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## A Longitudinal Study of Political Polarization in Congress and the American Public

### Abstract

This report examines mass ideological and affective polarization as well as elite ideological polarization using ANES polling data, DW-NOMINATE scores, and interest group ratings from 1992 until 2020. It investigates trends of mass affective polarization as well as elite ideological polarization, while also looking to resolve the disagreement among scholars surrounding whether there is an increase in mass ideological polarization. When investigating mass polarization, multiple demographic factors such as race, gender and age were accounted for. This report found increasing levels of overall mass ideological polarization and mass ideological polarization on each specific policy issue examined. In addition, it concluded that there has been a strong increase in mass affective polarization since 1992, and a smaller increase in elite ideological polarization in Congress. This report further examines when these various types of polarization increased, and to what extent, to help guide future research attempting to understand the causes of increasing polarization.

## Introduction

This report will examine the trends of political polarization among the masses and the elites, to determine if these levels of political polarization are increasing across all dimensions. Scholars agree that there is some level of polarization across all dimensions, and that this polarization has real impacts on society. Many Americans point to the increase in political violence, such as the attack on the Capital on January 6<sup>th</sup>, as consequences of polarization. Political polarization has also bled into other aspects of society, such as healthcare decisions surrounding COVID-19. Polarization has strong negative consequences for this country and understanding what types of people are politically polarized, and in which ways, is critical to finding a solution. Despite the agreement that there is polarization, there has historically been disagreement among scholars about whether there has truly been an increase in mass ideological polarization, or if the average voter is still a moderate at their core. This report examines mass ideological and affective polarization as well as elite ideological polarization to resolve this debate and better understand the ways in which people are polarized.

This investigation is done using ANES polling data, DW-NOMINATE scores, and interest group ratings from 1992 until 2020. The investigation found that polarization is increasing across all dimensions, including different demographic groups. The results specifically found a strong increase in ideological mass polarization beginning around 2008, and a steady strong increase in affective mass polarization across the entire 28 year period. The Congress has also become more polarized throughout this period; however, a majority of this ideological shift appears to be coming from the Republican party. Understanding these patterns of polarization is a key first step in finding solution's and fixing the damage that is being done by having an increasingly polarized political environment.

## Literature Review

For several decades, political polarization in the United States has been a large focus of political science research. In the past several years the academic conversation and mass media surrounding it have continued to gain focus. This increase in attention has come after many scholars have raised concerns about the potentially dangerous consequences of polarization, such as the January 6<sup>th</sup> attack on the capital, or increases in political violence. (West, Darrell M. 2022) This review will examine the differences between mass and elite polarization, summarize the political debates about the extent of polarization and review different methods for measuring polarization.

### Elite Political Polarization:

Elite polarization is the sorting of political ideas and attitudes away from the center or moderate position, within the government, decreasing the overlap between the parties' ideological positions. Evidence in recent decades has appeared to show that ideas within political parties are becoming more unified, while simultaneously the two main parties are moving further apart in their ideological positions (Garner & Palmer 2011). Polarization in congress is often measured as the democratic and republican parties' average difference in opinions on certain ideology areas. As the two parties' policy positions become more separate, polarization levels between them grows (Layman, Carsey & Horowitz 2006). Scholars point to many reasons for this increasing polarization in government, such as pressure from party activists (Layman, Carsey & Horowitz 2006), southern realignment during the 1960's and income inequality coupled with increasing immigration (Hare & Poole

2014). Scholars agree that the causes for elite polarization fall into two main camps, exterior and interior pressures. Many scholars believe that a combination of these pressures, such as having a more ideologically extreme electorate along with changes to the rules and procedures in Congress, have together led to today's current rise in elite polarization (Schaffner 2011). These increasing levels of elite political polarization can have serious negative consequences, such as hostile political debate and gridlock in Congress, which makes it increasingly difficult to efficiently pass legislation (Layman, Carsey & Horowitz 2006).

#### Mass Political Polarization:

Mass polarization is the sorting of political ideas and attitudes away from the center or moderate position amongst the citizens of the United States. There are two distinct forms of mass polarization, affective and ideological polarization. Ideological polarization is differences in opinion on political policy, such as abortion rights and military spending. Ideological mass polarization increases as Americans in the republic and democratic parties, shift their policy preferences in opposite directions (Layman, Carsey & Horowitz 2006). For example, if democrats become more likely to favor government spending for social programs, while republicans begin to believe there should be less spending, we would say there is increasing mass ideological polarization surrounding the issue of government spending.

Affective political polarization measures how one feels about the opposing party and is rooted in social identity. Group affiliation is a key part of humans as social creatures, numerous psychological studies have looked at the effect on in-group/out-group relationships and found that when this group dynamic is present, humans tend to view members of their own group as more positive and members of the opposing group as more negative, even if it's

for trivial reasons (Iyengar & Westwood 2014). Therefore, affective polarization is the idea that there might be negative feelings associated with citizens of the opposing party, unrelated to policy positions (Iyengar et. al 2019).

Scholars point to a variety of potential causes for mass polarization. Some theorize that mass polarization could be due to an increasing alignment of partisan values with ideological positions, merging American's social identities with partisanship (Iyengar et. al 2019). Other scholars believe that the divided media environment, including cable news and access to the internet, social media and increasingly negative political campaigns, is a major cause of the partisan divide in America (Iyengar et. al 2019). Another group of scholars believe that elite polarization occurred before mass polarization and acted as a catalyst for polarizing the citizens, however others believe that mass polarization was a factor in elite polarization, therefore more work is still being done to understand which form of polarization came first and how they might influence each other (Layman, Carsey & Horowitz 2006).

The consequences of polarization among the mass electorate are clear. A survey from Pew Research Center in July of 2022 found that 72% of Republicans say that Democrats are a lot/somewhat more immoral compared to other Americans, and 63% of Democrats said the same about Republicans (Pew Research Center 2022). Other surveys and studies have shown that people are increasingly less likely to have friendships or romantic relationships with people from the opposing party. Partisanship has also been shown to affect the economy and labor markets (Iyengar et al. 2019). For example, people are less likely to buy products or receive handouts from companies associated with the opposing party. It has also been shown that Democrats are more likely to get call backs for jobs in Democratic counties, and vice versa for Republicans (Iyengar et al. 2019). A final concerning consequence of mass polarization is the partisan implications on healthcare. As health care becomes more polarized, partisan ideology has impacted the decision-making process between a doctor and

a patient (Iyengar & Krupenkin 2018). For example, the polarization of Covid-19 led to increased vaccine hesitancy, which gave some individuals an increased unnecessary risk.

#### The Debate on the Extent of Polarization:

Despite there being clear evidence that there is some level of mass and elite polarization, and scholars agreeing that the levels of elite polarization are increasing, there is disagreement in the field of political science surrounding mass political polarization. The center of the debate focuses around whether levels of mass polarization are really increasing as some scholars claim, or if instead the polarization between the two mass parties has remained steady or decreased. Some scholars argue that affective polarization and ideological polarization are completely distinct and therefore one may appear present while the other does not (Iyengar et al. 2019). Many of the scholars who believe there is an increase in only one dimension of mass polarization, believe there is increasing affective polarization and not an increase in ideological polarization (Iyengar & Krupenkin 2018).

Scholars who believe there are not increasing levels of ideological polarization, often argue that the claims of mass polarization in the media and in books such as “culture war” are exaggerated and harmful. (Garner & Palmer 2011). These scholars claim historical evidence shows that attitudes have not shifted and become polarized through ideology, meaning the mass public still supports more moderate policy positions. They also argue that when examining ideological polarization, only one or two dimensions have become more polarized, such as the issue of abortion. This general lack of polarization is also claimed to be consistent across different subgroups, such as racial, religious, or gender subgroups (DiMaggio, Evans & Bryson 1996). Scholars that believe that increasing mass polarization is exaggerated believe that differences in polling methods, such as giving individuals an explicit moderate or

middle ground response option, is resulting in artificial changes in the levels of polarization. Some go as far as to claim that when looking at certain survey questions, Americans appear to be more moderate in their positions than they were several decades before (DiMaggio, Evans & Bryson 1996). It is important to note that this study specifically was examining survey responses from the 1990's and other scholars finding similar results were using opinion polling data up until the late 2000's, therefore these methods may lead to different results today.

Other scholars have directly responded to these claims, which say that increasing ideological and mass polarization is a myth. When looking at seven separate political issues, liberal-conservative self-placement, civil rights, military defense spending, the economy, health care, government size and spending, and abortion, these scholars claim that when combining these issues to create a seven-point ideology scale, there is a strong divide in Republican and Democratic positions (Abramowitz & Saunders 2008). These scholars also claim that the moderates that are found in these political surveys are the least politically engaged and informed of the public, and that the people who are the most engaged are continuing to grow more polarized (Abramowitz & Saunders 2008). When trying to understand these disagreements over whether polarization is remaining stagnant or increasing, it is important to pay attention to whether ideological or affective polarization is being examined, and to note how polarization is being measured and defined. A table displaying the findings among the scholars about whether polarization levels are increasing, is shown below.

**Table One:**

Conclusion	Measurement	Type of Polarization	Year	Researchers
There is increasing mass and elite polarization	NOMINATE scores and census data	elite and mass ideological polarization	2006	McCarty et. al
There is a large increase in ideological polarization	ANES 7-point issue scale combined	mass ideological	2008	Abramowitz & Saunders
The average citizen is not becoming more ideologically polarized on most issues	ANES, GSS and Gallup liberal/conservative self-identification	mass ideological	2008	Fiorina et. al
The elites are becoming more polarized	NOMINATE scores and census data	elite polarization	2016	McCarty, Poole, and Rosenthal
The masses are becoming more polarized	NES issue scales	mass polarization	2006	Layman, Carsey, and Horowitz
There is no mass ideological polarization, except surrounding abortion	NES and GSS surveys issue scales	mass ideological polarization	2001	Evans et al.
There is no increase in mass polarization	NES and GSS surveys issue scales and feeling thermometers	mass affective and ideological polarization	1996	Dimaggio et. al
There is increasing affective polarization	ANES feeling thermometers	mass affective	2019	Iyengar et. al
There is increasing mass ideological polarization	heteroskedastic regression	mass ideological polarization	2003	White

#### Common Measures and Procedures:

When trying to study levels of elite and mass polarization, different measures and procedures need to be used. When investigating elite polarization, the most common measure



used is the NOMINATE statistical procedure, to measure the ideological positions of members of the House and the Senate. The NOMINATE procedure is based on a spatial theory of voting and uses roll call data for its analysis. Therefore, NOMINATE scores can be used to measure a member's overall position, or they can be used to measure members' positions on specific policy dimensions, by using roll call votes in that area for analysis (Hare & Poole 2014).

A commonly used form of NOMINATE scores are DW-NOMINATE scores, which are a dynamic, weighted version of the original NOMINATE scores. DW\_NOMINATE scores use legislators that overlapped in different sessions to build scores from groups of legislators who never served on the same term, making these scores especially useful for longitudinal analysis (Hare & Poole 2014). Another method of examining elite polarization, is to look at party-line votes and party unity scores, to assess the level of uniformity within each party. This information is useful because as parties become more polarized, they tend to also become more unified in their positions (Garner & Palmer 2011).

Another commonly used method for evaluating Congressional levels of polarization is to look at interest group ratings. Interest groups often calculate their ratings by first selecting a sample of roll call votes and determining whether a yea or nay vote is preferred for the interest group. They then decide whether to weigh certain votes more than others due to their importance and calculate the percentage of time each member of Congress agrees with their position. Finally, they use those scores along with other things such as negative or positive media, to generate the final interest group rankings (Daniels 1989). Commonly used interest group ratings are the COPE (Committee on Political Education of the AFL-CIO), CCUS (Chamber of Commerce), ADA (Americans for Democratic Action), ACA (Americans for Constitutional Action), and NFU (National Farmers Union) (Fowler 1982). Despite its common usage, there is debate surrounding the use of interest group ratings as a reliable

measure. Critiques of interest group rating claim that they can be biased and highly subjective (Fowler 1982). Other scholars believe that interest group ratings tend to exaggerate the levels of extremism and polarization in congress (Snyder 1992). Single issue groups tend to be the most often criticized due to their narrow focus and strict agenda (Daniels 1989).

Despite these critiques, other scholars have found that interest group ratings can be stable over time, claiming that single issue group ratings are not subject to large levels of distortion or extremism (Daniels 1989). Some justify the use of interest group ratings in large part due to the convenience of use, this is because measuring elites on specific policy dimensions is a complicated process. Researchers who use issue group ratings to measure a legislator's ideological position recommend combining the ratings of different interest groups to create a combined score when possible. Although the scores are created in different ways, if the way in which the interest groups ratings are calculated are similar enough, researchers feel comfortable creating a combined scale. This technique helps eliminate some of the individual biases of various interest groups (Fowler 1982).

When investigating mass polarization, nationally representative surveys are the most used method, but the way researchers use the survey data varies. The American National Election Survey (ANES) is often used as it is a reliable and public data source, going back multiple decades. Many scholars look at the seven partisan issue questions that ANES ranks on a seven-point scale, the exception being for the abortion scale, which is four points, as a measure of polarization. Some scholars look at these issues individually, while others merge these responses to create a general ideological polarization scale (Abramowitz & Saunders 2008). Other scholars use many individual questions that focus on the same topic and use the combination of these answers to create ideology scales on certain policy areas such as abortion or civil rights. In addition to these survey questions that directly analyze polarization, ANES has a variety of demographic questions used to identify subsamples, for

example there are questions about education, race, gender and political engagement (DiMaggio, Evans & Bryson 1996).

The questions and scales mentioned above are good indicators of ideological polarization, but affective polarization can also be measured by scholars using the ANES feeling thermometer. The concept of the feeling thermometer was invented in 1970 and asks respondents to rate candidates or the opposing party on a temperate scale of 0 to 100, with 0 being very cold and unfavorable and 100 being very warm and favorable (Weisberg and Rusk 1970). The ANES feelings thermometer has asked respondents to rate members of their party and the opposing party since 1978. Studies have tried to measure the amount of expressive responding on ANES surveys and have found that increased incentives for being honest have had little to no effect on responses, showing that these are likely true responses and “not merely symptoms of instinctive partisan cheer leading” (Iyengar & Krupenkin 2018). This shows that the ANES feeling thermometer is a good longitudinal measure of affective polarization. Other less common ways of measuring mass polarization are through the use of Implicit Association Tests and measuring rates of social interactions, such as marriages between people from opposing political parties (Iyengar et. al 2019). There is a missed opportunity in this literature, to not only examine mass and elite polarization, but to investigate how the ideological polarization on specific policy areas has developed, addressing the current debate in the field.

## Research Methods

Investigating Mass Political Polarization:

I plan to first investigate the trends of affective and ideological mass polarization, over the past several decades. To do this I will be using a combined dataset using repeated questions from the American National Election Survey (ANES). The surveys these questions were taken from were conducted every four years from 1992 until 2020. Using these survey questions, I created two datasets. The first contains 28,004 entries and has 20 variables. The variables within this dataset are listed below.

