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Have Americans' Attitudes Become More Polarized? - an **Update** 

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Have Americans' Attitudes Become More Polarized? – an Update<sup>1</sup>

John H. Evans

Department of Sociology

University of California, San Diego

<sup>&</sup>lt;sup>1</sup> Address inquiries to: John H. Evans, Department of Sociology, UCSD, 9500 Gilman Drive, La Jolla, CA 92093-0533. jhevans@ucsd.edu Thanks to the Princeton Center for Arts and Cultural Policy Studies for funding, Vincent Fu for conducting the analyses, Paul DiMaggio for general and specific advice, and Mike Hout for comments on an earlier draft of this paper.

#### **Abstract:**

Objective: I update the analysis of attitudinal polarization originally presented in DiMaggio, Evans and Bryson (DEB) (1996) by using newly available survey data. *Method*: Like DEB, I derive aggregate distributional parameters for social groups in each year of the surveys, and then regress the year of the surveys on each parameter. *Results*: As in DEB's original paper, there is little evidence of general polarization in attitudes between the early 1970s and today. However, while DEB found some evidence that polarization in the public may be the result of polarization in our political system, the additional years of data show that this conclusion is inescapable. *Conclusions*: While political scientists have recently found polarization among our elected officials on economic issues, it seems clear that members of the public who are involved in politics are becoming polarized on moral issues. Political scientists should follow up on this research to see not only if elected officials are polarized on these issues, but also the causal direction of the link between officials and the public.

In 1996, DiMaggio, Evans and Bryson (henceforth DEB) published a paper called "Have Americans' Social Attitudes Become More Polarized?" (1996). Their purpose was to test claims that the American public had become increasingly polarized over a range of social issues in recent decades. Scholars claimed, for example, that there has been a trend toward "ideological polarization in domestic and social concerns" (Wyszomirski, 1994, 37), that there has been "sharpening cultural polarization of U.S. society after the mid-1970s" (Ellison and Musick, 1993, 379) and, most famously, that American society is engaged in a "culture war" (Hunter, 1991; Hunter, 1994). Using more than 20 years of General Social Survey (GSS) and National Election Studies (NES) data, and examining four types of polarization for 18 social issues, DEB found little evidence of polarization. The only exceptions were polarization in the general public and most sub-groups on the issue of abortion, and a growing polarization between people who self-identify as Democrats and Republicans.

Their conclusion, based on trend data ending in 1992 (NES) and (1994) GSS, could have resulted from one of three reasons. First, and most obviously, it could be because there is indeed little polarization in the public. Second, it could be because their statistical models were based on, at most, 15 cases, with an average of 10, because their methods required aggregation of the data for each year of the survey. Despite using a generous p-value of .10 to give the benefit of the doubt to the polarization argument, trends must be quite strong to be significant with only 10 cases. Third, they might not have found polarization because it had not occurred <u>yet</u>. That is, the social critics might have been prescient, observing the first indications of the underlying causes of general polarization that would take

nearly a decade to become apparent. The events of the 1990s, such as the "contract with America" and the Clinton presidency, may have finally created the predicted polarization.

With additional years of data I can evaluate the latter two interpretations. In this paper I replicate DEB's analysis, taking advantage of the completion of the 1994, 1996, 1998 and 2000 NES, and the 1996, 1998 and 2000 GSS. The purpose of my work is to see whether, in light of the additional years of data and additional statistical power, the conclusions of DEB should be modified.

#### MEASURING POLARIZATION

There is a severe challenge in writing a paper such as this. DEB committed large sections of their paper to deriving four types of polarization, explaining why they might be of substantive importance for social scientists, how they might interact, and, most importantly, how they could be measured. Given that my purpose is to replicate their paper with additional data, and given that I do not change or challenge any of these preliminaries, I am left with the challenge of providing enough summary so that the general reader will understand my analysis, without repeating what has been published elsewhere. With this in mind, I summarize how DEB conceived of and measured polarization and encourage the reader to look at their original paper for further explanations and justifications. Beyond your local research library, it is also available online at http://www.jstor.org.

DEB offered a multidimensional and fairly comprehensive theory and method for analyzing polarization in opinions. First, they asserted that polarization is not heated political rhetoric. Polarization refers to the distance between the various positions, not to the form or the content of those positions. Moreover, polarization can refer to a process or a static condition. DEB studied the process of

polarization, comparing the shape of an opinion distribution to the same distribution at other points in time rather than comparing the current distribution to a "theoretical maximum."

Below, I describe DEB's four dimensions along which a particular population may be considered more or less polarized across time -- each firmly grounded in some mechanism of consensus or mobilization.

- (1) The <u>dispersion</u> of opinions found in a given population may affect a group's ability to arrive at political consensus. DEB used the statistical parameter, sample variance, to measure dispersion.

  Increasing sample variance indicates increasing dispersion of opinion.
- (2) Bimodality rifts in a distribution of opinions -- is the extent to which opinions cluster into separate "camps." Bimodality differs from dispersion in that it measures gaps in the distribution of responses rather than the average <u>distance</u> between them. DEB argued for the importance of this dimension by noting that "because actors in middle attitudinal positions can often broker between extremes, the extent to which opinion variation leads to conflict is likely to depend on the extent to which occupants of polar stances are isolated from one another" (DiMaggio et al. 1996, 694). A lack of persons in the middle between pro and con positions, for example, would increase our tendency to experience opinion on abortion as sharply divided. DEB measured bimodality using kurtosis, with lower values of kurtosis indicative of greater polarization in this bimodal sense.
- (3) Consolidation of opinion along some other set of socially significant lines (such as religious affiliation or social position) increases the potential for political mobilization. DEB operationalized this dimension as differences in the mean of variable between pairs of groups. This is the measure that has traditionally been used (alone) to measure opinion polarization (Shapiro and Mahajan 1986; Page and

Shapiro 1992, ch. 7; Brint 1984, 110-21).

(4) DEB also presented data on a fourth dimension -- opinion constraint. This is "the extent to which opinions on any one item in an opinion domain . . . are associated with opinions on any other" (DiMaggio et al. 1996, 696). This is an indicator of ideological cohesion, when a person's views on one issue are increasingly predictable by their views on a related one. This is important for conflict because actors need to organize around coherent sets of ideas, such as support of "family values" or "individual rights." DEB measured constraint with Cronbach's alpha which, while usually used to measure scale reliability, can also be interpreted as the degree of association among the items in the scale due to the latent variable beneath them (DiMaggio et al. 1996, 697).

It is important to understand not only that there are four dimensions of polarization, but also that they work together in specific ways. Most importantly, although dispersion and bimodality are sufficient indicators of polarization within groups, polarization between groups (consolidation) is less likely to result in conflict if it is accompanied by increasing internal polarization within the opposing groups. - Within-group polarization decreases the probability of mobilization of that group by making it difficult for advocates of any position to organize the group as a whole. Therefore, following DEB, I regard two groups as polarizing in a manner likely to lead to conflict only when differences between the groups grow and polarization inside the groups remains constant or declines.

