gelman, A. B., Shor, J. B., & Park, D. (2008). *Red state, blue state, rich state, poor state: Why Americans vote the way they do*. Princeton University Press.

Goldman, L., Lim, M. P., Chen, Q., Jin, P., Muennig, P., & Vagelos, A. (2019). Independentrelationship of changes in death rates with changes in U.S. presidential voting. *Journal of General Internal Medicine, 34*, 363–371.

Haidt, J. (2022). Why the past 10 years of American life have been uniquely stupid. *The Atlantic*, *11*.

Herrin, J., Witters, D., Roy, B., Riley, C., Liu, D., & Krumholz, H. M. (2018). Population well-being and electoral shifts. *PLoS ONE, 13*, e0193401.

Hetherington, M. J. (2001). Resurgent mass partisanship: The role of elite polarization. *American Political Science Review, 95*(3), 619–631.

Hofstede, G. (1980). *Culture's consequences: National differences in thinking and organizing*. Sage.

Holcombe, R. G. (2006). *Public sector economics: The role of government in the American economy*. Prentice Hall.

Hotelling, H. (1929). Stability in competition. *Economic Journal, 39*(153), 41–57.

Jacobson, G. C. (2004). Partisan and ideological polarization in the California electorate. *State Politics and Policy Quarterly, 4*(1), 113–139.

Jacobson, G. C. (2005). Polarized politics and the 2004 congressional and presidential elections. *Political Science Quarterly, 120*(2), 199–218.

Jelen, T. G., & Wilcox, C. (2003). Causes and consequences of public attitudes toward abortion: A review and research agenda. *Political Research Quarterly, 56*(4), 489–500.

Johnston, R., Manley, D., & Jones, K. (2016). Spatial polarization of presidential voting in the United States, 1992–2012: The "big sort" revisited. *Annals of the American Association of Geographers, 106*(5), 1047–1062.

Jost, J. T. (2006). The end of the end of ideology. *American Psychologist, 61*(7), 651.

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology, 60*, 307–337.

Knowles, E. D., & Tropp, L. R. (2018). The racial and economic context of Trump support: Evidence for threat, identity, and contact effects in the 2016 Presidential Election. *Social Psychological and Personality Science, 9*, 275–284.

Lane, R. E. (2000). *The loss of happiness in market democracies*. Yale University Press.

Layman, G. C. (1997). Religion and political behavior in the United States: The impact of beliefs, affiliations, and commitment from 1980 to 1994. *Public Opinion Quarterly, 61*(2), 288–316.

Layman, G. C. (2001). *The great divide: Religious and cultural conflict in American PartyPolitics*. Columbia University Press.

Layman, G. C., & Carmines, E. G. (1997). Cultural conflict in American Politics: Religious traditionalism, post-materialism, and U.S. political behavior. *Journal of Politics, 59*(3), 751–777.

Layman, G. C., & Carsey, T. M. (2002). Party polarization and "'Conflict Extension'" in the American electorate. *American Journal of Political Science, 46*(4), 786–802.

Layman, G. C., Carsey, T. M., & Horowitz, J. M. (2006). Party polarization in American politics: Characteristics, causes, and consequences. *Annual Review of Political Science, 9*, 83–110.

Levendusky, M. S. (2009). *The partisan sort: How liberals became Democrats and conservatives became Republicans*. University of Chicago Press.

Liberini, F., Redoano, M., & Proto, E. (2017). Happy voters. *Journal of Public Economics, 146*, 41–57.

Lindaman, K., & Haider-Markel, D. P. (2002). Issue evolution, political parties, and the culture wars. *Political Research Quarterly, 55*(1), 91–110.

Marietta, M. (2012). *A citizen's guide to american ideology: Conservatism and liberalism in contemporary politics*. Routledge.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*(1), 415–444.

Merrill, S., Grofman, B., & Brunell, T. L. (2008). Cycles in American national electoral politics, 1854–2006: Statistical evidence and an explanatory model. *American Political Science Review, 102*(01), 1–17.

Montgomery, D. (2008). A happiness gap: Doomacrats and Republigrins. *Washington Post*, 10–24.

Napier, J. L., & Jost, J. T. (2008). Why are conservatives happier than liberals? *Psychological Science, 19*(6), 565–572.

Okulicz-Kozaryn, A. (2010). Religiosity and life satisfaction across nations. *Mental Health, Religion & Culture, 13*(2), 155–169.

Piketty, T. (1995). Social mobility and redistributive politics. *The Quarterly Journal of Economics, 110*(3), 551–584.

Podhoretz, N. (2010). *Why are Jews Liberals?* Vintage Books New York, USA.

Poole, K. T., & Rosenthal, H. (1998). The dynamics of interest group evaluations of Congress. *Public Choice, 97*(3), 323–361.

Poole, K. T., & Rosenthal, H. (2001). D-Nominate after 10 years: A comparative update to congress: A political-economic history of roll-call voting. *Legislative Studies Quarterly, 26*(1), 5–29.

Putnam, R. D. (2007). E Pluribus Unum: Diversity and community in the twenty-first century. The 2006 Johan Skytte prize lecture. *Scandinavian Political Studies, 30*(2), 137–174.

Samuels, D. (2004). Presidentialism and accountability for the economy in comparative perspective. *American Political Science Review, 98*(3), 425–436.

Schlesinger, A. M. (1939). Tides of American politics. *Yale Review, 29*(2), 217–230.

Smelser, N. J., & Alexander, J. C. (Eds.). (1999). *Diversity and its discontents: cultural conflict and common ground in contemporary American society*. Princeton University Press, New Jersey, NJ.

Smith, E. R. (1980). The levels of conceptualization: False measures of ideological sophistication. *American Political Science Review, 74*(3), 685–696.

Stimson, J. A. (2015). *Tides of consent: How public opinion shapes American politics*. Cambridge University Press.

Stonecash, J. M., Brewer, M. D., & Marianai, M. D. (2003). *Diverging parties: Social change, realignment, and party polarization*. Westview Press.

Subramanian, S. V., & Perkins, J. M. (2010). Are Republicans healthier than Democrats? *International Journal of Epidemiology, 39*(3), 930–931.

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology, 33*(1), 1–39.

Tajfel, H., Flament, C., Billig, M. G., & Bundy, R. F. (1971). Social categorization and Intergroup behaviour. *European Journal of Social Psychology, 1*, 149–177.

Taylor, P., Funk, C., & Craighill, P. (2006). Are we happy yet? *A Pew Research Center Social Trends Report*. https://www.pewresearch.org/social-trends/2006/02/13/are-we-happy-yet/. Accessed 25 Oct 2023.

Ward, G. (2020). Happiness and voting: Evidence from four decades of elections in Europe. *American Journal of Political Science, 64*(3), 504–518.

Ward, G., De Neve, J. E., Ungar, L. H., & Eichstaedt, J. C. (2021). (Un) happiness and voting in US presidential elections. *Journal of Personality and Social Psychology, 120*(2), 370.

White, J. K. (2003). *The values divide*. Chatham House.

Wildavsky, A. (1987). Choosing preferences by constructing institutions: A cultural theory of preference formation. *American Political Science Review, 81*(01), 3–21.