**Abortion4pt** - A four-point scale measuring opinions on abortion.

**Blacks7pt**- A seven-point scale measuring opinions on government assistance to black Americans.

**Spending7pt**- A seven-point scale measuring opinions on government spending.

**Jobs7pt**- A seven-point scale measuring opinions on government responsibility for jobs and standard of living.

**Healthcare7pt**- A seven-point scale measuring opinions on insurance.

**Defense 7pt**- A seven-point scale measuring opinions on defense spending.

**Demthermom**- A 100 point feeling thermometer for the Democratic party.

**Repthermom**- A 100 point feeling thermometer for the Republican party.

**ConservLib7pt**- A seven-point scale measuring conservative and liberal ideological positions.

**Attention**- A question measuring the level of attention one gives to politics.

**PartyID**- The political party the respondent supports.

**StrongID**- If the respondent supports democrats or republicans, a measure of how strong they support them.

**LeanID**- If the respondent is an Independent, a measure of what party they lean towards.

**Age**- The age of the respondent.

**Education**- The education level of the respondent using a 5-point scale.

**Hispanic-** A measure of if the respondent is Hispanic or not.

**Race-** A measure of if the respondent was white or black.

\*Other races were not included consistently in older versions of the ANES surveys.

**Gender-** A measure of if the respondent is male or female.

**Year-** The year the survey took place.

**Weight-** The survey respondents weighting value for a representative sample.

PartyID, StrongID and LeanID, were combined into a single party variable. Those who initially identified with or said they leaned towards the democratic or republican party were counted as such. Those who said they had no lean were counted as independents.

Using this dataset, I plan to investigate affective mass polarization with the ANES feeling thermometers, since they measure how one feels about the democratic or republican party, without asking about specific ideological positions. Using these scales, I will be able to see how the average out-party and in-party ratings have changed since 1992. The actual measure of affective polarization will be computed as the absolute value of the difference between the score that a respondent gives to their own party (in-party rating) and the score that a respondent gives to the opposing party (out-party rating). This measure of affective polarization ranges on a scale from 0 to 100 with 0 being the least polarized. I plan to use this measure to examine the levels of affective polarization within the different parties and demographics groups over time. Additionally, I will compare this trend to mass ideological and elite polarization.

I plan to investigate ideological mass polarization using two separate methods. First, I plan to use six, seven-point issue scales and one four-point issue scale individually, to measure ideological polarization across different policy dimensions. The scales measure

opinions on the environment, healthcare, defense spending, government spending, government job assistance, abortion, and aid to black Americans. Other scholars have used these scales in the past as a long-term reliable measure of ideological opinions. (Fiorina, Abrams and Pope 2008) I will not be using the conservative/liberal ideological self-placement scale here because it does not measure a specific policy dimension. When investigating polarization using these scales individually, I will be looking at the average score on each scale, for the different parties, across the various years. The measure of polarization will be the absolute value of the difference between the average score of the two parties. This will provide a measure of ideological polarization across these seven policy issues throughout the 28 year period, where the larger the difference gets the more polarized the parties are. For this part of the investigation, I will also be using my second ANES dataset, which contains 25,519 observations and eleven variables. This dataset contains observations from 1996 until 2020 and it includes an additional seven-point scale that was not included in the 1992 survey. This final seven-point scale is measuring opinions on government regulation to protect the environment. The other eleven variables in this dataset are the same as the last eleven demographic and weighting variables that were included the first dataset.

The second method for measuring ideological polarization will only be using the first ANES dataset from 1992 until 2020. I will be using the six, seven-point scales and the one four-point abortion scale included in this dataset, to create a combined scale measuring overall ideological polarization. Each individual scale ranges from a conservative to a liberal position, with four being the moderate option. The measure of polarization will be calculated by first determining how many of a given respondents answers are conservative versus liberal. I will then take the absolute value of the difference between the number of liberal answers and the number of conservative answers given. A score of 7 would mean they

answered along a consistent ideological dimension for every question. I will use these combined scores as a measure of overall ideological polarization, with 0 being the least polarized and 7 being the most polarized. I will once again compare these scores between the two separate parties and across different demographic groups and I will investigate how this trend over time compares to affective mass polarization and elite polarization levels. To compare these ideological polarization levels with affective polarization, all ideological scales were converted from 0 to 7 into 0 to 100, with 0 being the least polarized.

In addition to comparing how these average polarization scores have changed across the years, I will also be creating two multiple linear regression models to determine how statistically significant of an impact time has had on polarization. When building these models, I will include demographic information such as race, gender, education, and level of political attention, to account for variability in polarization the is due to these factors.

#### Investigating Elite Political Polarization:

I plan to investigate the trends surrounding elite polarization by first using DW-NOMINATE scores. To do this I will be using two separate datasets. The first dataset has 1,641 observations and contains the DW-NOMINATE scores for all members of the Senate, for each year, from 1992 until 2020. The second dataset has 7,130 observations and contains the DW-NOMINATE scores for all members of the House, for each year, from 1992 until 2020. These DW-NOMINATE scores were computed by and downloaded from [Voteview: Congressional Roll-Call Votes Database](#). These nominate scores range from -1 to 1 and are computed on the liberal conservative dimension, with a score of 1 being the most conservative and a score of -1 being the most liberal. I plan to adjust the range for the nominate scores, so they vary from 0 to 100, with 0 being the most liberal, this will make it

possible to compare elite levels of polarization with the mass indicators developed earlier. I will then collect the average DW-NOMINATE score for the republican and democratic party each year and use the absolute value of the difference of these two scores as a measure of ideological polarization. If the difference between these average scores is increasing, this will be evidence of increasing polarization. I plan to compare this trend of polarization over time with the evidence gained about mass polarization from the ANES polling questions.

Although DW-NOMINATE scores are an effective way to measure overall ideology, they do not give us any information about specific policy dimensions. To investigate elite polarization in specific policy dimensions I plan to use interest group ratings. I plan to look at the National Right to Life Committee, NARAL Pro-Choice America, American Civil Liberties Union, Human Rights Campaign, Council for Citizens Against Government Waste, National Taxpayers Union, American Public Health Association, Council for a Livable World and Peace Action. These interest groups were chosen due to their focus on specific policy dimensions, and the availability of rankings going back several decades. These policy dimensions include abortion, the environment, government spending, military spending, civil rights and healthcare, therefore the policy topics are comparable to many of the ideological scales measuring mass ideological polarization in the ANES surveys.

Because of the differences in how the interest group ratings are calculated, I will not be combining interest group ratings on similar ideological issues. Instead, I plan to look at the average interest group ratings for the republicans and democrats in Congress, for each year they are available. All these scores are on a scale from 0 to 100, with 100 being the most conservative and 0 being the most liberal within these specific policy areas. I will take the absolute value of the difference between the average interest group rating for each party, as a measure of polarization on that specific ideological spectrum. When looking at multiple interest groups focusing on the same topic, I will compare both results individually instead of



combining these scores. Finally, I plan to investigate how this measure of polarization has changed over time and I will compare those results to how the mass ideological opinion has changed on these same ideological topics over time. A table on the next page provides a brief description of all datasets being used for this study, including their name, description, number of observations, date range and number of variables. Understanding how mass and elite polarization levels correlate is a key component to understanding if one could be causing the other, or if there are different factors at play.

**Table Two:**

Name	Description	# of Observations	# of Variables	Date Range
senateDW	DW-NOMINATE scores for members of the senate. On a conservative/liberal dimension.	1,641	3	1992-2020
houseDW	DW-NOMINATE scores for members of the house. On a conservative/liberal dimension.	7,130	3	1992-2020
finalANESdata	ANES polling data with polarization questions and demographics. Scales and thermometer questions.	28,005	20	1992-2020
finalANESdataenvironment	ANES polling data with environment scale and demographics.	25,519	12	1996-2020
senateNARAL	NARAL Pro-Choice America interest group senate ratings.	1,149	4	1997-2020
houseNARAL	NARAL Pro-Choice America interest group house ratings.	2,970	4	1997-2020
senateRTL	Right to Life interest group senate ratings.	728	4	1998-2020
houseRTL	Right to Life interest group house ratings.	1,935	4	1998-2020

senateACLU	American Civil Liberties Union interest group senate ratings.	687	4	1998-2020
houseACLU	American Civil Liberties Union interest group house ratings.	1,812	4	1998-2020
senateHRC	Human Rights Campaign interest group senate ratings.	653	4	1998-2020
houseHRC	Human Rights Campaign interest group house ratings.	1,755	4	1998-2020
senateCAGW	Council for Citizens Against Government Waste interest group senate ratings.	1,205	4	1997-2020
houseCAGW	Council for Citizens Against Government Waste interest group house ratings.	3,239	4	1997-2020
senateNTU	National Taxpayers Union interest group senate ratings.	958	4	1997-2020
houseNTU	National Taxpayers Union interest group house ratings.	2,585	4	1997-2020
senateAPHA	American Public Health Association interest group senate ratings.	831	4	1997-2017
houseAPHA	American Public Health Association interest group house ratings.	1,996	4	1997-2017
senateCFLW	Council for a Livable World interest group senate ratings.	288	4	2000-2016
houseCFLW	Council for a Livable World interest group house ratings.	979	4	2000-2016
senatePA	Peace Action interest group senate ratings.	759	4	1998-2015
housePA	Peace Action interest group house ratings.	1,701	4	1998-2015

## Results

The results for this report are presented in four separate sections. The first section will contain the overall levels of affective and ideological mass polarization in the United States population from 1992 until 2020, as well as the overall levels of Congressional ideological polarization. The second section continues to focus on mass ideological and affective polarization, but it will investigate these trends across various demographic subgroups, such as race, political attention levels and education. The third section displays the linear regression models, showing the impact that time has on mass ideological and affective polarization after taking into account multiple demographic factors. The final section of results contains trends showing how mass opinion between the two parties surrounding specific ideological topics, such as abortion and the environment, have changed over time. These mass opinion trends will also be compared with Congressional interest group ratings from interest groups focused on similar topic issues. Each graphic displaying Congressional polarization is using combined data from the House and the Senate, graphics displaying polarization in the House and Senate separately can be found in the appendix.

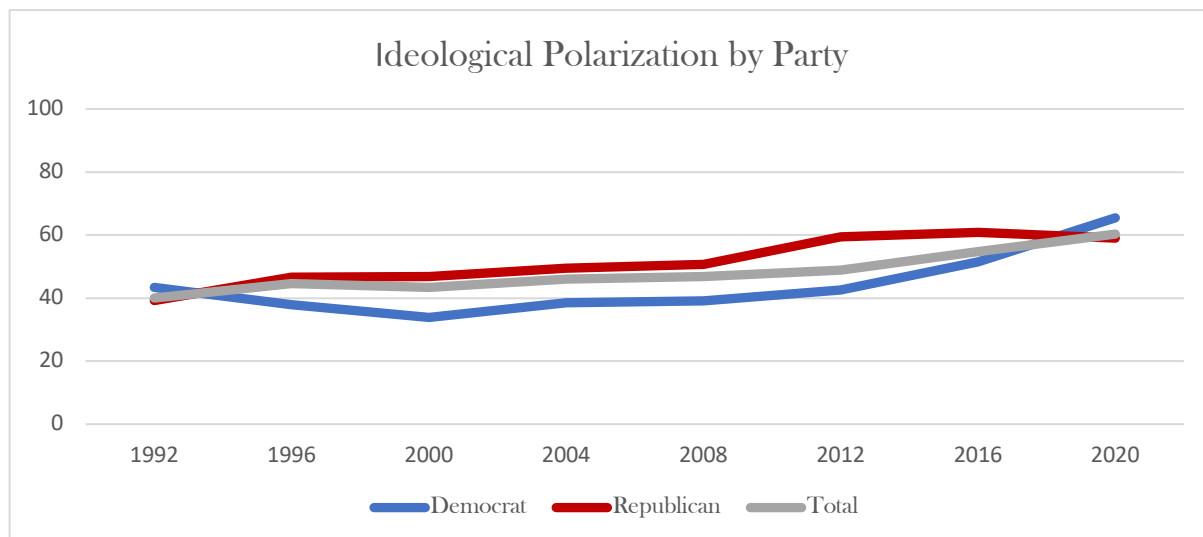
### **Section One: Overall Polarization:**

#### **Figure One:**

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This graphic is displaying total ideological polarization and ideological polarization by political party. Ideological polarization is measured using multiple combined ANES ideological scales and ranges from 0 to 100, with 100 being the most polarized.

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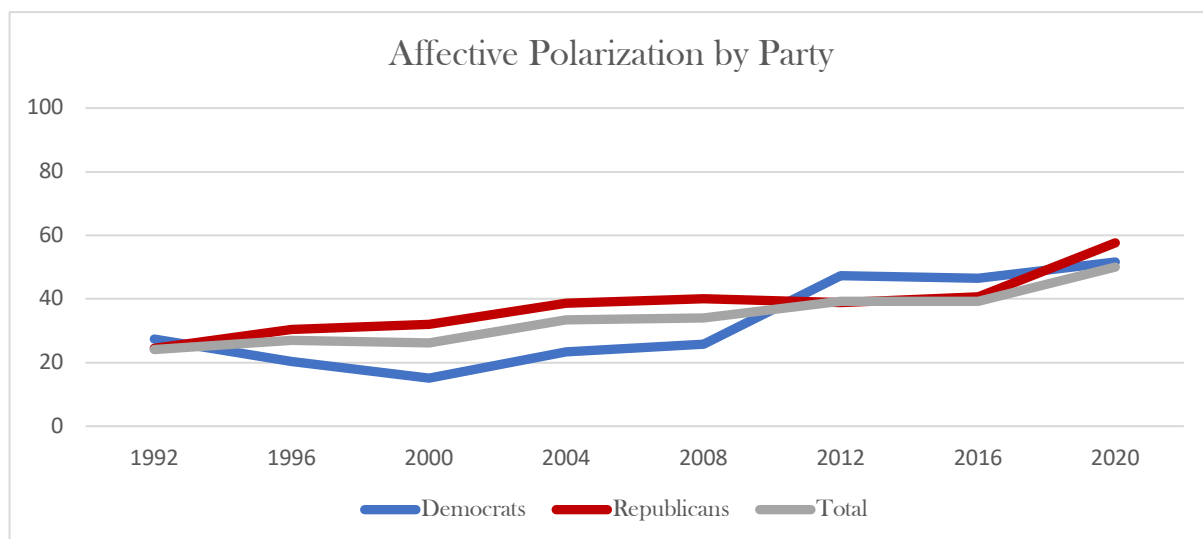


*American National Election Survey, Data Center (1992-2020)*

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### Figure Two:

This graphic is displaying total affective polarization and affective polarization by political party. Affective polarization is measured as a combined scale using the ANES feeling thermometers and ranges from 0 to 100, with 100 being the most polarized.