Table 1. Descriptive Statistics. National Election Studies, 1972-2000.

| Variable                 | N     | Mean     | Std. Dev. | Min  | Max  |
|--------------------------|-------|----------|-----------|------|------|
| Year                     | 29399 | 1985.372 | 8.575024  | 1972 | 2000 |
| Sub-Populations          |       |          |           |      |      |
| Female                   | 29399 | .5593388 | .4964749  | 0    | 1    |
| Age:                     | 2)3)) | .5575566 | .4704747  | U    | 1    |
| Under 30                 | 29281 | .227622  | .4193045  | 0    | 1    |
| Under 35                 | 29281 | .3404938 | .4738834  | 0    | 1    |
| Over 45                  | 29281 | .4437348 | .4968326  | 0    | 1    |
| Race:                    | 27201 | .++3/3+0 | .4700320  | U    | 1    |
| White                    | 27861 | .8808011 | .3240282  | 0    | 1    |
| Black                    | 27861 | .1191989 | .3240282  | 0    | 1    |
| Education                | 27001 | .1171707 | .5240202  | U    | 1    |
| College Degree           | 29119 | .1984271 | .3988224  | 0    | 1    |
| <= High School           | 29119 | .5050311 | .4999833  | 0    | 1    |
| Region = South           | 29399 | .3522229 | .4776711  | 0    | 1    |
| Liberal                  | 29399 | .2564949 | .4367086  | 0    | 1    |
| Conservative             | 20901 | .4187359 | .4933638  | 0    | 1    |
| Democrat                 | 28781 | .3889024 | .4933036  | 0    | 1    |
|                          | 28781 | .2541955 | .4354156  | 0    | 1    |
| Republican Voted in Last | 20/01 | .2341933 | .4334130  | U    | 1    |
| Presidential Election    | 27106 | 6496092  | 1772050   | 0    | 1    |
|                          | 27196 | .6486983 | .4773858  | 0    | 1    |
| Politically Active       | 26920 | .1132987 | .3169634  | 0    | 1    |
| Attitude Measures        |       |          |           |      |      |
| Omnibus                  | 13194 | 311.6284 | 77.94105  | 52   | 614  |
| Government Aid           |       |          |           |      |      |
| to Minorities            | 24609 | 4.456662 | 1.801536  | 1    | 7    |
| Abortion attitudes:      |       |          |           |      |      |
| 1972-1978                | 6628  | 2.419282 | .9947664  | 1    | 4    |
| 1980                     | 1320  | 2.275379 | .9526905  | 1    | 4    |
| 1980-2000                | 18409 | 2.145907 | 1.087894  | 1    | 4    |
| Women's Roles            | 23186 | 2.763219 | 1.96348   | 1    | 7    |
| Feeling Thermometers:    |       |          |           |      |      |
| Blacks                   | 23688 | 32.31619 | 20.42596  | 0    | 97   |
| Poor people              | 22397 | 24.98    | 18.16883  | 0    | 97   |
| Liberals                 | 22223 | 44.55713 | 20.99861  | 0    | 97   |
| Conservatives            | 22351 | 59.12425 | 19.34029  | 0    | 97   |

Table 2. Descriptive Statistics. General Social Survey.

| Variable                   | N      | Mean     | Std. Dev. | Min  | Max  |
|----------------------------|--------|----------|-----------|------|------|
| Year                       | 40,226 | 1986.455 | 8.676     | 1972 | 2000 |
| Sub-Populations            |        |          |           |      |      |
| Female                     | 40,226 | .561     | .496      | 0    | 1    |
| Male                       | 40,226 | .439     | .496      | 0    | 1    |
| Age:                       |        |          |           |      |      |
| Under 30                   | 40,093 | .225     | .418      | 0    | 1    |
| Under 35                   | 40,093 | .340     | .474      | 0    | 1    |
| Over 45                    | 40,093 | .439     | .496      | 0    | 1    |
| Race:                      |        |          |           |      |      |
| White                      | 40,226 | .847     | .360      | 0    | 1    |
| Black                      | 40,226 | .122     | .327      | 0    | 1    |
| Education:                 |        |          |           |      |      |
| College Degree             | 40,076 | .186     | .389      | 0    | 1    |
| <= High School             | 40,106 | .583     | .493      | 0    | 1    |
| South                      | 40,226 | .340     | .474      | 0    | 1    |
| Liberal                    | 34,512 | .272     | .445      | 0    | 1    |
| Conservative               | 34,512 | .341     | .474      | 0    | 1    |
| Democrat                   | 40,023 | .381     | .486      | 0    | 1    |
| Republican                 | 40,023 | .260     | .438      | 0    | 1    |
| Voted in last Presidential |        |          |           |      |      |
| Election                   | 36,090 | .697     | .459      | 0    | 1    |
| Religious Conservative     | 38,416 | .247     | .431      | 0    | 1    |
| Religious Liberal          | 38,416 | .243     | .429      | 0    | 1    |
| Attitude Measures          |        |          |           |      |      |
| Omnibus                    | 3,862  | 86.848   | 11.697    | 55   | 122  |
| Abortion Attitude Scale    | 21,298 | 9.607    | 2.394     | 7    | 14   |
| Women's Public Roles       | 19,357 | 3.678    | .977      | 3    | 6    |
| Family Gender Roles Scale  | 14,639 | 9.199    | 2.613     | 4    | 16   |
| Sexuality Attitudes Scale  | 11,286 | 9.196    | 2.444     | 3    | 12   |
| Racism Scale               | 5,478  | 11.080   | 1.955     | 8    | 16   |
| Crime and Justice Scale    | 21,369 | 4.895    | .694      | 3    | 6    |
| Sex Education              | 22,596 | 1.148    | .355      | 1    | 2    |
| School Prayer              | 21,004 | 1.602    | .489      | 1    | 2    |
| Divorce Law                | 24,889 | 2.241    | .854      | 1    | 3    |

#### DATA, MEASURES AND ANALYTIC STRATEGY

Following DEB I use the General Social Survey (GSS) (Davis and Smith 1972-2000) and the National Election Studies (NES) (Sapiro et al. 2001). I created the same attitude scales and defined the same sub-populations as DEB. I refer the reader to DEB for details of the various coding decisions they made (see primarily pages 699-705). The updated descriptive statistics, which include the additional years of data, can be found in Tables 1 and 2.

As shown in Table 1, from the NES I have indicators of attitudes toward government aid to minorities, abortion, women's roles and feelings towards blacks, poor people, liberals and conservatives. I also have an omnibus scale that combines these scales into one measure. For the GSS I have scales for attitudes toward abortion, women's public roles, family gender roles, sexuality, racism², crime and justice, sex education, school prayer and divorce law (see Table 2). I also have an omnibus scale for the GSS. For all of these scales, their individual components have been re-coded so that more "conservative" responses receive higher numbers.³ Because all of the attitude measures in the NES except the omnibus measure are single questions, there are no Cronbach's alpha analyses

<sup>&</sup>lt;sup>2</sup> African-American respondents are excluded from the racial attitude scales in the 1977 GSS because in that year they were only asked the question on busing. After 1977, all questions were asked of African-Americans.

<sup>&</sup>lt;sup>3</sup> In the late 1980s and early 1990s, the GSS used a split ballot design. For the omnibus and racism scales, this meant that the questions necessary to complete the scale were only asked together on one-third of the ballots, resulting in a very small number of cases. When examining the within-group population for those respondents with college degrees, the number of cases for those years dropped precipitously low because of the relatively low percentage of respondents with college degrees. DEB, therefore combined the data from 1988 and 1989 for the college graduate analyses in these two scales (with the year data re-coded as 1988.5). 1990 and 1991 were also combined to create 1990.5. Similarly, in between-group comparisons, DEB lacked enough African-Americans, religious liberals and religious conservatives for these scales in these years, and the same years were combined as above. Finally, African-Americans were specifically not asked a few of the racism questions in 1977, so that year is missing for the African-American/White comparisons for the racism and omnibus scales, resulting in there only being six years in the analyses. The tables presented below show which analyses used fewer cases.

(constraint) for these variables. Because the sex education, school prayer and divorce law variables of the GSS are dichotomous, and because the variance and kurtosis of a dichotomous variable provides no more information than its mean, those attitude measures are only used in the analyses which compare the means of groups over time.

#### Analytic Strategy

I have decided to replicate exactly the methods of DEB, not only so that direct comparisons can be made, but also because other possible methods are impractical. Other methods could have been used to measure polarization, but they typically can only be used for one dimension of polarization. For example, public opinion researchers have long examined interaction terms between a group and a year variable to determine whether the means of two groups are diverging (Page and Shapiro 1992). DEB's consolidation measure is closely related to this technique. Similarly, others have split data into two time periods and compared the variances of a group between the two periods using an F-test (Gay et al. 1996). This method, while related to DEB's use of dispersion (variance), requires that two years or two sets of years be focused on, often without substantive justification for the choice of years.

Since the publication of DEB, Hoffmann and Miller have built upon DEB's framework to control for other variables that may cause polarization over time -- essentially creating multivariate variance and kurtosis trend models (1998). Unfortunately, their method cannot determine the relative contribution of each variable toward a polarization trend: it only removes that part of the polarization attributable to the control variable. In a subsequent paper, Evans (2002) uses Hoffmann and Miller's

technique, as well as the logic of sensitivity analysis to try to determine the underlying cause of polarization on abortion. While this is an interesting and useful approach, the data reporting requirements are so immense that it cannot be used for more than a few comparisons.

Recently, Mouw and Sobel criticized DEB's methodology for, among other things, not being sensitive to the fact that none of the attitude scales in DEB were truly continuous variables, and suggested an analysis using contingency tables (2001). As DEB pointed out in a response (Evans et al. 2001), this method is quite useful for the examination of dispersion over time, but it cannot be used to examine other forms of polarization. Also, Mouw and Sobel's method explicitly assumes that there is no bi-modality and like Hoffmann and Miller's approach, it is also impractical for large numbers of analyses. Moreover, Mouw and Sobel report that their method can only be used with single variables, not with additive scales, which make up a majority of the dependent variables in DEB's original paper. I will therefore not be able to use Mouw and Sobel's innovation for this paper.

Finally, Downey and Huffman have recently determined that kurtosis, while still measuring bimodality, is insensitive to the fact that some opinion distributions may actually be tri-modal (2001).

They found that 22 percent of the variables they examined in the GSS had "truly trimodal" distributions.

Unfortunately, they find it "impossible to offer a satisfactory alternative at this point," but simply suggest that researchers look for tri-modality in the actual distributions before assessing summary statistics

(Downey and Huffman 2001, 501). Given that no superior alternative is offered, I examined the actual distributions and found little evidence of tri-modality.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> I am unaware of any measure of tri-modality. Rather, one must look at a histogram and decide whether it has three distinct humps. Combining all of the years of data and looking at the distribution for each variable, the only variable that might be interpreted as trimodal is the GSS sexual morality scale, but even this is questionable. A more

In my analysis, with DEB, a summary statistic which corresponds with a type of polarization is created for each group in each year under study. For example, the variance on the omnibus scale for respondents with a college education in 1977 is one data point. To make claims about trends in polarization, I examine the change over time in each of these parameters for each of the groups under study. To examine within-group polarization, I simply regress the year of the survey on the value of the parameter (mean, variance, kurtosis or alpha). An increase in variance and/or alpha, and a decrease in kurtosis, is indicative of increased polarization.<sup>5</sup> As in DEB, I report increases or decreases in the mean for each group. While this does not speak to polarization per se, it is useful for our understanding of what may be occurring to the opinions of the group.

difficult question is what to make of the NES feeling thermometers, which are 100 point likert scales. As is well known, respondents do not pick the "in between" numbers (e.g. 62), but rather the "round" numbers (e.g. 60). Therefore, the feeling thermometer variables are all multi-modal, with responses concentrated at the "round" numbers. My understanding of the behavior of the kurtosis statistic suggests that this does not create the sort of problem that Downey and Huffman identify, but clearly additional research is required on the topic of measuring bimodality in non-continuous variables.

<sup>5</sup> The GSS does not provide sampling weights. There are, however, a few years where the GSS over-sampled African Americans. Due to the complexity of using weights in my analysis (see below), instead of weighting the cases in these years, I followed the common practice of removing the respondents who were part of the oversample. Therefore, there were no weights used for the GSS.

The NES provides a variety of weights to correct for sample construction biases and attrition from the NES' panel components. I applied these weights in the manner suggested by the NES documentation. In the 1990s the NES began a panel design, with pre-and post-election waves. I used the weights suggested for the particular survey the question was on, either before or after the election. For the omnibus scale, some of the components were asked in the pre-election wave and some in the post-election wave. In this instance I used the weights for the post-election wave because if a respondent dropped from the sample between waves, he would have missing values on some of the scale components anyway, thus making his case have a missing value on the omnibus scale.

The primary challenge in using weights is that while statistical programs easily allow the calculation of a weighted mean, they do not allow for the calculation of weighted variances, alphas and kurtoses. To estimate these weighted parameters I inflated the data set based on the weight variables. Each observation was inflated into the number of observations corresponding to its weight. The weights had five significant digits, but memory limitations allowed the use of only four significant digits for the weights. Thus, each observation was inflated into anywhere from 0 to 10000 observations [the largest weight was actually only 3428]. Then, means, variances, kurtoses, and alphas were calculated from the data in the usual way as if the inflated data set were a simple random sample. While this would obviously confound estimates of the standard error, I do not, at this stage of the analysis, engage in inference, just parameter estimation.

To examinee between-group polarization (consolidation), I regress the year of the study on the absolute difference between the mean of the two groups. An increase in this difference is indicative of increased between-group polarization. To emphasize again, these are all simple regressions because: a) multivariate models, while developed, are not practical (see above); and b) there are very few cases in each regression.

#### Regression Strategies

I rely upon ordinary least squares regression to summarize the trend in polarization. One challenge to this approach is that because DEB used group/year as the unit of analysis, there are, at best, as many cases as there are years of the survey, but often fewer, because not all questions were asked in all of the years. The largest number of cases in any of the analyses is 18 and the lowest is 7. In any analysis with so few cases, one must be particularly concerned that idiosyncratic cases do not unduly influence the analysis. For example, if there are only 7 cases in the analysis, one additional case which is an outlier can make a non-significant finding significant or a significant finding insignificant. To guard against this possibility, I re-ran all of the analyses in this paper using a robust regression model where influential cases are down-weighted so as to not unduly influence the results (Western 1995; StataCorp 2001). Neither type of analysis is more true than the other; they are simply different ways of summarizing the data.

### **RESULTS**

DEB presented graphical depictions of the change in polarization over time as well as tables summarizing the graphs. To save space in this paper, I present the results only in tables. Even using

only tables, there is too much information to present. I therefore present only the OLS models and describe the robust models when they differ, which is not often (robust results available upon request). As in DEB, I start by examining polarization in the entire sample, move on to looking at polarization within sub-samples of the population, and finally study polarization between groups.

#### Within-group Polarization in the Population as a Whole

The most general examination of polarization is whether the entire population is polarizing on social issues in general. To determine this, I examine trends in the omnibus scales, which are compilations of all of the different variables. As in DEB I found no evidence of overall polarization. Even with the additional years of data, the NES scale is constant over time in variance, kurtosis and alpha (see Table 3). As in DEB the GSS scale continues to show a decrease in the dispersion (variance) type of polarization (see Table 4).

<sup>&</sup>lt;sup>6</sup> If anything, the decline in polarization is accelerating, with this coefficient being about 28% larger than in DEB. This increasing depolarization is a bit ambiguous, however, because a scatter plot (not shown) and the robust model both suggest that this increase in the size of the coefficient is due to the last year of the series, which has a very low variance compared to the remainder of the years.

Table 3. OLS Regression Coefficients for Time Trend (Year): Within-Group Statistics, NES, 1972-2000.

| 1772-2000.            |          |          |          |        |
|-----------------------|----------|----------|----------|--------|
|                       | Mean     | Variance | Kurtosis | Alpha  |
| Omnibus Scale (n=11   | 1)       |          |          |        |
| Full Sample           | -0.729*  | -14.068  | 0.005    | -0.001 |
| college               | -0.350   | 15.053   | 0.002    | 0.001  |
| voters                | -0.621   | 2.772    | -0.001   | 0.001# |
| under 30              | -0.416   | 2.081    | 0.010    | -0.001 |
| politically active    | 0.394    | 92.994*  | -0.012   | 0.005# |
| Feelings thermometer  | •        |          |          |        |
| Blacks (n=14)         |          |          |          |        |
| full                  | -0.135#  | 0.138    | -0.018*  |        |
| college               | -0.209*  | 1.709    | -0.036*  |        |
| voters                | -0.145#  | -0.764   | -0.030** |        |
| under 30              | -0.253*  | 2.622    | -0.038** |        |
| politically active    | -0.143#  | 0.805    | -0.019   |        |
| Poor (n=13)           |          |          |          |        |
| full                  | 0.146*   | 2.524**  | -0.018#  |        |
| college               | 0.058    | 1.778    | -0.043*  |        |
| voters                | 0.140*   | 1.950*   | -0.024** |        |
| under 30              | 0.088    | 4.570**  | -0.003   |        |
| politically active    | 0.059    | 2.642#   | -0.014   |        |
| Liberals (n=14)       |          |          |          |        |
| full                  | 0.016    | 1.610    | -0.009   |        |
| college               | 0.030    | 1.821    | -0.001   |        |
| voters                | 0.055    | 2.617    | -0.014   |        |
| under 30              | 0.004    | 2.479    | -0.011   |        |
| politically active    | 0.280*   | 9.364**  | -0.025*  |        |
| Conservatives (n=1    | 14)      |          |          |        |
| full                  | -0.088   | 1.773    | -0.017*  |        |
| college               | 0.009    | 0.570    | -0.021** |        |
| voters                | -0.067   | 2.260    | -0.017*  |        |
| under 30              | 0.005    | 2.561    | -0.028#  |        |
| politically active    | 0.022    | 4.285*   | -0.019*  |        |
| Aid to Minorities (n= | 15)      |          |          |        |
| full                  | 0.017**  | -0.029*  | 0.015*   |        |
| college               | 0.026**  | -0.009   | 0.001    |        |
| voters                | 0.017**  | -0.028*  | 0.015*   |        |
| under 30              | 0.025*** | -0.003   | 0.002    |        |
|                       |          |          |          |        |