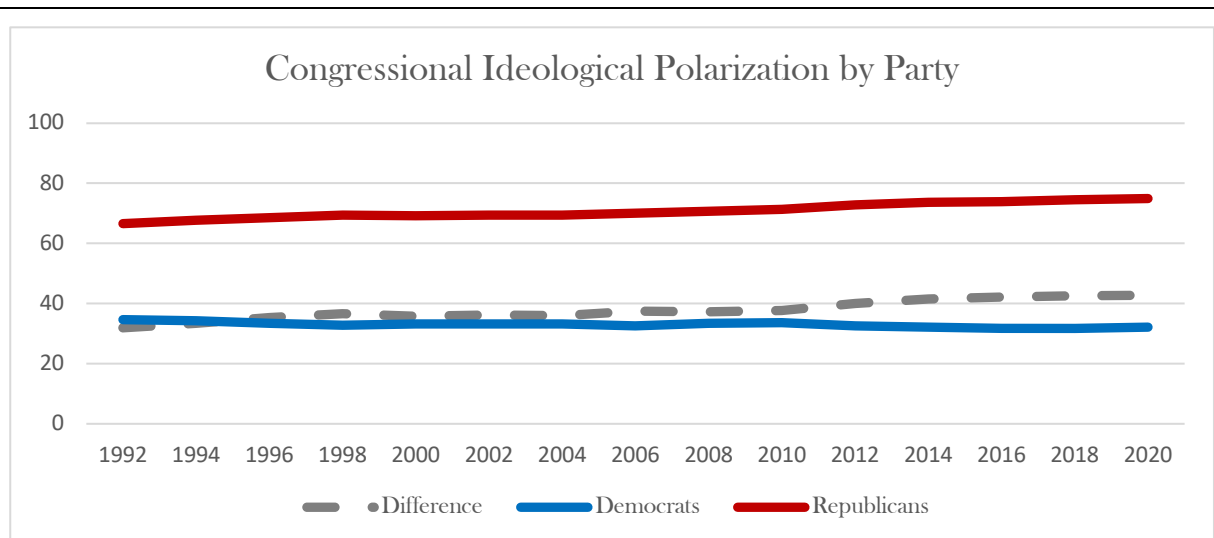


*American National Election Survey, Data Center (1992-2020)*

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### Figure Three:

This graphic is displaying total ideological polarization by political party in Congress. Ideological polarization in congress is measured using DW Nominate Scores. The difference in average scores between the two parties is used as a measure of polarization.



*Voteview: Congressional Roll-Call Votes Database (1992-2020)*

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When looking at these first three graphics it is clear to see that levels of political polarization have been rising since 1992. Affective polarization among the masses has increased the most, with both the democratic and republican party's affective polarization scores increasing by about double since 1992. The democratic party's affective polarization levels began at 27 and increased to 51 and the republican party's affective polarization levels began at 24 and increased to 57 throughout the twenty-eight-year period. Ideological polarization levels had a similar overall trend, with the democratic party's ideological polarization levels beginning at 43 and increasing to 65, and the republican party's ideological polarization levels beginning at 39 and increasing to 59.

In addition to this increase in mass polarization, there appears to be a small but steady increase in polarization in the Congress. Since 1992, the republican party's average DW-nominate scores have moved eight points further in the conservative direction, while the democratic party's scores have moved 3 points further in the liberal direction. This has resulted in an overall congressional polarization increase of 11 points since 1992. Although the republicans in congress seem to be becoming more ideologically polarized at a faster rate than the democrats, this trend does not carry over into the masses. Despite the party's

polarization levels differing on various years, the long-term increase in polarization is nearly identical for the two parties' followers.

Another interesting trend visible from these graphics, is that the democratic parties ideological and affective polarization rates were declining from 1992 until the year 2000. After this point democratic ideological polarization has had a fairly steady incline until 2020. Similar to democratic ideological polarization, democratic affective polarization appears to have decreased during the years leading up to 2000, but unlike affective polarization, it's incline after 2000 is not as steady. Democratic affective polarization has been increasing at different rates across the 28 year period. For example, during the four-year period from 2008 until 2012, during a time of many political and social shifts, the democratic party experienced a much larger increase in affective polarization than at any other time. The republican party's ideological polarization has increased fairly steadily since 1992, with a slightly elevated increase once again between 2008 and 2012. When it comes to affective polarization, the republican party's polarization rate has also been increasing steadily for the most of the two decades, however between 2016 and 2020, there appeared to be a much larger increase in republican affective polarization than had been seen in past years.

## **Section Two: Polarization within Demographic Subgroups:**

### **Figure Four:**

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This graphic is displaying ideological and affective mass polarization by race. Affective and ideological measures are calculated using ANES feeling thermometers and several ideological scales. Both affective and ideological polarization range from 0 to 100, with 100 being the most polarized.

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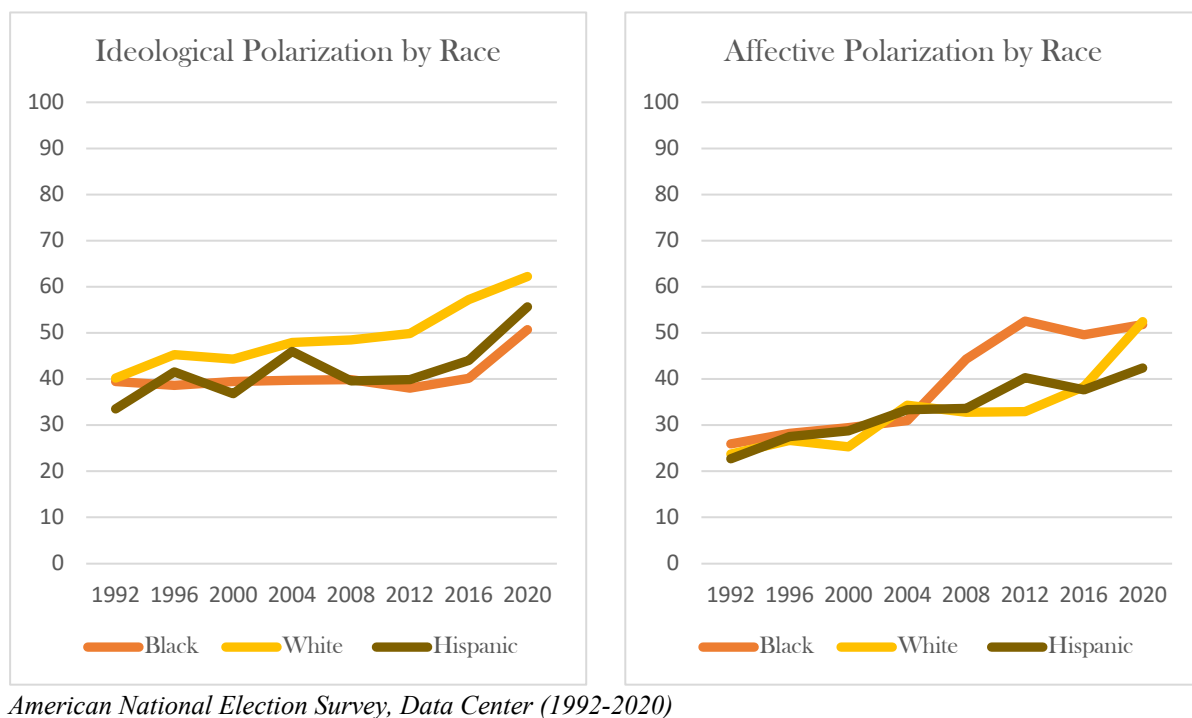


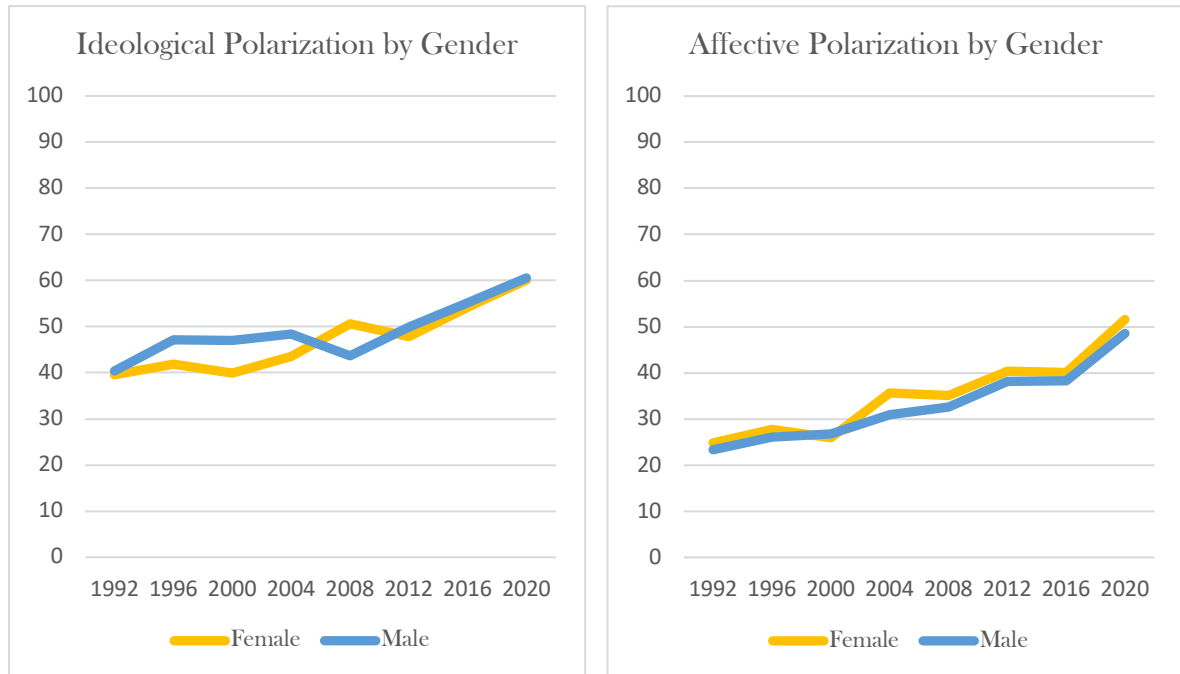
Figure four shows that affective and ideological polarization have been increasing across every racial group since 1992. Affective and ideological polarization are impacted by race differently. White Americans consistently had the highest levels of ideological polarization. Hispanic and black Americans had nearly identical average ideological scores across the 28- year period. Until 2004, black, white and Hispanic Americans had very similar levels of affective polarization, but in the period after 2004, there was a sharp incline in levels of political polarization among black Americans. Black Americans continued to have the highest levels of political polarization by far, until 2016. Between 2016 and 2020, white Americans saw a very large increase in affective polarization, resulting in them having both the highest affective and ideological polarization levels in 2020.

**Figure Five:**

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This graphic is displaying ideological and affective mass polarization by gender. Affective and ideological measures are calculated using ANES feeling thermometers and several ideological scales. Both affective and ideological polarization range from 0 to 100, with 100 being the most polarized.

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*American National Election Survey, Data Center (1992-2020)*

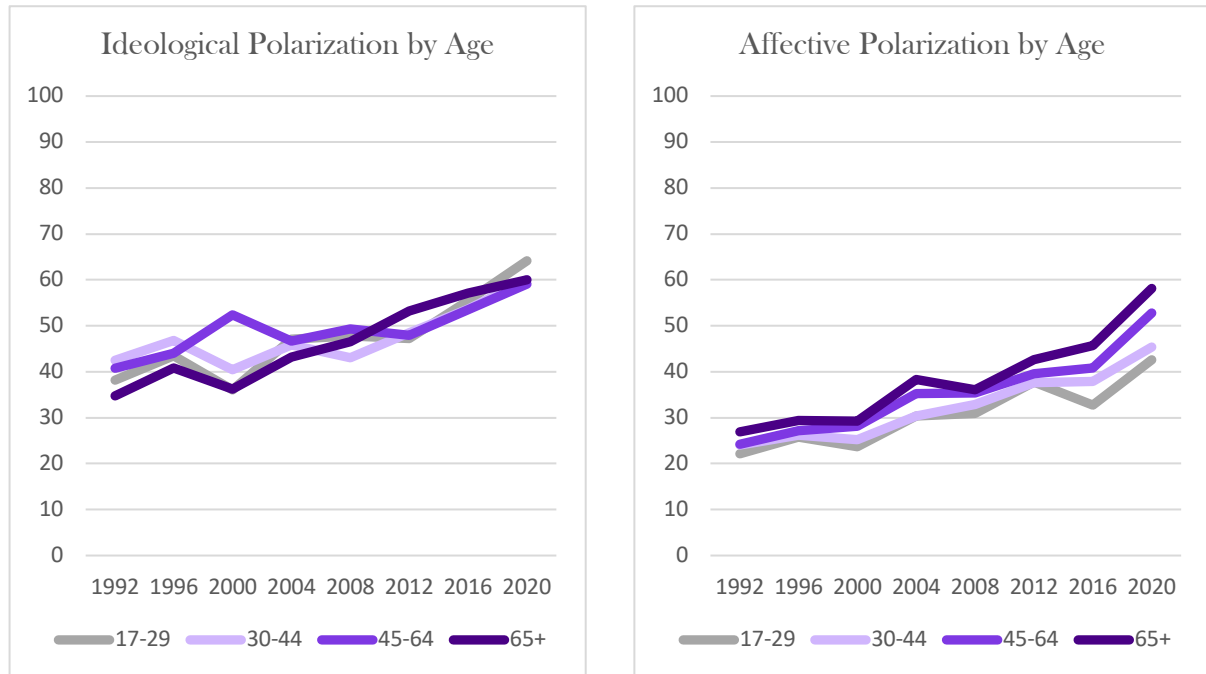
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Figure five shows that levels of mass affective and ideological polarization appear to be increasing steadily for both males and females. Men appeared to be slightly more ideologically polarized than women from 1992 until 2004, then in 2008 for a brief time, women had a slightly higher average ideological polarization score. Since 2008 the ideological polarization scores for men and women have been nearly identical and increasing steadily. There appears to be almost no difference in affective polarization by gender, with both male and female levels of affective polarization, increasing at similar rates across the twenty-eight year period.

**Figure Six:**



This graphic is displaying ideological and affective mass polarization by age. Affective and ideological measures are calculated using ANES feeling thermometers and several ideological scales. Both affective and ideological polarization range from 0 to 100, with 100 being the most polarized.