Table 3 Continued . . .

|                    | Mean      | Variance     | Kurtosis  | Alpha |
|--------------------|-----------|--------------|-----------|-------|
| politically active | 0.025**   | -0.023       | 0.013     |       |
|                    |           |              |           |       |
| Women's Roles (n=  | 14)       |              |           |       |
|                    |           |              |           |       |
| full               | -0.046*** | -0.081***    | 0.086***  |       |
| college            | -0.027*** | -0.049***    | 0.089***  |       |
| voters             | -0.044*** | -0.075***    | 0.083***  |       |
| under 30           | -0.039*** | -0.079***    | 0.128***  |       |
| politically active | -0.032*** | -0.056***    | 0.060***  |       |
| Abortion (n=14)    |           |              |           |       |
| full               | -0.011*** | 0.010***     | -0.009*** |       |
| college            | -0.007*   | 0.004#       | 0.014     |       |
| voters             | -0.011**  | 0.008**      | -0.005*   |       |
| under 30           | -0.001    | 0.011**      | -0.007**  |       |
| politically active | -0.009*   | 0.005#       | 0.008     |       |
| NT : 11 10 16      | 0.5 444   | 4 4.4.4. 004 |           |       |

Note: # = p<.10, \*=p<.05, \*\*=p<.01, \*\*\*=p<.001

Table 4. OLS Regression Coefficients for Time Trend (Year): Within-Group Statistics, GSS, 1972-2000.

|                     | Mean     | Variance | Kurtosis | Alpha   |
|---------------------|----------|----------|----------|---------|
| Omnibus Scale (n=9) |          |          |          |         |
| Full Sample         | 360***   | -1.944** | .003     | 002#    |
| college (N=7)       | 133      | 0929     | 009      | .001    |
| voters              | 376***   | -1.496*  | 011      | 001     |
| under 30            | 244**    | -1.888#  | .004     | 004     |
| Abortion (n=17)     |          |          |          |         |
| full                | .001     | .034***  | 008**    | .001*** |
| college             | .022***  | .077***  | 042***   | .001*** |
| voters              | .001     | .042***  | 011**    | .001*** |
| under 30            | .008     | .031#    | 012***   | .001#   |
| Family Gender Roles | (n=11)   |          |          |         |
| full                | 094**    | 051*     | .014*    | 000     |
| college             | 059***   | 024      | .005     | .000    |
| voters              | 096***   | 039      | .011#    | .000    |
| under 30            | 075***   | 043*     | .008     | .002    |
| Women's Public Role | s (n=16) |          |          |         |
| full                | 030***   | 029***   | .178***  | 002**   |

Table 4 Continued . . .

|                   | Mean   | Variance | Kurtosis | Alpha |
|-------------------|--------|----------|----------|-------|
| college           | 014*** | 015***   | .274***  | 000   |
| voters            | 029*** | 027***   | .186***  | 002*  |
| under 30          | 018*** | 021***   | .240***  | 004*  |
| Sexuality (n=13)  |        |          |          |       |
| full              | 020*   | .004     | 026*     | 003*  |
| college           | 002    | 025      | 003      | 003#  |
| voters            | 024*   | .008     | 030*     | 003*  |
| under 30          | .003   | .002     | 011      | 003   |
| Crime and Justice | (n=18) |          |          |       |
| full              | 003    | 004*     | .022**   | 000   |
| college           | 004    | 006*     | .016#    | 004   |
| voters            | 004    | 003#     | .017**   | .000  |
| under 30          | .001   | 004#     | .022*    | 000   |
| Racism (n=9)      |        |          |          |       |
| full              | 059*** | 068**    | .032*    | 005*  |
| college (n=7)     | 032**  | 048*     | 006      | 004   |
| voters            | 061*** | 067*     | .029#    | 004   |
| under 30          | 040**  | 078*     | .044     | 011#  |

Note: # = p<.10, \*=p<.05, \*\*=p<.01, \*\*\*=p<.001

Therefore, as before, the conclusion is that polarization in this most general of senses is not occurring within the general public. However, these variables are very blunt instruments. As a first step toward sharpening our tools, I consider whether the general public is becoming more polarized on individual issues.

Race and Poverty. As in DEB, the GSS racial-attitude scale demonstrates a trend toward less polarization in racial attitudes, with declines in variance and increases in kurtosis. A change from DEB is that now alpha is also shown to be decreasing, suggesting an even fuller decline in polarization. The

feelings towards blacks variable in the NES shows no change in polarization over time.<sup>7</sup> Polarization in the NES aid to minorities variable also declined, with a change from DEB being that the decline is not only in variance but kurtosis as well.

With the additional data there is a slight change in interpretation from DEB. While DEB reported that attitudes toward government assistance for minorities seemed to become <u>more</u> polarized from the mid-1980s on, new data I show that this was not actually a trend. In fact, the decreasing polarization trend that was in force before the mid-1980s has re-asserted itself in recent years. Finally, as in DEB, feelings toward poor people have polarized over the time period. Therefore, I conclude that in the general population, polarization has, if anything, slightly declined on issues of race, but not on poverty.

*Gender*. In DEB, the three scales representing gender issues become less polarized over time in all available measures. This result remains unchanged with the additional years of data.

Crime and Justice. While the data examined here still show a decline in polarization over crime and justice issues, the coefficients are 43% and 41% smaller in variance and kurtosis, respectively, and a previously significant decline in constraint now shows no change. This is due to a dramatic turn toward increasing polarization after 1994, with the three measures returning to levels found in 1974 (not shown). I can only speculate at this point about the reasons for this dramatic turnaround, but this period of time found increasing public debates over the three components of the scale:

<sup>&</sup>lt;sup>7</sup> There is a significant polarizing trend in kurtosis in the OLS model shown in Table 3, but the coefficient in the robust model is not significant (not shown). Therefore, because this trend seems to be due to outliers, I note the different conclusions here but will interpret this variable as not changing from that reported in DEB.

the death penalty (with the release of movies such as <u>Dead Man Walking</u>), gun control (with debates over the militia movement and the Oklahoma bombing), and the courts' treatment of criminals (with debates about the O.J. Simpson trial).

Attitudes Towards Liberals and Conservatives. DEB were interested in whether Americans have become more polarized in their reaction to political labels. As in DEB, the answer is that Americans are not becoming more polarized, with the exception of a slight polarizing trend in bimodality (kurtosis) on feelings toward conservatives.