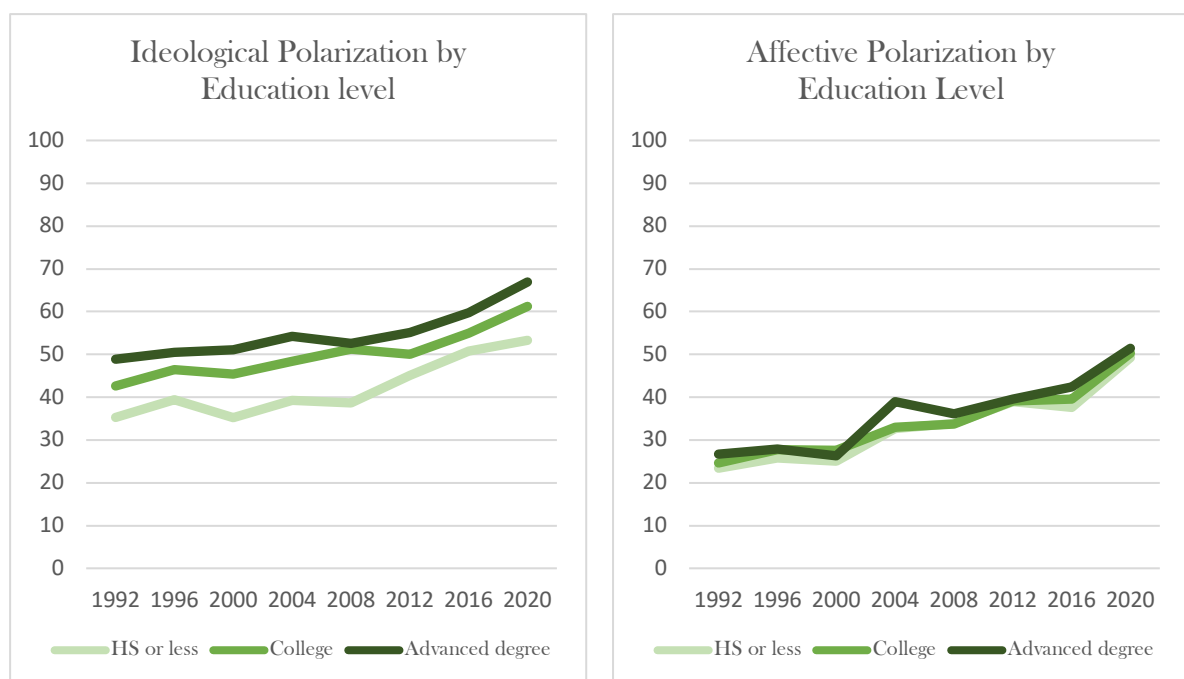
*American National Election Survey, Data Center (1992-2020)*

Figure six shows that affective and ideological polarization have increased across every age group between 1992 and 2020. When looking at the ideological polarization graphic, you can see that all age groups have very similar levels of ideological polarization throughout the years. An interesting outlier is the trend between 1996 and 2000, when every age group saw a decrease in ideological polarization throughout this time, except for Americans who were between 45 and 64 years old. Americans between 45 and 64 saw a fairly strong increase in ideological polarization levels during that same period. Since 2004, the levels of ideological polarization have been increasing at similar rates across all the age groups. Affective polarization begins in a similar manner, where the affective polarization levels are very similar across age groups. As time passes however, these polarization levels begin to separate and older Americans consistently have the highest levels of affective polarization, while the youngest age group has the lowest levels. Interestingly, people from

age 17 to 29 were the only age group who saw a decrease in affective polarization from 2012 to 2016. However, like with the other age groups, 17 to 29 year old's experienced a large increase in affective polarization levels after 2016.

**Figure Seven:**

This graphic is displaying ideological and affective mass polarization by education. Affective and ideological measures are calculated using ANES feeling thermometers and several ideological scales. Both affective and ideological polarization range from 0 to 100, with 100 being the most polarized.



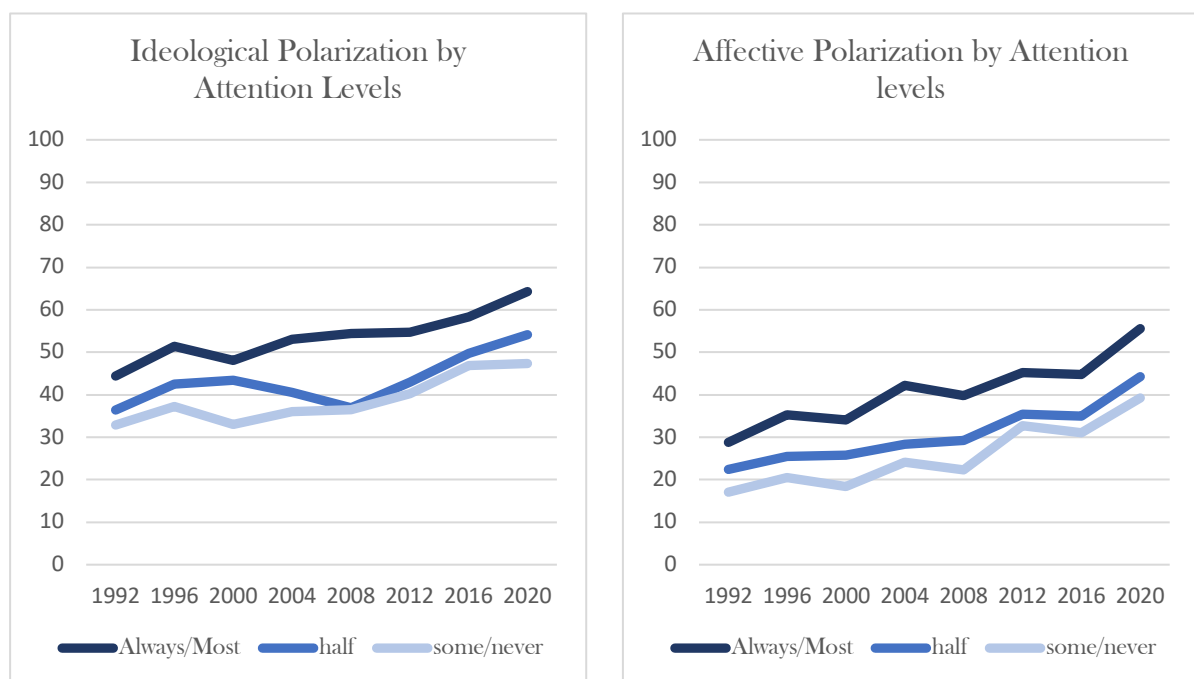
*American National Election Survey, Data Center (1992-2020)*

Figure seven shows that affective and ideological polarization have been increasing across every education level from 1992 until 2020. The HS or less category is comprised of people who have at most completed high school or gotten a high school equivalent diploma but have not gone on to do any other schooling. The college demographic is comprised of people who completed some college but did not get a degree, as well as students with bachelors and associate degrees. Finally, the Advanced degree category is comprised of anyone who has attained a degree higher than a bachelor's degree, such as a masters or a

PHD. When looking at the ideological polarization graphic, Americans with the highest education levels have the highest levels of ideological polarization, and Americans with the lowest education levels are the least ideologically polarized. Interestingly, this clear distinction between educational groups polarization levels, does not appear when looking at affective polarization. Levels of affective polarization appear to have been increasing at nearly identical rates for the different education levels across the 28 year period.

### Figure Eight:

This graphic is displaying ideological and affective mass polarization by attention to politics and political campaigns. Affective and ideological measures are calculated using ANES feeling thermometers and several ideological scales. Both affective and ideological polarization range from 0 to 100, with 100 being the most polarized.



American National Election Survey, Data Center (1992-2020)

*\*The question wording and response options for this question have changed during this time period. Before 2008, the question asked "Some people don't pay much attention to political campaigns. How about you?" with three response options, since 2008 this question is asked as "How often do you pay attention to what's going on in government and politics?" and it has five response options. These questions were combined because both are a measure for political attention levels.*

Figure eight shows once again that levels of both affective and ideological polarization have been increasing across all attention levels from 1992 until 2020. For both

affective and ideological polarization levels, Americans who pay the most attention to politics are the most polarized. Although people who sometimes or never follow politics are also becoming more polarized, they consistently have lower levels of polarization than people who follow politics more. This is a trend that you would expect, as the people who follow politics the most would likely be the most passionate about politics and are more likely to develop consistent ideological positions that favor either a liberal or conservative perspective.

### Section Three: Regression Models:

**Figure Nine:**

This graphic is displaying the linear regression model output, for a model where mass affective polarization is the dependent variable, and attention levels, education, age, race, party and gender are independent variables. The affective polarization measure was created using ANES feeling thermometers.

```
svyglm(formula = thermom ~ Attention + Education + Gender + Age +
      Race + Hispanic + Party + year, design = ANES_we)
```

Survey design:  
Called via srvyr

Coefficients: (1 not defined because of singularities)

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	-1.765e+03	4.709e+01	-37.487	< 2e-16	***
Attentionhalf	-8.743e+00	5.847e-01	-14.954	< 2e-16	***
Attentionsome/never	-1.225e+01	7.328e-01	-16.717	< 2e-16	***
Educationadvanceddegree	-1.352e+00	7.119e-01	-1.900	0.0575	.
Educationbachelors	-1.442e+00	6.336e-01	-2.276	0.0229	*
Educationhs	6.915e-01	6.737e-01	1.026	0.3047	
Educationnohs	1.866e+00	1.025e+00	1.820	0.0687	.
Gendermale	-2.554e+00	4.935e-01	-5.175	2.30e-07	***
Age	1.183e-01	1.578e-02	7.497	6.81e-14	***
Racewhite	-5.733e+00	7.548e-01	-7.596	3.20e-14	***
Hispanicnonhispanic	-8.463e-03	7.491e-01	-0.011	0.9910	
Partyindependent	-2.573e+01	7.358e-01	-34.968	< 2e-16	***
Partyrepublican	2.754e+00	5.385e-01	5.114	3.18e-07	***
year	9.009e-01	2.353e-02	38.293	< 2e-16	***

*American National Election Survey, Data Center (1992-2020)*

The first thing to note about this regression model, is that the year coefficient is positive and statistically significant, that means that after taking into account education, age,

race, gender, political party and attention level, there is evidence to show that affective polarization has been increasing from 1992 to 2020. Affective polarization is increasing about .909 points on a 100 point scale, each year. We can also see from this regression model that people who pay the most attention are statistically more likely than those who pay little, to have higher levels of affective polarization. Someone who pays a lot of attention is expected to be almost 9 points more polarized than someone who pays a little or no attention, assuming all other demographic factors are consistent.

There does not appear to be strong statistical evidence to say there are differences in affective polarization due to education levels which is similar to what was seen in the graphic. Males are shown to be around 2.5 points less polarized than females, assuming all other demographic factors are consistent. When looking at age, there is significant evidence to suggest that the older one gets, the higher their levels of affective polarization. There was no significant evidence showing a difference between Hispanics and non-Hispanics affective polarization levels, but there is evidence showing that white Americans are around 5.75 points less polarized than black Americans. Finally, when looking at political parties, independents have much lower levels of affective polarization than either party, which is to be expected. People who are republican or who lean republican are shown to be around 2.75 points more affectively polarized than people who identify or lean towards the democratic party, while all other demographic factors remain consistent.

#### **Figure Ten:**

---

This graphic is displaying the linear regression model output, for a model where mass ideological polarization is the dependent variable, and attention levels, education, age, race, party and gender are independent variables. Ideological polarization was measured using several ANES ideological scales.

---

---

```
svyglm(formula = ideomeasure ~ Attention + Education + Gender +
       Age + Race + Hispanic + Party + year, design = ANES_we2)
```

```
Survey design:
Called via srvyr
```

```
Coefficients:
```

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	-1.113e+03	7.060e+01	-15.764	< 2e-16	***
Attentionhalf	-8.794e+00	8.879e-01	-9.903	< 2e-16	***
Attentionsome/never	-1.399e+01	1.104e+00	-12.675	< 2e-16	***
Educationbachelors	-3.237e+00	1.015e+00	-3.189	0.00143	**
Educationhs	-8.664e+00	1.177e+00	-7.358	2.00e-13	***
Educationnohs	-1.095e+01	1.920e+00	-5.704	1.20e-08	***
Educationsomecollege	-5.867e+00	9.973e-01	-5.883	4.14e-09	***
Gendermale	2.681e-01	7.106e-01	0.377	0.70594	
Age	-8.826e-02	2.337e-02	-3.776	0.00016	***
Racewhite	7.700e+00	1.213e+00	6.351	2.23e-10	***
Hispanicnonhispanic	1.440e+00	1.142e+00	1.260	0.20758	
Partyindependent	-1.595e+01	1.343e+00	-11.876	< 2e-16	***
Partyrepublican	2.096e+00	7.761e-01	2.700	0.00694	**
year	5.825e-01	3.524e-02	16.528	< 2e-16	***

*American National Election Survey, Data Center (1992-2020)*

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Once again, it is important to note first, that the year coefficient is positive and statistically significant, that means that after taking into account education, age, race, gender, political party and attention level, there is evidence to show that ideological polarization has been increasing from 1992 to 2020. Ideological polarization is increasing about .582 points on a 100 point scale, each year. This is a smaller increase than affective polarization, but it is still significant. Consistent with the model for affective polarization, those who pay attention to politics often have much higher levels of ideological polarization than those who do not follow politics as closely. Unlike in the last model, all levels of education are statistically significant for this model, with the highest education level resulting in the highest level of ideological polarization. A person with no high school degree is expected to be almost 11 points less polarized than someone with an advanced degree, assuming all other demographics remain consistent.

Also, unlike the last model for affective polarization, age actually has a very slight negative effect on ideological polarization, meaning the older one gets, the less ideologically polarized they become. Also, unlike the first model, gender is not a statistically significant factor for ideological polarization.

Once again, Hispanic identity is not shown to have a statistically significant impact on ideological polarization levels, but being white does. However, in this model being white is associated with a positive rather than a negative coefficient. This means that white Americans are likely to have higher levels of ideological polarization than black Americans assuming all other factors are consistent. Finally, the coefficients for political parties show similar results to the previous model, where independents are much less ideologically polarized, and republicans are slightly more ideologically polarized (2 points more) than democrats are. These models provide strong evidence for increasing levels of both mass and ideological polarization.

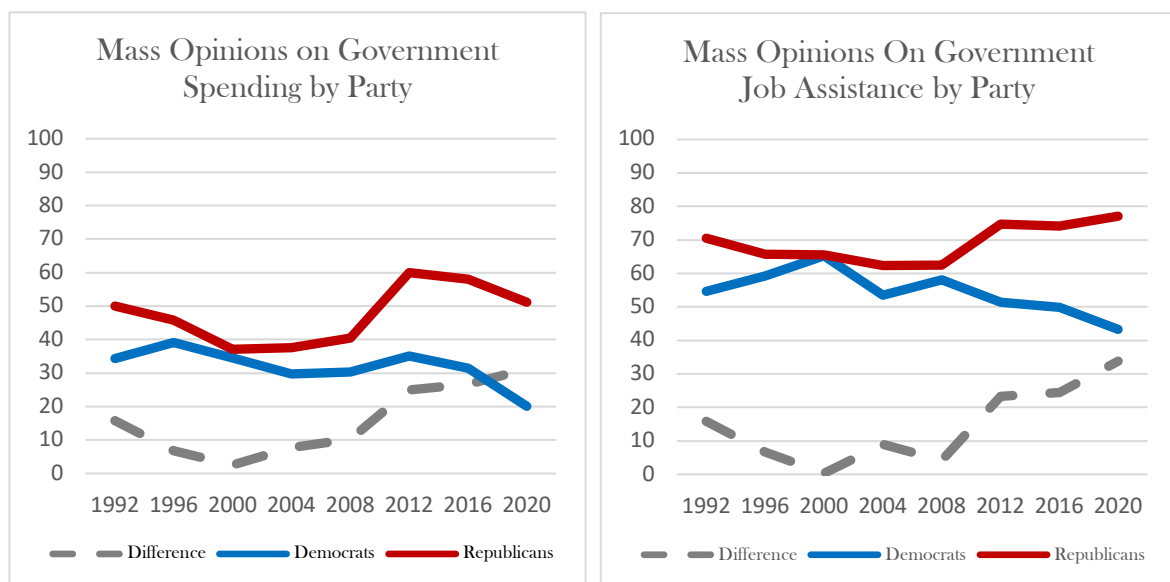
## **Section four: Ideological Topics**

After investigating levels of polarization among the masses and the elite and finding evidence for increasing levels of polarization among both, it is important to see if these levels of polarization are consistently increasing across various popular ideological topics, or if these patterns break down in specific policy areas. To complete this investigation, I've looked at seven ideological scales that are consistently on the ANES survey. These cover areas such as abortion and the environment. In addition to seeing how the mass political parties' views on these policy areas has shifted over the years, I will also be using congressional interest group ratings from interest groups focused in similar ideological areas to investigate elite ideological polarization in these policy areas. It is important to note here that the use of

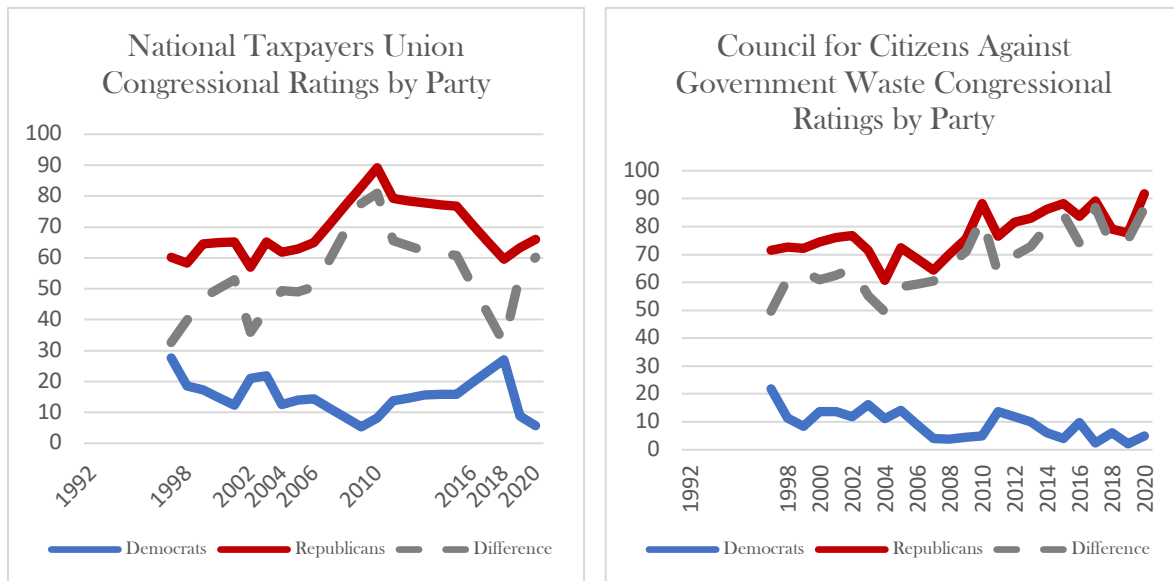
interest group ratings is often criticized as being unreliable and biased. Because of this, this report tries to include ratings from multiple interest groups when possible, however availability of ratings made this difficult at times. The interest group ratings are still being used for comparison below, but it is important to note that some ratings are more stable and reliable than others. Therefore, it is recommended for further research to use a wider group of interest groups for each topic, to decrease bias and increase stability, or to use other methods, such as calculating DW-Nominate scores for roll call votes focused on specific ideological topics.

### Figure Eleven:

These graphics are displaying the changes in average opinions on government spending programs and government job assistance by political party. The difference in these opinions is taken as a measure of polarization, with 100 being the most polarized and 0 being the least. Additionally, the average congressional party ratings from the National Taxpayers Union and Council for Citizens Against Government Waste are displayed. With the difference in party ratings being used as a measure of polarization.







*American National Election Survey, Data Center (1992-2020)*

*Vote Smart. 2022. "National Special Interest Groups."*

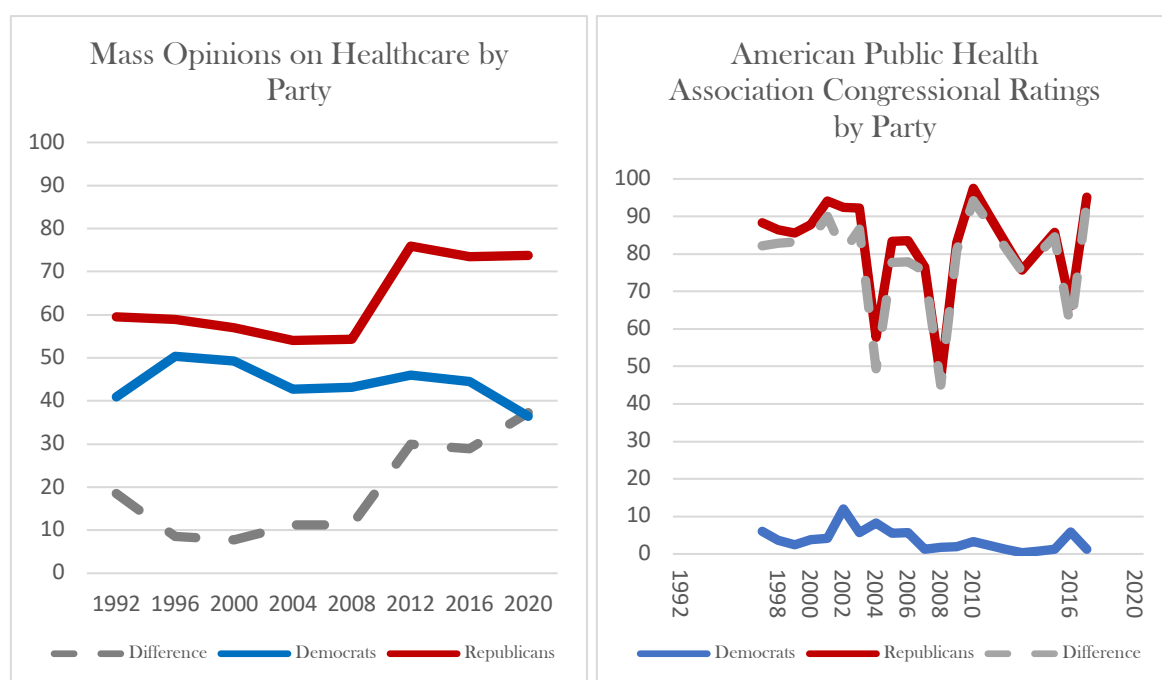
*\*Exact spending question wording is "Some people think the government should provide fewer services, even in areas such as health and education in order to reduce spending, other people feel it is important for the government to provide many more services even if it means an increase in spending" Those who want less government spending are at the higher end of the scale.*

*\*Exact jobs question wording is "Some people feel the government in Washington should see to it that every person has a job and standard of living, others think the government should just let each person get ahead on their own." Those who think it is not the governments job are on the higher end of the scale.*

Figure eleven shows that there has been an obvious divergence in mass opinions on government job assistance and spending from 1992 to 2020. The republican and democratic party had fairly similar views in these areas until the mid 2000's, with the parties actually growing ideologically closer from 1992 until 2000. However, in 2008 there appears to have been a large split in mass opinion between the two parties, with both parties making a large shift towards the more liberal and conservative ends of the scale. Although the results from the National Taxpayers Union and Citizens against Government Waste are less stable and more exaggerated, they also reflect this overall pattern. Both interest group ratings show a sharp incline in the difference between the parties around 2008, with the overall trend for the interest groups being an increase in polarization. This means that like the masses, congress is also becoming more polarized on these economic ideology issues.

**Figure Twelve:**

These graphics are displaying the changes in average opinions on private versus public health insurance. The difference in these opinions is taken as a measure of polarization, with 100 being the most polarized and 0 being the least. Additionally, the average congressional party ratings from the American Public Health Association are displayed. With the difference in party ratings being used as a measure of polarization.



*American National Election Survey, Data Center (1992-2020)*

*Vote Smart. 2022. "National Special Interest Groups."*

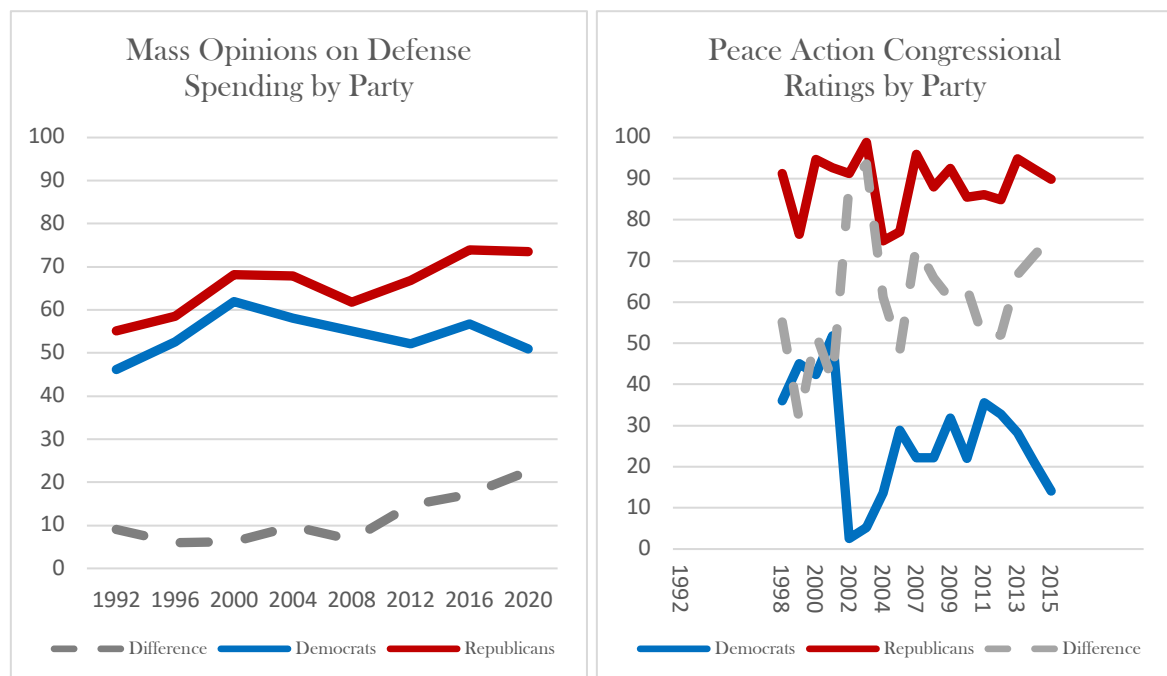
*\*Exact question wording is "Some people feel there should be a government insurance plan which would cover all medical and hospital expenses for everyone, others feel that all medical expenses should be paid by individuals through private insurance plans like Blue Cross or other company paid plans" Those who think that insurance plans should be private are on the higher end of the scale.*

Figure twelve shows that mass ideological polarization surrounding healthcare has risen from 1992 to 2020. Again, there seems to be a large divergence in the party ideology around 2008. In this case it appears that the democratic party has remained fairly neutral in their position, while the republican party has shifted towards the more conservative end of the scale, resulting in this increased polarization. Due to the large amounts of insatiability in the American Public Health Association interest group ratings, it is difficult to gain any valuable

insight about the trend of ideological polarization surrounding healthcare in Congress. The ratings towards the democratic party have remained fairly stable, while there are large fluctuations in the ratings of the republican party.

**Figure Thirteen:**

These graphics are displaying the changes in average opinions on government defense spending. The difference in these opinions is taken as a measure of polarization, with 100 being the most polarized and 0 being the least. Additionally, the average congressional party ratings from Peace Action are displayed. With the difference in party ratings being used as a measure of polarization.



*American National Election Survey, Data Center (1992-2020)*

*Vote Smart. 2022. "National Special Interest Groups."*

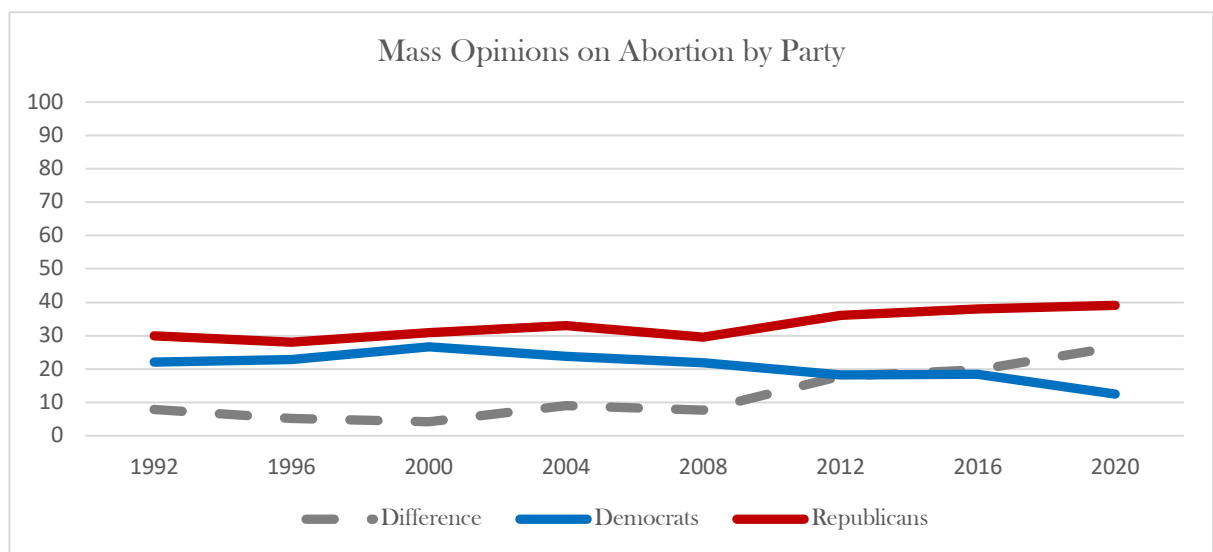
*\*Exact question wording is "Some believe that we should spend much less money on defense, others feel that defense spending should be greatly increased." Those who believe spending should be increased are on the higher end of the scale.*