Abortion and Sexuality. Abortion was the one issue where DEB found unambiguous evidence of polarization in the general population. Here I find that the extent of polarization on abortion remains the same as reported in DEB, with the GSS and NES showing polarization in all senses of the term. However, DEB did not put too much interpretive weight on the across-time analysis of the NES abortion variable because they suspected that a change in wording mid-way through the series would affect the results -- a suspicion confirmed by Mouw and Sobel (2001). I will therefore not discuss the NES abortion measure separately below.<sup>8</sup>

DEB found no polarization in the sexual morality scale, but I <u>do</u> find evidence of increasing polarization. Despite increasing liberalism on the issue (e.g. a declining mean), the coefficient for kurtosis is much smaller compared to DEB, and, unlike in DEB, this coefficient is statistically significant. The trend in variance is positive but not significant. What the linear model in variance masks is a ushaped pattern with decreasing variance until about 1990 and then a rapid increase in variance to 2000,

<sup>&</sup>lt;sup>8</sup> The NES abortion variable remains in the omnibus measure so that this study can be compared to DEB. The change is slight enough that it should not unduly perturb the omnibus scale since it is comprised of so many elements.

with the variance for the year 2000 surpassing the value from 1974. Yet, this case of polarization is a bit ambiguous because while the <u>decreasing</u> polarization trend in the alpha has declined 40%, it remains significant.

Conclusions about Polarization in the General Public. Attitudes toward race gender and feelings toward liberals and conservatives all are declining in polarization, as found in DEB. However, the additional years of data have suggested a turn-around in crime and justice, which now shows evidence of increasing polarization. Similarly, the polarization that DEB found in the general public in attitudes toward abortion continues, and now attitudes toward sexuality are indicating polarization. I will discuss possible explanations and interpretations of these findings after presenting all of the results.

#### Within-Group Polarization in Subgroups

While looking at individual issues is a sharper tool than looking at all issues combined, it will sharpen our tools even more to look at polarization for each issue within particular subgroups in the population. DEB selected sub-groups they expected were polarizing. I report polarization findings that are different from the polarization (or lack thereof) found in the general population. 9

Participants in the Political System. DEB had two ways of measuring political participation

-- voting and a series of questions about engagement in political acts. DEB found that people who had

voted in the last presidential election had a slight tendency toward more polarization. Recent data

illustrate that the difference has disappeared. Voters are not appreciably different from the rest of the

<sup>&</sup>lt;sup>9</sup> By "different" I mean a situation where a polarization trend is statistically significant in one case and not in another.

population in terms of polarization (see Tables 3 and 4).

On the other hand, and in contrast to DEB, the politically active in the NES show increasing polarization in variance on the omnibus scale.<sup>10</sup> DEB found that the politically active were not polarizing in attitudes to the poor, while the general population was. I find here that they are, like the public, becoming more polarized. DEB also found that they were more polarized in variance in their feelings towards liberals, but the general public was not. Now I find polarization in both variance and kurtosis on feelings not only toward liberals, but toward conservatives as well.<sup>11</sup> In sum, the politically active are becoming more polarized, especially on the most political of matters - feelings toward liberals and conservatives.

College Graduates. Similar to the politically active, it is plausible that the more highly educated members are more attentive to discourse on social issues and therefore may become more polarized.

We may also expect to find polarization due to the higher levels of political activism among the educated as well as the growing racial and religious diversity of the college educated population.

DEB found scattered evidence of a resistance to the declines that the general population was making. They found that unlike the general public, college graduates showed no decline in variance on the GSS omnibus scale, or in attitudes toward racial integration. The former is still true in the present

<sup>&</sup>lt;sup>10</sup> They also show increasing alpha (constraint) in OLS models, but this is contradicted by the robust models, so this finding is not emphasized here.

<sup>&</sup>lt;sup>11</sup> A difference from DEB in the variance trend in aid to minorities, shown in Table 4, is not supported by the robust models.

analysis, yet the latter is not. DEB found, and the present analysis concurs, that college graduates show no increase in kurtosis for racial attitudes, while the general population does. Both DEB and this analysis also find no decline in alphas for attitudes toward women's public roles, but the general population has such a decline. As before, there is no consistent story to tell about polarization among the college educated.

However, it is also interesting to note that the views of the college educated on abortion (GSS) are not only becoming more conservative (while the general population remains the same), but their rate of polarization is double that of the general population in dispersion (variance) and five times the rate for bi-modality. This pattern remains unchanged from DEB, although DEB neglected to discuss this trend in their paper.

Young People. It could be the next generation that is polarizing, suggesting that the concerns of general polarization are simply ahead of their time. Looking for polarization among people between the ages of 18 and 29 (when they filled out the survey), DEB found that the "differences between young people and the general public are numerous but inconclusive" because some measures suggested increased polarization and some decreased polarization (DiMaggio et al. 1996, 720). All but a few of the differences from the general public noted in DEB have disappeared with the additional data, but new differences have replaced them. In the present analysis, the young are different from the general public by not exhibiting declining polarization in family gender roles (kurtosis), racial attitudes (kurtosis), and aid to minorities (kurtosis and variance). Yet, they are also different from the general public by not exhibiting a decrease in kurtosis (increasing polarization) in sexual morality or attitudes toward the poor. In sum, the polarization among the young remains inconclusive.

Summary. Like DEB, I looked for polarization on each separate issue within several sub-populations. DEB concluded that this exercise resulted in no clear pattern of polarization within any one population. Recent data result in similar conclusions, however there does seem to be more evidence now for polarization among the politically active than there was in DEB.

#### Polarization as Between-Group Difference

In this section I examine whether polarization is occurring not within groups, but between groups (consolidation). For each pair of contrasting groups I calculate the absolute value of the difference in means of the two groups and regress this value on the year of the survey. If the difference is increasing, then this is evidence of polarization between the groups.

As in DEB, if I find polarization between two groups, then I also consider the increasing bi-modality within each of the two groups. I am only interested in between-group difference because of its potential for conflict. However, if one or both of the groups is polarizing internally, then its ability to conflict with the other group – despite its growing distance – is greatly diminished and any observed between-group difference is of lessened importance.

Table 5: OLS Regression Coefficients for Time Trend (Year): Between-Group Comparisons, NES

|  | Absolute Difference | Kur     | tosis     |
|--|---------------------|---------|-----------|
|  | In Means            | Group A | Group B   |
| Omnibus Scale (n=11)                     |                     | 1       | 1         |
| A. Over45/B. under35                     | -0.546**            | -0.004  | 0.003     |
| A. Conservative/B. liberal               | -0.020              | -0.003  | 0.018#    |
| A. Women/B. men                          | 0.426**             | 0.008   | 0.008     |
| A. African-American/B. white             | -1.390**            | -0.004  | 0.005     |
| A. College degree/B. high school or less | -0.531              | 0.002   | -0.001    |
| A. Democrat/B. Republican                | 1.287**             | 0.005   | 0.005     |
| A. South/B. other                        | -0.236#             | 0.016   | -0.001    |
| Feelings Thermometer:                    |                     |         |           |
| Blacks (n=14)                            |                     |         |           |
| A. Over45/B. under35                     | -0.032              | 0.000   | -0.042*** |
| A. Conservative/B. liberal               | -0.054#             | -0.021* | -0.013*   |
| A. Women/B. men                          | -0.028              | -0.020# | -0.015#   |
| A. African-American/B. white             | -0.430**            | -0.090# | -0.028*   |
| A. College degree/B. high school or less | -0.013              | -0.036* | -0.007    |
| A. Democrat/B. Republican                | 0.017               | -0.012  | -0.017    |
| A. South/B. other                        | 0.082#              | -0.019# | -0.012    |
| Poor (n=13)                              |                     |         |           |
| A. Over45/B. under35                     | -0.080#             | -0.027# | -0.016    |
| A. Conservative/B. liberal               | -0.040*             | -0.034* | -0.017    |
| A. Women/B. men                          | 0.040               | -0.014  | -0.016    |
| A. African-American/B. white             | -0.275**            | -0.089# | -0.021*   |
| A. College degree/B. high school or less | -0.124#             | -0.043* | -0.004    |
| A. Democrat/B. Republican                | 0.005*              | -0.033  | -0.031#   |
| A. South/B. other                        | -0.012              | -0.020  | -0.016    |
| Liberals (n=14)                          |                     |         |           |
| A. Over45/B. under35                     | 0.027               | -0.008  | -0.011    |
| A. Conservative/B. liberal               | 0.012               | -0.011  | 0.004     |
| A. Women/B. men                          | 0.079*              | -0.013  | -0.004    |
| A. African-American/B. white             | -0.227#             | 0.010   | -0.015    |
| A. College degree/B. high school or less | 0.005               | -0.001  | -0.006    |
| A. Democrat/B. Republican                | 0.262**             | 0.004   | -0.021#   |
| A. South/B. other                        | -0.016              | -0.001  | -0.012    |