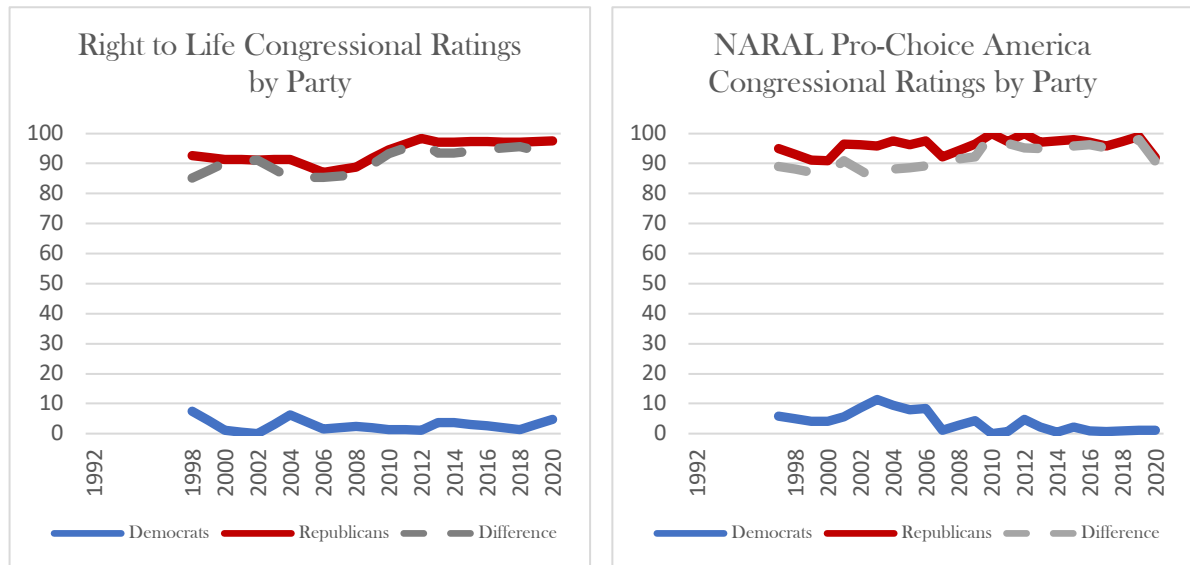
Figure thirteen shows that the difference in opinion between the democratic and republican public has also diverged on the issue of defense spending since 1992. There appears to be a smaller increase in polarization on this topic than other ideological topics already examined, however the clear pattern still remains. Again, the largest split between the

two parties began around 2008, as the republicans developed a more conservative position, and the democrats became slightly more liberal on the issue. The Peace Action interest group ratings appear unstable; however, they do show an overall positive increase in the difference between the two parties, showing that congress is becoming more polarized surrounding defense spending at the same time as the public.

#### Figure Fourteen

These graphics are displaying the changes in average opinions on abortion laws. The difference in these opinions is taken as a measure of polarization, with 100 being the most polarized and 0 being the least. Additionally, the average congressional party ratings from NARAL Pro-Choice and Right to Life are displayed. With the difference in party ratings being used as a measure of polarization.





*American National Election Survey, Data Center (1992-2020)*

*Vote Smart. 2022. "National Special Interest Groups."*

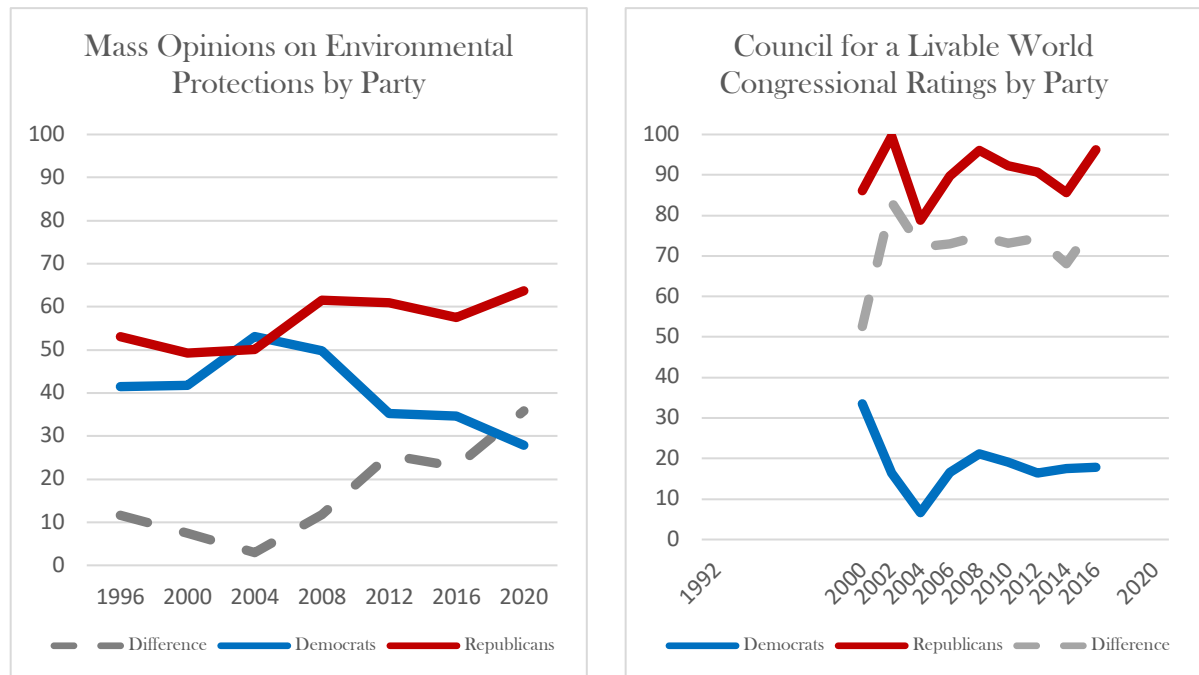
*\*The abortion scale consists of a series of policy positions regarding abortion, with the highest end of the scale being the most restrictive option.*

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Figure fourteen shows there is a clear increase in the difference between the two parties' positions on abortion from 1992 until 2020. However, this increase appears to be a smaller than the divergence on issues like jobs and spending. Again, this split started to increase speed around 2008, with the republicans having the larger shift in their positions, towards the more conservative end of the scale. It is hard to see any large trends from looking at the NARAL Pro-Choice America and Right to Life interest group ratings, due to the average ratings for each party consistently being at the extreme ends of the scale, this leaves little room for movement with time. However, despite the lack of room for large movement there does still appear to be a small steady increase in the difference between the two party's interest group ratings. This demonstrates that once again the congress is becoming more polarized at the same time as the masses.

**Figure Fifteen**

These graphics are displaying the changes in average opinions on environmental protections. The difference in these opinions is taken as a measure of polarization, with 100 being the most polarized and 0 being the least. Additionally, the average congressional party ratings from Council for a Livable World are displayed. With the difference in party ratings being used as a measure of polarization.



*American National Election Survey, Data Center (1992-2020)*

*Vote Smart. 2022. "National Special Interest Groups."*

*\*Exact wording is "Some people think the federal government needs to regulate business to protect the environment. They think that efforts to protect the environment will also create jobs, others think that the federal government should not regulate business to protect the environment. They think this regulation will not do much to help the environment and will cost us jobs." Those who think the government should not do much for the environment are on the higher end of the scale.*

Figure fifteen shows that there has been a very strong divergence in mass party opinion surrounding environmental protections since 1992. Unlike with the other ideological areas looked at, this shift seems to have gained traction around 2004, rather than 2008. It also appears from this graphic that the democrats have been the cause for the majority of this movement, as they moved almost 25 points towards the more liberal direction, on a 100 point scale between 2004 and 2020. It is hard to gain as much insight from the Council for a Livable World's interest group ratings, due to the lack of data before the year 2000. However,

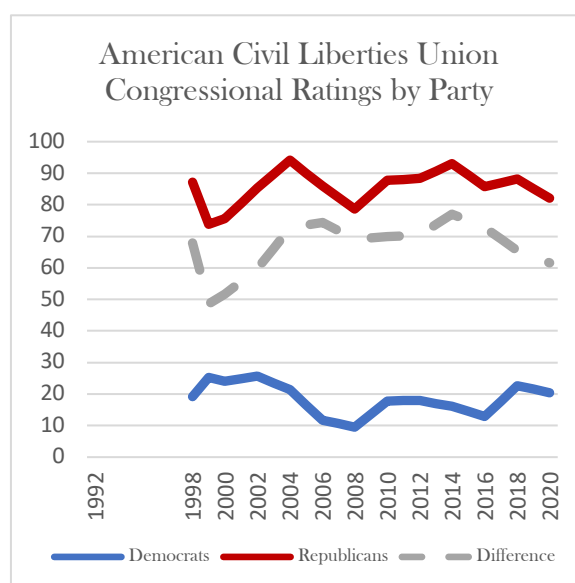
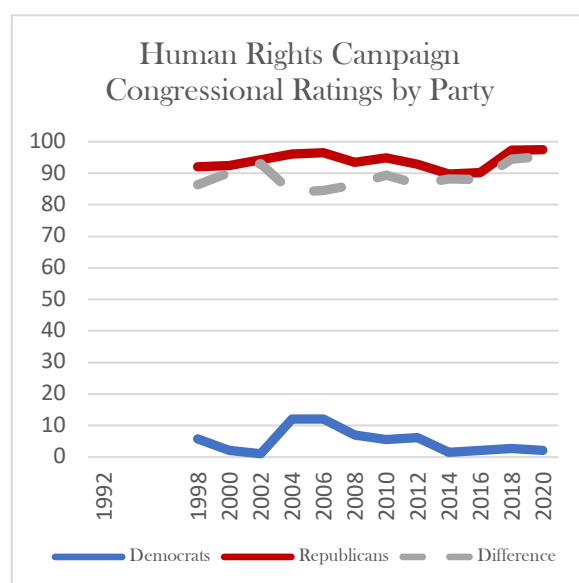
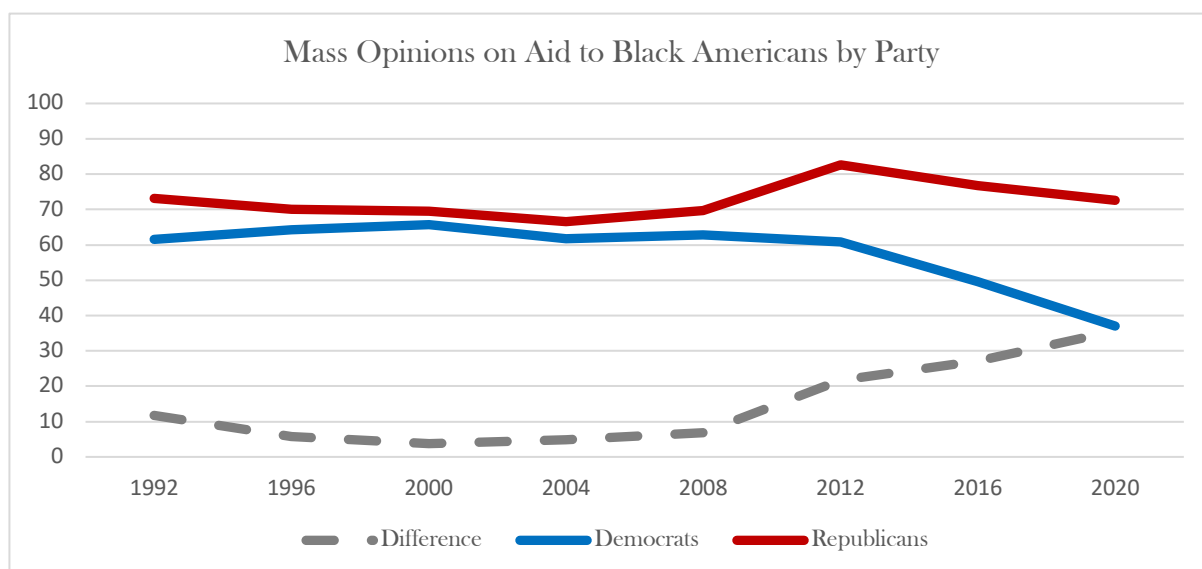
there does appear to be a clear strong increase in the democratic party's interest group ratings during the early 2000's, at the same time that the democratic public became more liberal on this ideological topic. It appears in this case that the democratic party's ideological movement in congress predated the ideological movement of the mass democratic party, but has since leveled off, while the mass democratic party continues to move toward a more liberal position. The mass republican party has had some slight movement towards the more conservative end of the scale but has remained fairly steady in their position after 2008.

## Figure Sixteen

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These graphics are displaying the changes in average opinions on government aid to black Americans. The difference in these opinions is taken as a measure of polarization, with 100 being the most polarized and 0 being the least. Additionally, the average congressional party ratings from the American Civil Liberties Union and the Human Rights Campaign are displayed. With the difference in party ratings being used as a measure of polarization.

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American National Election Survey, Data Center (1992-2020)

Vote Smart. 2022. "National Special Interest Groups."

\*Exact question wording "Some people feel that the government in Washington should make every effort to improve the social and economic position of blacks, others feel that the government should not make any special effort to help blacks because they should help themselves." The people who believe that black Americans should help themselves fall on the higher end of the scale.

Figure sixteen shows once again, like with almost all other ideological topics examined, the difference in the mass party's opinion surrounding aid to black Americans has increased since 1992, with a large proportion of that increase occurring after 2008. Initially most of the movement appeared to come from the republican party, as they moved towards



the more conservative end of the scale. More recently however, the republicans have begun to return to their original position, as democrats have begun to move more rapidly towards the liberal end of the scale. Both the Human Rights Campaign and the American Civil Liberties Union interest group ratings show little overall movement in the difference between the parties in congress. There does appear to be a slight increase in the difference between the elite parties on this ideological topic but considering the variability of interest group ratings and the small increase, these results are not able to confidently tell us the trend of the parties' ideology in congress when handling civil rights issues.

## Discussion and Conclusion

It seems clear after examining the ANES polling data and DW-NOMINATE scores, that polarization has been increasing in the masses and in Congress. These results confirm the findings of previous scholars, claiming that mass affective and elite ideological polarization levels have been increasing. More importantly, they find clear evidence of increasing ideological mass polarization overall and across every individual policy area looked at, settling the debate from the late 2000's about the moderate American. Levels of mass affective polarization are increasing faster than levels of mass ideological polarization during this time frame. This means that the average American's distaste for the other party is growing at rates faster than their policy positions are separating. A similar increase is seen for polarization in congress, however the ideological polarization in congress is not increasing nearly as fast as in the masses. Also in Congress, a majority of the increasing polarization appears to be coming from republican members, shifting their ideologies further to the right. There is a opposite democratic shift as well, but the democrats are moving further in the liberal direction at a much slower rate.

Not only is mass ideological polarization increasing, but it appears to be increasing on every policy issue studied in this report; abortion, the environment, aid to black Americans, government spending, government job assistance, defense spending and healthcare. This seems to directly contradict claims made by scholars like Fiona and Evans in the early 2000's. However, the results in this report show that ideological polarization was decreasing on many policy areas from 1992 to 2000 and the levels of increase were fairly low until 2008. The results from 2008 to 2020, after the point when many of these reports came out denying increasing polarization, are what most clearly show this trend of increasing ideological polarization among the masses.

Across every policy area examined the first large jump in ideological political polarization occurred between 2008 and 2012, except for the environment, which began to polarize slightly earlier in 2004. This is not surprising, as this time represented a large shift in the country's attitudes politically and socially. This period between 2008 and 2012 was marked politically by the Great Recession, the birth of the Tea Party Movement and the beginning of popularized far right conspiracy theories, starting with the Birtherism conspiracy surrounding Obama's presidency. Socially there were also radical shifts taking place, such as social media companies like Twitter and Facebook, just beginning to gain traction.

Although there were large increases in ideological polarization across every policy area examined, these levels differed across the different topics. For example, policy issues like defense spending and abortion appeared to have a much smaller increase in polarization compared to issues such as environmental protections and healthcare. It is also interesting to note that the main source of this polarization appears to differ across policy issues. For example, when looking at the trend on defense spending, it appears that a large amount of the shift in ideology has come from the mass republican party, whereas when looking at opinions

on environmental protections, we see that the democrats instead had the largest ideological shift.

Considerable evidence of increasing mass affective polarization comes from looking at the time period between 2016 and 2020. Both parties saw an increase in affective polarization during this time period, with republicans seeing their sharpest increase over four years, out of all the dates studied. Once again, this time period was marked by a large political movement, especially within the Republican party, with the birth of MAGA republicans. Despite this dramatic increase in affective polarization after 2016, republicans became slightly less ideologically polarized over this same period, though they still had a large overall increase in ideological polarization across the entire 28 year time frame. This is research to support findings from previous scholars such as Iyengar and Westwood, who claimed that ideological and affective mass polarization are two separate phenomena and therefore we can see levels of affective polarization rise while ideological polarization levels fall, or vice versa, in each party.

There were strong limitations of this report when examining Congressional ideological polarization on specific ideological positions. Although the DW-NOMINATE scores for overall polarization were very reliable, the interest group ratings were much less stable and were obviously very biased. Because of this, it was hard to gain specific insights on the ideological trends of the parties in Congress on these specific issues. Further research should be conducted on ideological polarization in Congress, on these specific policy issues like abortion and civil rights. A deeper study of interest group ratings, using a combination of many different groups, or investigating roll call votes on specific topics and their subsequent DW-NOMINATE scores could lead to a good investigation. If Congress is also becoming more polarized on these policy issues, it could be a potential cause of mass polarization. If Congress is not becoming more polarized, in line with the mass party ideology, it would also

be interesting to see if the separation between the ideology of the party within Congress and the party in the electorate, is correlated with increasing political dissatisfaction or disillusionment, as the political parties would not be matching the ideology of their constituents.

Another possible investigation would be to determine whether American's are becoming more intolerant of just those in the other political party, or if this polarization is being seen across other demographics, such as race or religion. If these trends are shown across a wide variety of demographic groups, it would be evidence to show that the causes for this increase are not only political but also social because they are bleeding over into other aspects of life. Having these better understandings of polarization trends across time in the public and congress can help scholars diagnose causes and potential solutions for decreasing polarization. More research should also be done to examine if there were key political turning points in the early and mid 2000's that individually caused these increases, or if there is an underlying factor, such as decreasing trust in government, that could be leading to these continual increases in polarization. It is most likely that the cause for increasing mass and elite polarization is a combination of these kinds of factors.

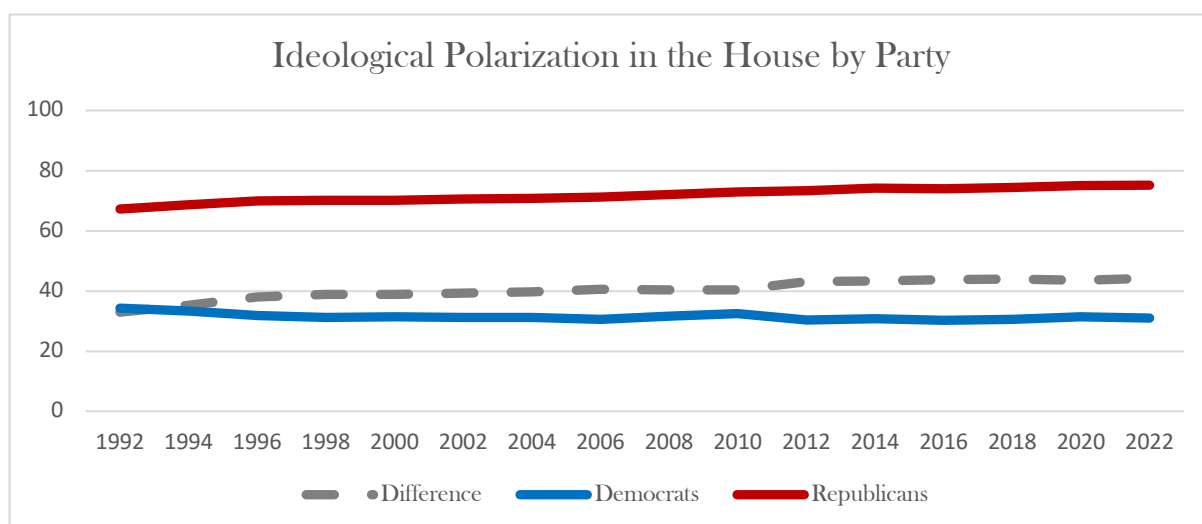
Scholars have shown that polarization has had real negative impacts on society, such as disrupting important healthcare decisions that should be made between a patient and a doctor, as well as politicizing education, leading to disruption at school board meetings (Iyengar & Krupenkin 2018). As levels of polarization increase it is likely that we will see the consequences of this polarization worsen. Understanding the patterns of polarization and settling the debate of whether there even exists mass ideological polarization, is a key first step, that this report has addressed, in understanding the causes of polarization. It is critical to continue doing research into this area, because understanding these different causes for

polarization and how they interact, can allow us to then discover potential solutions to decrease polarization and reunify the country.

## Appendix

### Appendix Figure One:

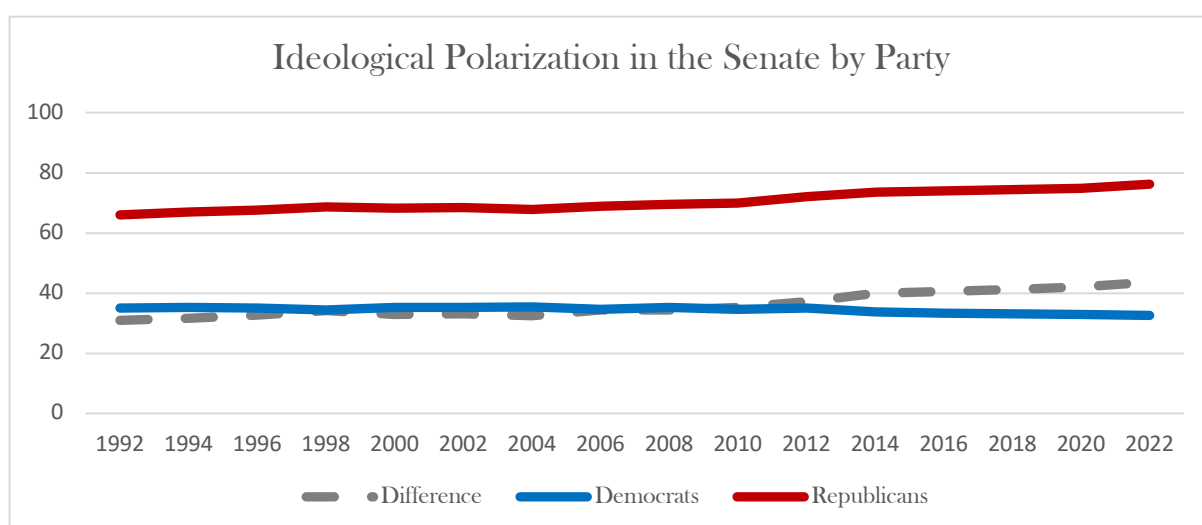
This graphic is displaying total ideological polarization by political party in the House. Ideological polarization in congress is measured using DW Nominate Scores. The difference in average scores between the two parties is used as a measure of polarization.



*Voteview: Congressional Roll-Call Votes Database (1992-2020)*

### Appendix Figure Two:

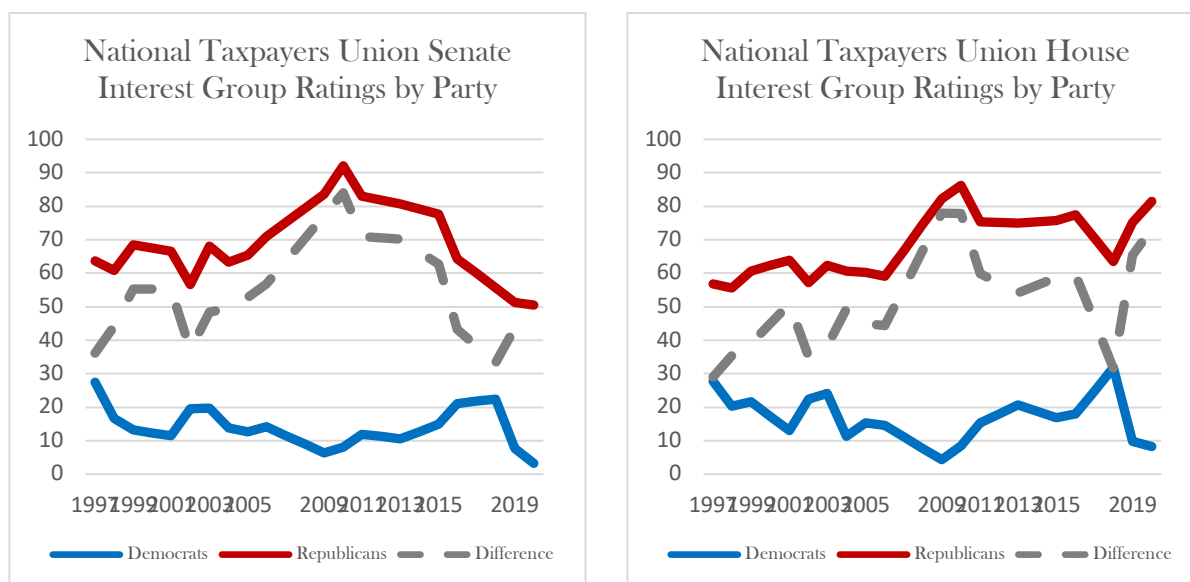
This graphic is displaying total ideological polarization by political party in the Senate. Ideological polarization in congress is measured using DW Nominate Scores. The difference in average scores between the two parties is used as a measure of polarization.



*Voteview: Congressional Roll-Call Votes Database (1992-2020)*

### Appendix Figure Three:

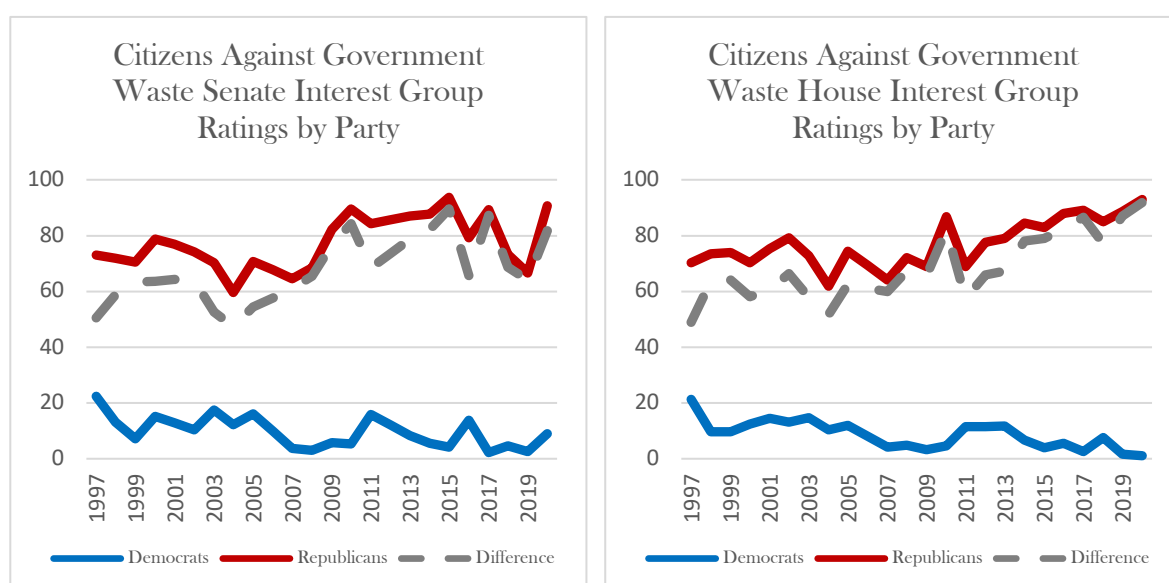
These graphics are displaying the average House and Senate party ratings from the National Taxpayers Union are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

### Appendix Figure Four:

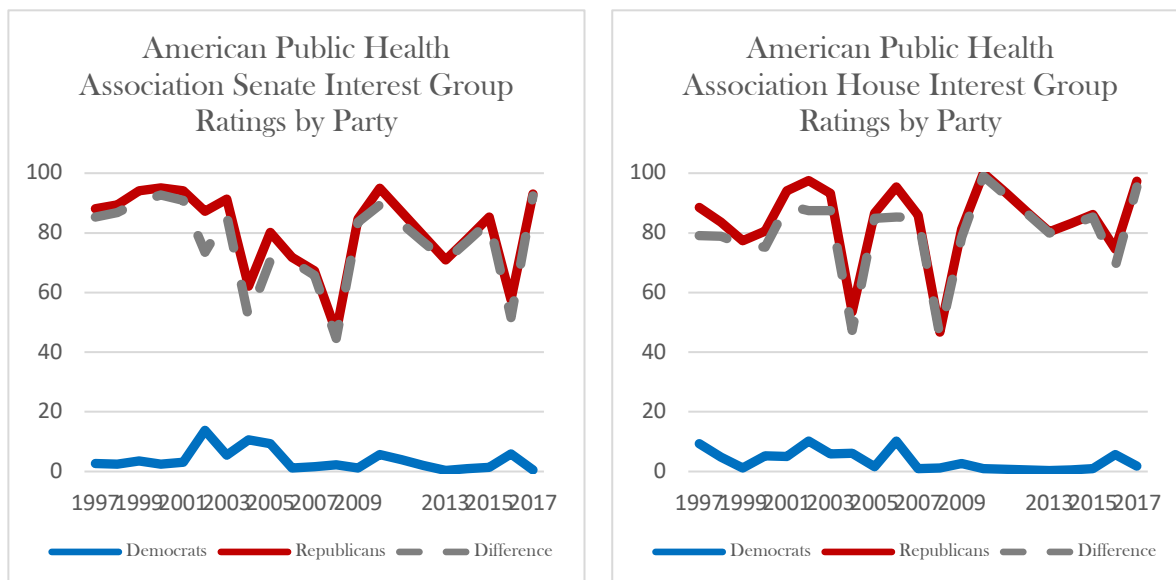
These graphics are displaying the average House and Senate party ratings from the Council for Citizens Against Government Waste are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