Table 5 (continued)

| Tuble C (commuted)                       | Absolute Difference | Kurt      | <u>osis</u> |
|--|---------------------|-----------|-------------|
|  | In Means            | Group A   | Group B     |
| Conservatives (n=14)                     |                     |           |             |
| A. Over45/B. under35                     | -0.159*             | -0.010    | -0.032*     |
| A. Conservative/B. liberal               | 0.043               | -0.007    | -0.025*     |
| A. Women/B. men                          | 0.027               | -0.020*   | -0.009      |
| A. African-American/B. white             | -0.302***           | -0.009    | -0.013*     |
| A. College degree/B. high school or less | -0.080*             | -0.021**  | -0.005      |
| A. Democrat/B. Republican                | 0.202***            | -0.013    | -0.014      |
| A. South/B. other                        | -0.011              | -0.012    | -0.017*     |
| Aid to Minorities (n=15)                 |                     |           |             |
| A. Over45/B. under35                     | -0.014*             | 0.018*    | 0.005       |
| A. Conservative/B. liberal               | -0.005              | 0.022**   | 0.014*      |
| A. Women/B. men                          | 0.002               | 0.013#    | 0.017*      |
| A. African-American/B. white             | -0.044***           | -0.045*** | 0.014*      |
| A. College degree/B. high school or less | -0.011*             | 0.001     | 0.019*      |
| A. Democrat/B. Republican                | 0.014**             | 0.016*    | 0.026***    |
| A. South/B. other                        | -0.005*             | 0.016#    | 0.014*      |
| Women's Roles (n=14)                     |                     |           |             |
| A. Over45/B. under35                     | -0.010*             | 0.063***  | 0.122***    |
| A. Conservative/B. liberal               | -0.001              | 0.062***  | 0.131***    |
| A. Women/B. men                          | 0.000               | 0.093***  | 0.078***    |
| A. African-American/B. white             | 0.000               | 0.070***  | 0.087***    |
| A. College degree/B. high school or less | -0.029***           | 0.089***  | 0.064***    |
| A. Democrat/B. Republican                | 0.009#              | 0.121***  | 0.053***    |
| A. South/B. other                        | -0.003              | 0.087***  | 0.087***    |
| Abortion (n=14)                          |                     |           |             |
| A. Over45/B. under35                     | -0.011***           | -0.023*** | -0.006*     |
| A. Conservative/B. liberal               | 0.012***            | -0.019*** | -0.002      |
| A. Women/B. men                          | 0.000               | -0.012*** | -0.007**    |
| A. African-American/B. white             | -0.008**            | -0.019**  | -0.007***   |
| A. College degree/B. high school or less | -0.006*             | 0.014     | -0.030***   |
| A. Democrat/B. Republican                | 0.008**             | -0.014**  | -0.010**    |
| A. South/B. other                        | 0.000               | -0.026*** | -0.002      |
|  |                     |           |             |

Note: # = p<.10, \*=p<.05, \*\*=p<.01, \*\*\*=p<.001

Table 6: OLS Regression Coefficients for Time Trend (Year): Between-Group Comparisons, GSS

|   | Absolute Difference | Kur     | tosis   |
|---|---------------------|---------|---------|
|   | In Means            | Group A | Group B |
| Omnibus Scale (n=9)                           |                     | •       | -       |
| A. Over45/B. under35                          | 211*                | 011     | .012    |
| A. Conservative/B. liberal                    | .007                | .002    | .011    |
| A. Women/B. men                               | .054                | .010    | 007     |
| A. African-American/B. white (n=6)            | 225                 | 066     | .003    |
| A. Religious liberals/B. conservatives (n=7)  | 399***              | 003     | 002     |
| A. College degree/B. high school or less (n=7 | ')246*              | 009     | .002    |
| A. Democrat/B. Republican                     | .266**              | 025     | 003     |
| A. South/B. other                             | 013                 | .006    | .005    |
| Abortion (n=17)                               |                     |         |         |
| A. Over45/B. under35                          | 009                 | 010***  | 011**   |
| A. Conservative/B. liberal                    | .051***             | 006*    | .013    |
| A. Women/B. men                               | .003                | 010**   | 007*    |
| A. African-American/B. white                  | 024*                | .001    | 011**   |
| A. Religious liberals/B. conservatives        | 035***              | 053**   | 023**   |
| A. College degree/B. high school or less      | 017*                | 042***  | 006*    |
| A. Democrat/B. Republican                     | .029**              | .000    | 016***  |
| A. South/B. other                             | 006                 | 010***  | 010*    |
| Family Gender Roles (n=11)                    |                     |         |         |
| A. Over45/B. under35                          | 045**               | 014**   | .016    |
| A. Conservative/B. liberal                    | .005                | .002    | .025*   |
| A. Women/B. men                               | .013                | .021**  | .015    |
| A. African-American/B. white                  | 008                 | .024    | .015#   |
| A. Religious liberals/B. conservatives        | 025**               | .018#   | 008     |
| A. College degree/B. high school or less      | 035*                | .005    | .007    |
| A. Democrat/B. Republican                     | .027*               | .014    | 008     |
| A. South/B. other                             | 002                 | .010#   | .017#   |
| Women's public Roles (n=16)                   |                     |         |         |
| A. Over45/B. under35                          | 018***              | .106*** | .247*** |
| A. Conservative/B. liberal                    | 005                 | .116*** | .255*** |
| A. Women/B. men                               | 001                 | .191*** | .162*** |
| A. African-American/B. white                  | 002                 | .165*** | .188*** |
| A. Religious liberals/B. conservatives        | 016***              | .186*** | .105*** |
| A. College degree/B. high school or less      | 016***              | .274*** | .107*** |

## Table 6 (continued)

| Table 0 (continued)                            | A1 1 D'CC           | Kurtosis |         |  |
|--|---------------------|----------|---------|--|
|  | Absolute Difference |          |         |  |
|  | In Means            | Group A  | Group B |  |
| A. Democrat/B. Republican                      | 003                 | .189***  | .123*** |  |
| A. South/B. other                              | 009**               | .133***  | .211*** |  |
| Sexuality (n=13)                               |                     |          |         |  |
| A. Over45/B. under35                           | 041***              | 077**    | 011     |  |
| A. Conservative/B. liberal                     | .011                | 036      | 004     |  |
| A. Women/B. men                                | 009                 | 033*     | 018     |  |
| A. African-American/B. white                   | .019                | .018     | 031*    |  |
| A. Religious liberals/B. conservatives         | 020#                | .002     | 070*    |  |
| A. College degree/B. high school or less       | 013*                | 003      | 030*    |  |
| A. Democrat/B. Republican                      | .025*               | 044***   | 035**   |  |
| A. South/B. other                              | 001                 | 039#     | 021*    |  |
| Crime and Justice (n=18)                       |                     |          |         |  |
| A. Over45/B. under35                           | 005**               | .018#    | .019**  |  |
| A. Conservative/B. liberal                     | 001                 | .015     | .017*   |  |
| A. Women/B. men                                | 004**               | .029*    | .011*   |  |
| A. African-American/B. white                   | 002                 | .012     | .027*** |  |
| A. Religious liberals/B. conservatives         | 002                 | .023*    | .019#   |  |
| A. College degree/B. high school or less       | .001                | .016#    | .028**  |  |
| A. Democrat/B. Republican                      | .007**              | .009     | .033*   |  |
| A. South/B. other                              | 000                 | .028**   | .019*   |  |
| Racial Attitudes (n=9)                         |                     |          |         |  |
| A. Over45/B. under35                           | 036**               | .019     | .034    |  |
| A. Conservative/B. liberal                     | 009                 | .027     | .037    |  |
| A. Women/B. men                                | 005                 | .032*    | .029#   |  |
| A. African-American/B. white (n=6)             | 040                 | 174      | .031*   |  |
| A. Religious liberals/B. conservatives (n=7)   | 047**               | .010     | .034#   |  |
| A. College degree/B. high school or less (n=7) | 029*                | 006      | .027#   |  |
| A. Democrat/B. Republican                      | .030*               | .031     | .026    |  |
| A. South/B. other                              | 024*                | .041*    | .029*   |  |
| Sex education (n=16)                           |                     |          |         |  |
| A. Over45/B. under35                           | 004***              |          |         |  |
| A. Conservative/B. liberal                     | .002#               |          |         |  |
| A. Women/B. men                                | 001**               |          |         |  |
| A. African-American/B. white                   | 001                 |          |         |  |
| A. Religious liberals/B. conservatives         | 002*                |          |         |  |
| A. College degree/B. high school or less       | 005***              |          |         |  |

Table 6 (continued)

|  | Absolute Difference | Kur     | tosis   |
|--|---------------------|---------|---------|
|  | In Means            | Group A | Group B |
| A. Democrat/B. Republican                | .002                |         |         |
| A. South/B. other                        | 002*                |         |         |
| School Prayer (n=16)                     |                     |         |         |
| A. Over45/B. under35                     | 000                 |         |         |
| A. Conservative/B. liberal               | .003#               |         |         |
| A. Women/B. men                          | .001                |         |         |
| A. African-American/B. white             | .002                |         |         |
| A. Religious liberals/B. conservatives   | 001                 |         |         |
| A. College degree/B. high school or less | .004*               |         |         |
| A. Democrat/B. Republican                | .002#               |         |         |
| A. South/B. other                        | .002                |         |         |
| Divorce Law (n=18)                       |                     |         |         |
| A. Over45/B. under35                     | 009***              |         |         |
| A. Conservative/B. liberal               | 000                 |         |         |
| A. Women/B. men                          | 002*                |         |         |
| A. African-American/B. white             | 001                 |         |         |
| A. Religious liberals/B. conservatives   | 012***              |         |         |
| A. College degree/B. high school or less | 008*                |         |         |
| A. Democrat/B. Republican                | .007***             |         |         |
| A. South/B. other                        | 001                 |         |         |
|  |                     |         |         |

Note: # = p<.10, \*=p<.05, \*\*=p<.01, \*\*\*=p<.001

Age. DEB found no instances of increasing between-group difference between those less than 35 years old and those over 45. (See Tables 5 and 6). Indeed, they found that 12 of 18 measures showed convergence in attitudes. The additional data used in this paper does not change this finding. With data for 1972 to 2000, I find that 13 of 17 measures show convergence, and 4 show no

convergence or divergence.<sup>12</sup>

Educational Attainment. Much sociological theory, such as the theory of the "new class" (Gouldner 1979; Brint 1984), suggests that there would be a growing divide between groups based upon their education. Instead, comparing those with college degrees to those with no more than high school degrees, DEB found convergence on 9 of 18 measures and polarization on none. I now find convergence on 12 of 17, but with polarization on one – school prayer. (In DEB school prayer was just short of significantly showing polarization). However, the overall theme is clear: anything, there is even less evidence of polarization between educational groups than in DEB.

Gender. Political scientists have identified a gender gap in voting behavior, but DEB found little evidence of the gender gap in attitudes. They found a small degree of polarization on the NES omnibus scale, convergence in attitudes about crime and sex education, and no convergence or divergence on the other issues. In my analysis the results remain the same, with the addition of polarization in attitudes towards liberals and of convergence in attitudes toward divorce law. There remains no large amount of polarization by gender.

<sup>&</sup>lt;sup>12</sup> There is one less measure because I am no longer considering the NES abortion item separately.

Race. Racial divisions in attitudes are well established, but, are they growing over time or remaining constant? DEB found no instances of increasing polarization and many instances of decreasing polarization between blacks and whites. With the new data the results are substantively identical. On no issue is there increasing polarization, but there is decreasing polarization in the NES omnibus scale in feelings toward blacks, the poor, liberals, and conservatives, as well as on aid to minorities and abortion (GSS). The issues on which opinion is not converging generally deal with the status of women and sexuality. In other words, black and white attitudes toward women's roles (NES), family gender roles (GSS), women's public roles (GSS), sexual morality, <sup>13</sup> sex education and divorce law are not converging. Additionally, blacks and whites are not converging on school prayer, racial attitudes (GSS) and the GSS omnibus scale. The only change from DEB is that blacks and whites are no longer converging on the crime and justice scale. The scatter plot (not shown) suggests that this last change is due to a polarization trend after about 1994 when blacks became markedly more liberal and whites remained on their previous trajectory.

Religion. Many assume that polarization between religious groups is driving all polarization (Hunter 1991; Hunter 1994). DEB relied upon a fairly crude religious division between "religious conservatives" and "religious liberals" not only to make measurement possible, but also to operationalize the central claims about polarization made by others. Others have broken religious groups into smaller categories to look for polarization on particular variables, yielding interesting results (Evans 2002;

<sup>&</sup>lt;sup>13</sup> Inspection of a scatter plot (not shown) reveals that this non-convergence is actually masking a rapid merger in views from 1974 to about 1990, and then a rapid polarization, with blacks starting off as very liberal and ending up as very conservative, and whites starting out as very conservative and ending up as very liberal.

Hoffmann and Miller, 1997; Hoffmann and Miller 1998). For comparability with DEB, I retain their coding.

DEB found that religious liberals and conservatives were not polarizing as is commonly assumed, but rather had been converging on 7 of 9 issues. Of the GSS variables, the only issues on which they did not converge were crime and justice and school prayer. With the additional data used in this paper, the results remain exactly the same, meaning that the decline in polarization has continued since the mid-1990s – the last data used in DEB.

Region. – DEB hypothesized that the well-documented differences in opinion between residents of the South, residents of the rest of the country may reflect polarization processes at work. While the continued growth of a national culture through television and other media would suggest a declining polarization, the growth of the Republican party in the South, which emphasized social issues, suggests at least the possibility of polarization. DEB found no evidence of polarization. Instead, moderate to large differences in attitudes between the South and the Non-South either remained constant over the time series or declined. More recent data confirms that the same variables that were converging then are converging now. 14

*Ideology*. Polarization may be a political reality if political identities become linked to particular social attitudes. For example, people who self-identify as "conservatives" may come to think that being a "conservative" means being opposed to abortion, women's participation in public life, sex education,

<sup>&</sup>lt;sup>14</sup> In the OLS models, there is a slight polarization in attitudes towards blacks (NES). This trend was present, but smaller and insignificant in DEB. However, in the robust model (not shown), there is not polarization, suggesting that this finding is driven by outliers.

etc. "Liberals" might think of themselves as defined by their support of these issues. Thus, polarization could be occurring between self-identified conservatives and liberals.

DEB found a few cases of convergence in attitudes (attitudes toward the poor, aid to minorities and women's public roles), but primarily no change in the gulf that separates liberals and conservatives. They did, however, find one clear case of polarization: in attitudes toward abortion. To "be a conservative" or to "be a liberal" became more tightly connected to abortion attitudes over the years of the study (for a similar result, see Hout 1999)).

We now see that this polarization was indicative of a broader trend that was only beginning to appear when DEB was written. The polarization reported in DEB continues, but now there is also polarization between liberals and conservatives in attitudes toward sex education and school prayer. For the school prayer variable, a trend not quite significant in DEB becomes significant in light of the additional data, which allow greater confidence in the findings. For the sex education variable, the newfound polarization is the result of a trend beginning in about 1990 of growing conservatism among conservatives and growing liberalism among liberals.

Additionally, if trends continue, then in a few more years sexual morality will reach the threshold for measuring polarization. Similarly, the coefficient for divorce law, while not shown to be significantly polarizing in either DEB or now, changed from -.004 to -.000. On a scatter plot the change in this trend seems to be the result of a convergence from 1974 to the mid 1980s, and then a slow

<sup>&</sup>lt;sup>15</sup> The coefficient remains insignificant, but it was .002 in DEB and is now .011. This reflects a sharp liberalizing trend among liberals beginning in 1990.

divergence to 1993, with a strong divergence after 1994 attributable primarily to a strong conservative trend among people who identify as "conservatives." Finally, while in DEB attitudes towards women's public roles were converging between liberals and conservatives, this no longer holds true. Examination of the scatter plot (not shown) reveals that attitudes converged until the late 1980s and have run parallel since then. The additional years showing no change simply began to outweigh the smaller number of years which showed convergence.