### Appendix Figure Five:

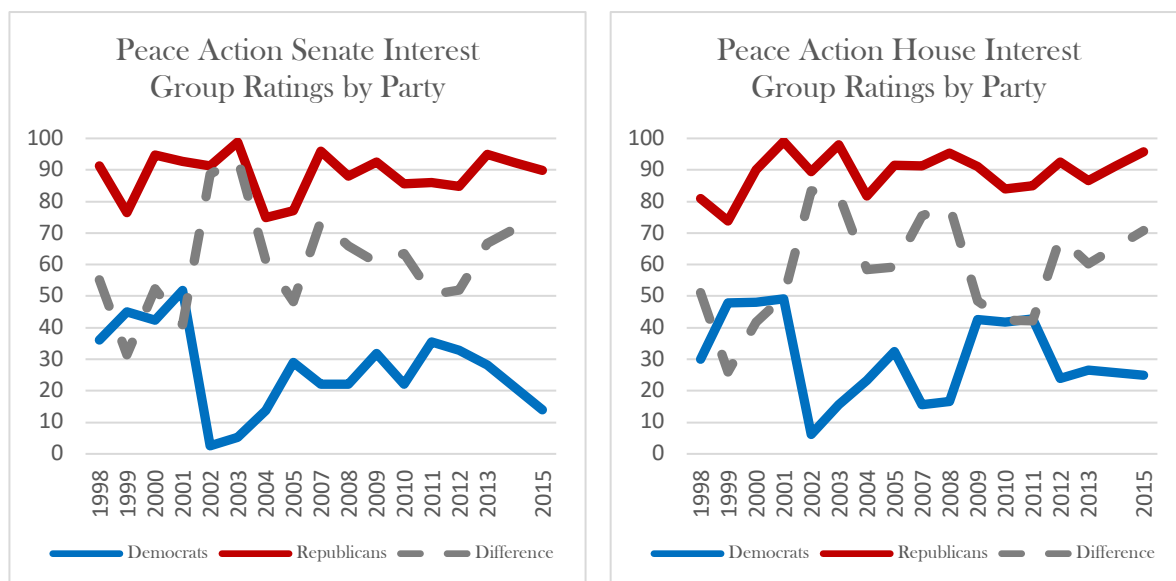
These graphics are displaying the average House and Senate party ratings from the American Public Health Association are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

### Appendix Figure Six:

These graphics are displaying the average House and Senate party ratings from Peace Action are displayed. With the difference in party ratings being used as a measure of polarization.

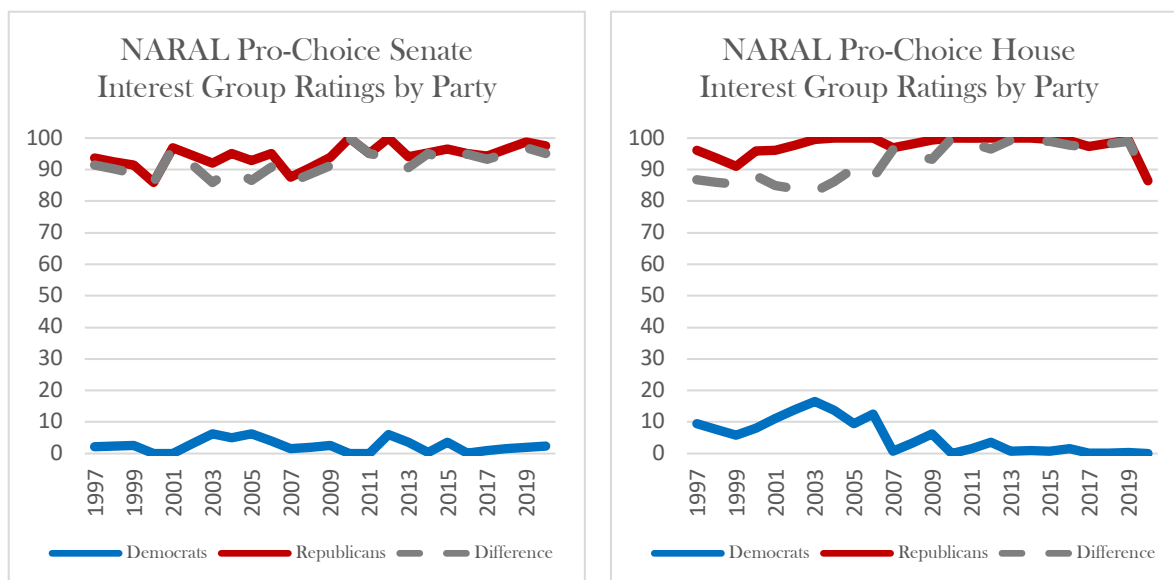


*Vote Smart. 2022. "National Special Interest Groups."*



## Appendix Figure Seven:

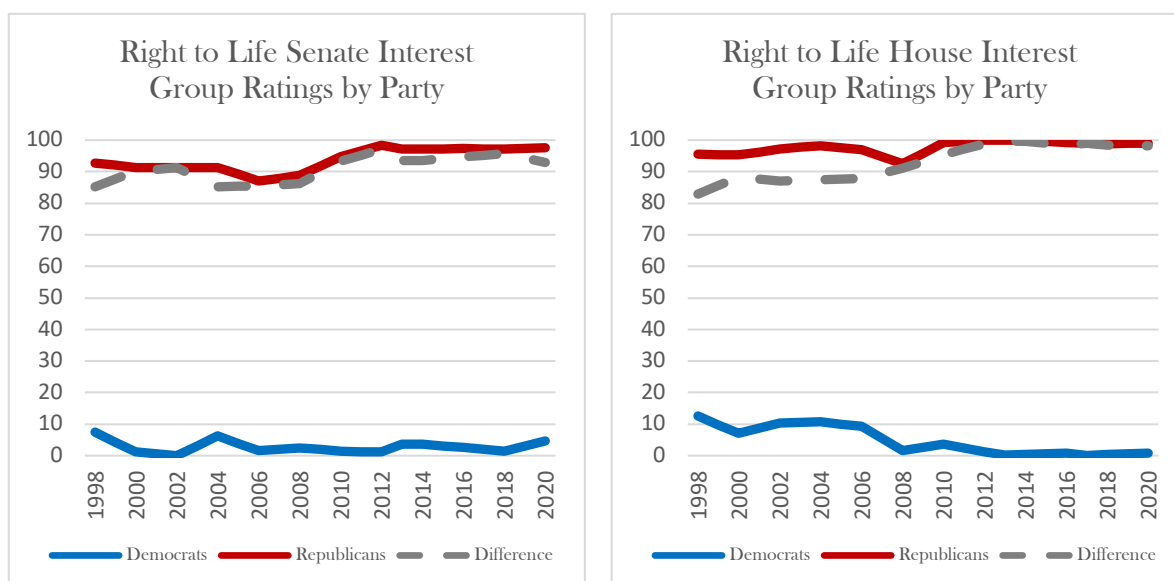
These graphics are displaying the average House and Senate party ratings from NARAL Pro-Choice America are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

## Appendix Figure Eight:

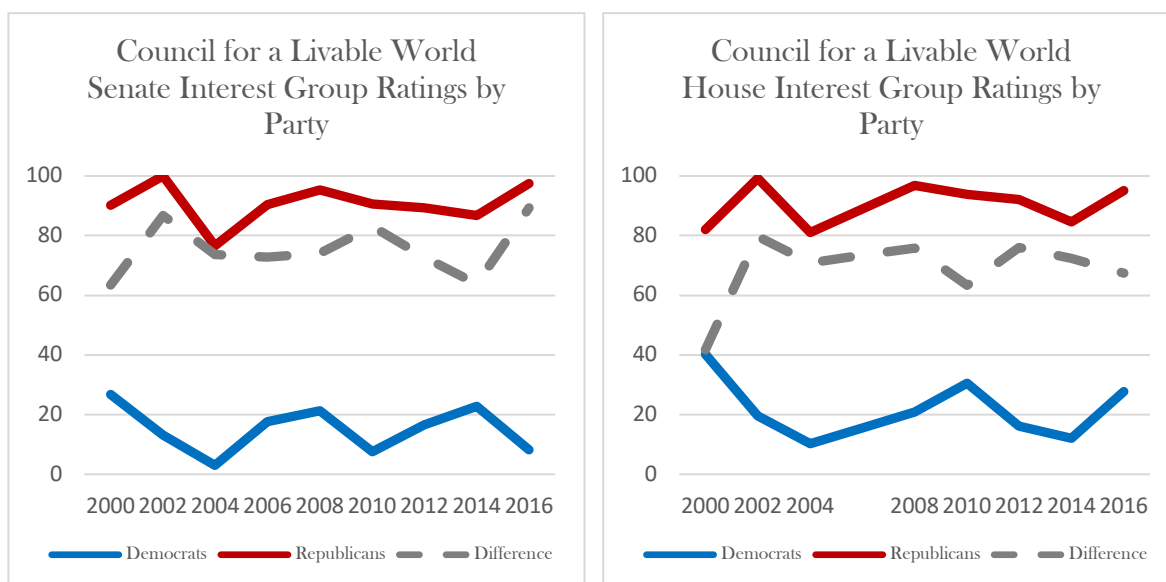
These graphics are displaying the average House and Senate party ratings from the Right to Life interest group are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

## Appendix Figure Nine:

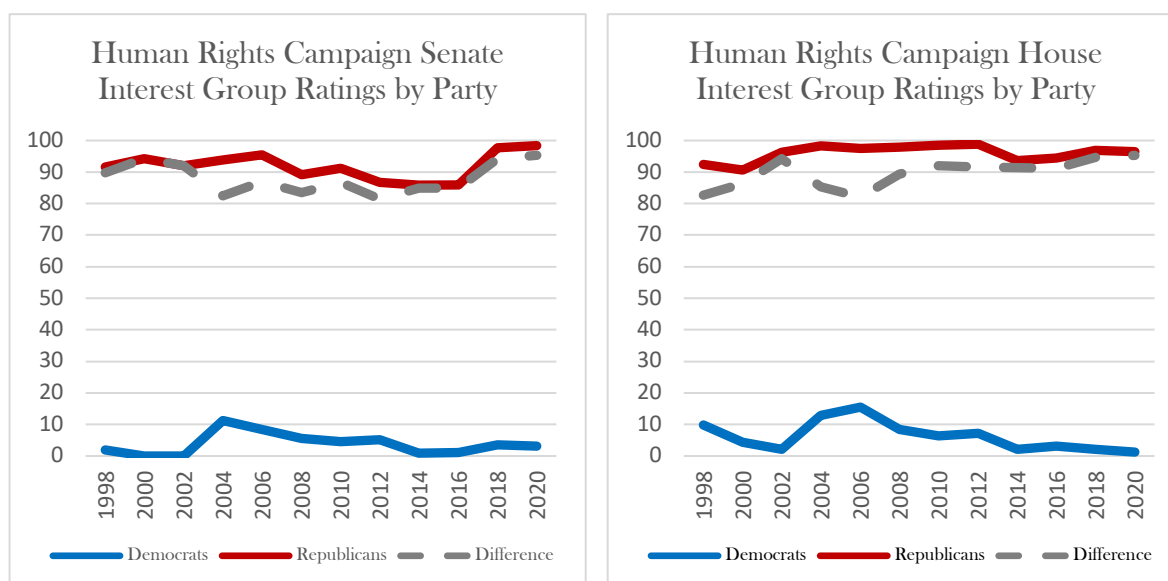
These graphics are displaying the average House and Senate party ratings from the Council for a Livable World are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

## Appendix Figure Ten:

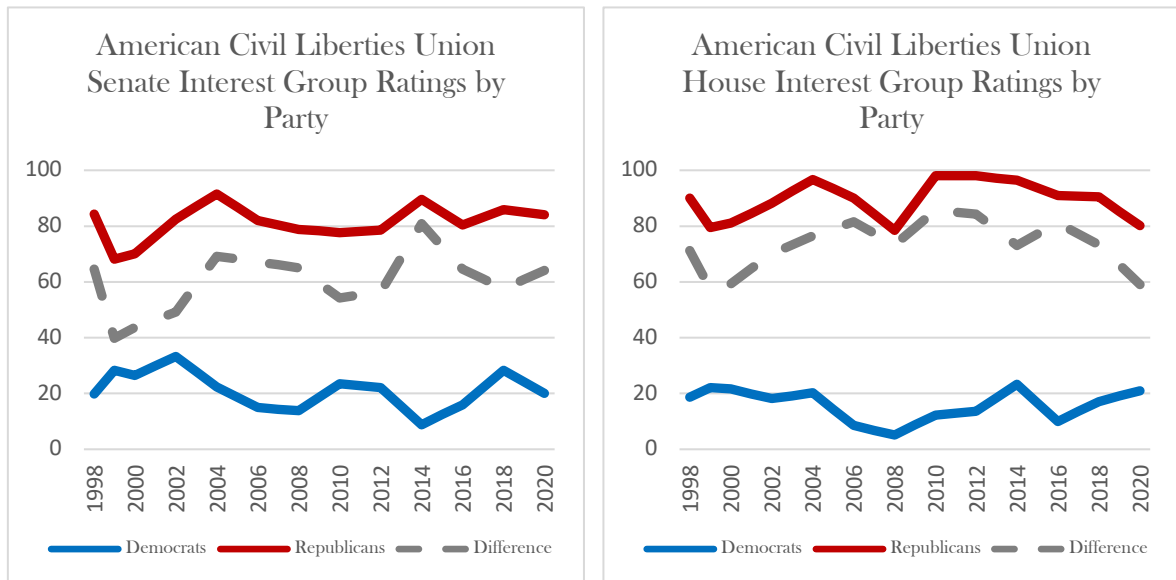
These graphics are displaying the average House and Senate party ratings from the Human Rights Campaign are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

## Appendix Figure Eleven:

These graphics are displaying the average House and Senate party ratings from the American Civil Liberties Union are displayed. With the difference in party ratings being used as a measure of polarization.



*Vote Smart. 2022. "National Special Interest Groups."*

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