It appears that the "liberal" and "conservative" labels have increasingly become markers of positions on social issues over time (Miller and Hoffmann 1999). "Conservatives" are those who are aligned with the social agenda of the social conservative wing of the Republican Party, and "liberals" are those aligned with the social liberals in the Democratic party.

Party Identification. DEB concluded that mechanisms that political scientists have identified as attracting parties to the political center seem to have broken down. DEB identified nine issues on which Democrats and Republicans had become more polarized, and 8 on which they had remained constant in their differences. While this polarization has been observed among elected officials (Poole and Rosenthal 2001), it has not been observed in the general public. We see now that when the data used by DEB ended in 1994, they were simply seeing the early signs of a much more significant trend. With the additional data, 14 of 17 variables show polarization between Democrats and Republicans, while only 3 do not change (there are no convergences.)

DEB noted divergence in the NES and GSS omnibus scales, abortion, feelings toward the poor, liberals and conservatives, as well as in attitudes toward crime and justice, racial attitudes and divorce law. These trends all continued in the new analyses. However, we now see polarization between the

parties in attitudes toward aid to minorities, women's roles (NES), family gender roles (GSS), sexual morality and school prayer.

While this might suggest increasing conflict between the parties, an examination of the extent of internal polarization within each party complicates this conclusion. While the two groups are separating in their mean opinion, the Republicans are becoming increasingly internally polarized over the poor, liberals and abortion. Both groups are becoming more internally polarized on attitudes toward sexual morality. Internal divisions should lessen the willingness of a group to battle on an issue. If there are any issues that are more prone to conflict due to the increasing polarization between the groups, they are aid to minorities and women's roles (NES) because in these two cases polarization between groups is accompanied by decreasing polarization within both groups, suggesting that there will be greater support for any conflict within each group. That said, it is clear that polarization between the parties has broadened since DEB's analyses.<sup>16</sup>

Conclusions. As DEB found, there is little evidence of increasing polarization and more evidence of decreasing polarization between groups, including groups commonly thought to be polarizing, such as men and women, the young and the old, those with greater and lesser education, blacks and whites, residents of the South and residents of the rest of the country, and religious conservatives and liberals. The one exception found in DEB was increasing polarization between those

<sup>&</sup>lt;sup>16</sup> With robust models the school prayer variable does not show significant polarization. However, while the OLS model for the sex education variable does not, it is significant in the robust model. In terms of my point about the growing allegiance of the two parties to one or other side of the Religious Right's issues, these two findings balance each other out.

who identify as Democrats and those who identify as Republicans. This polarization has broadened to encompass more issues. Also, whereas DEB only found polarization between self-identified liberals and self-identified conservatives on the abortion issue, polarization between these two groups has broadened, with polarization now occurring on the issues of sex education and school prayer. Evidence suggests that in a few years polarization between these two groups will be observed on a range of other issues as well.

#### SUMMARY AND DISCUSSION OF DIFFERENCES IN POLARIZATION FINDINGS

The most recent data used by DEB was the 1992 NES and the 1994 GSS. Much has transpired in U.S. society since that point, and replicating DEB's analysis with updated data allows me to see if any changes in DEB's conclusions about polarization in American society should be made.

A secondary theme in DEB was the idea that polarization may simply be the result of the agendas of political movements. DEB had framed their analysis not to test this idea explicitly, but more to assess the claim that polarization was the result of some macro-societal phenomena. Evidence for the influence of political movements was at best suggestive, so it was not emphasized. The particular patterns of newfound polarization in this paper suggest that the primary polarization occurring in the United States is among political activists who are becoming more polarized over the issues that have been of concern to politically active religious conservatives.

Support for this interpretation comes from the following. First, polarization seems to occur on issues that are important to politically active religious conservatives, such as abortion, sexuality, divorce law, school prayer and the like. Second, it is now clear that the primary instances of between-group

polarization are between people who are identified by their politics, not by their gender, religion, race or some other identity. Note that it is not the marginally politically involved who are polarizing (like voters), but rather those who identify with the partisan labels in the political system – people who label themselves liberals or conservatives, Democrats or Republicans.

In sum, with the additional years of data we have a more fine-grained interpretation of polarization in America. In contrast to DEB's conclusion that there was really little polarization in America (with the exception of abortion and some polarization between Democrats and Republicans), it is now safe to say that their findings are simply indicative of what is now a broader pattern of polarization between those who identify with political labels.

It is important to add that this polarization over the issues of concern to politically active religious conservatives is not accompanied by polarization between religious conservatives and religious liberals. This could be for any number of reasons. First, the categories could be too blunt. Second, there is a difference between the politically active in the religious traditions and everyone else. Third, the political agendas of politically active religious organizations might not have religious traditions as their base.

#### CONCLUSIONS

DEB concluded their study by asking why there was the perception of polarization when there was little evidence of polarization among the population. They outlined twelve possible explanations. In light of the additional years of data, which found an even more striking polarization based upon political identifications, I think we can narrow those 12 down to two prime suspects -- the polarization of

political parties and a crystallization of the meaning of "liberal" and "conservative."

Political scientists have found that polarization between Democrats and Republicans in Congress declined from the beginning of the twentieth century until World War II, was stable until the late 1970s, and since then has been increasing (Poole and Rosenthal 2001, 18-19). If anything, Poole and Rosenthal conclude, the 1990s show an acceleration of the trend. While Bartels has noted that "we know less than we should about the nature and extent of mass-level reactions to these elite-level developments" (2000, 44), other political scientists have concluded that the increasing partisanship of our elected officials has increased the partisanship of the general public (Hetherington 2001, 629). The present study suggests that polarization is occurring between people who identify with the two parties. Of course, it is beyond the scope of this paper to determine whether polarization in the attitudes of the party identifiers changed the voting behavior of our representatives or if the behavior of our representatives has changed the view of the party identifiers. I will leave that to my colleagues in political science to determine.

Poole and Rosenthal also emphasize that this polarization is increasingly between the (Republican) rich and the (Democratic) poor and see the primary issue as the redistribution of wealth (McCarty et al. 1997). DEB and this paper only examined two attitude questions that pertain to income redistribution -- attitudes toward the poor and aid to minorities -- and the results were ambiguous. While Poole and Rosenthal briefly mention that "gender, sexual orientation, abortion and other issues areas generally also map onto this dimension" (2001, 7), they focus on redistribution, partly due to the limitations of their data, I believe. Scholars in this tradition should consider whether polarization over social issues is another dimension that polarizes our elected officials, given that it seems to polarize the

rank-and-file political activists.

One final analysis using the GSS (not shown) reveals an increase over time in the likelihood that a person identifying as a Republican also identifies as a "conservative," and that a person identifying as a Democrat identifies as a "liberal." This suggests that the polarization observed in the people who identify with these terms is related to the polarization between the parties. Additionally, Miller and Hoffmann (1999) find that the label "conservative" is increasingly used by the religiously orthodox and the label "liberal" by the religiously progressive. This all points to attitude polarization driven by elites associated with the political system.

A final point should be made. DEB's stated motivation was to test claims by Hunter and others that America is in a "culture war." A tension in Hunter's claims was that at times he would use public opinion data to investigate polarization (Hunter 1991; Hunter 1994, chapter 4), but at other times would argue that the conflict he identified could not be observed in the general public (1994, vii), but was restricted to elites in the political system, such as social movement activists. The findings above suggest that the latter strand in Hunter's work is more accurate and should be pursued.

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<sup>&</sup>lt;sup>17</sup> This was a regression using the GSS data with party identification as the dependent variable, and the liberal/conservative scale, year and a liberal/conservative-year interaction as independent variable. The interaction term was significant, indicating that conservatives have become more associated with the Republican party over time and that liberals have become more associated with the Democratic party over time.

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