Consistency of Consistency:

Identifying the Individuals with “Non-Attitudes”

Marshall Miller
Mathematical Methods in the Social Sciences
Northwestern University
Advisor: Professor Benjamin Page

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ABSTRACT

This project explores the topic of what causes respondents in a survey situation to answer more or less consistently across time to the identical political issue questions. This discussion was begun by Philip Converse in 1964, who used data from the 1956-1958-1960 American National Election Studies panel survey to put forth the idea that certain respondents were generally more consistent across time than others, and that these more consistent respondents should be characterized by a higher level of political attunement, which would involve such factors as education and interest in politics. Utilizing the same data, this project uses regression analysis to discover significant correlations between respondents’ temporal response consistency and their demographic and other characteristics. Results suggest that instead of being generally related to education and political interest, temporal response consistency depends on the relevance of the particular issue at hand to the respondent’s life and the clarity of the positive or negative consequences of the issue for the respondent and the respondent’s community.
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INTRODUCTION

Since public opinion polling and analysis began in earnest in the 1930’s, some academics have been skeptical of the usefulness of the data they collected. Surveys of the public’s general knowledge of policy and current events pointed toward an ignorance that would suggest that for a large portion of Americans, survey responses to policy and ideological questions were not grounded in real thoughts and beliefs, but rather were the product of spontaneity, superficiality, and randomness. For example, a 1946 Gallup survey found that only 47 percent of American adults knew that the term of a member of United States House of Representatives was two years in duration (Page and Shapiro 1992, 10). This sort of evidence of widespread ignorance raised the questions of whether public officials should heed the opinions of the population, and if not, whether public opinion was worth studying at all.

Using data from the 1956-1958-1960 and 1972-1974-1976 American National Election Studies panel surveys, Philip Converse studied the consistency of individuals’ opinions on political issue questions and determined that the high level of inconsistency he found in individuals’ consecutive answers to the same questions appeared to reflect random choices rather than meaningful change (Converse 1964). Although Converse acknowledged at one point that some respondents were likely to be more consistent on issues closer to their own lives, he did not explore this possibility in relation to temporal consistency and rather stood by the less complex idea that respondents higher up in intellectual hierarchy would be more consistent in general. Many decades later, Benjamin Page and Robert Shapiro acknowledged that Converse’s thesis may be true, but argued that the aggregated opinions of Americans are consistent, stable, explainable, and therefore, useful (Page and Shapiro 1992).
This project explores questions raised in both of the aforementioned lines of study by analyzing the demographics and attitudinal characteristics of individual respondents through the use of the same panel data that Converse used in his 1964 analysis. By assigning a scoring system to measure each respondent’s tendency to give consistent answers and using multivariate regression analysis to observe the effects of demographic and attitudinal specifics, this project discovers certain characteristics that are associated with being more or less consistent, other characteristics which are explicitly not associated with consistency, and explores a possible pattern in those characteristics.

This project first explores the demographic and attitudinal factors that are associated with a respondent’s overall propensity to give consistent answers. Results from this section suggest that there may be no identifiable specific characteristics associated with being a more or less consistent respondent in general, most notably those characteristics like education, income, and political participation, things that Converse would say characterize intellectuality. Instead, largely through the importance of the variable labeling a respondent African American, this section suggests that consistency is much more based on the specific issue asked of a specific respondent, meaning that the situation appears much more nuanced than Converse suggested.

To further pursue this approach, the general propensity to give consistent answers is broken down into the propensity to answer consistently on each separate survey question being studied. Results here are promising, and show that variables that might be expected to be associated with consistency are not, while many other variables are. This section uses these responses to identify a possible pattern: that response consistency is primarily related to the relevance of a particular question to a respondent and the clarity of the application of the answer alternatives to the respondent’s life. In other words, if it is clearer for a respondent to identify
what their answer on a given question would mean for their daily life or personal values, then they will be more consistent in their responses. In this scenario, more highly educated respondents could be explicitly less consistent on a given issue because their unique social position places them farther from it and its consequences. In the last section of the analysis, a possible direction in which to expand this project is experimented with.

The project concludes with a return to the ideas of Page and Shapiro and to a specific interesting moment from Converse’s 1964 article, followed by suggestions for future research.

BACKGROUND AND PREVIOUS RESEARCH

The 1956-1958-1960 American National Election Studies panel study was able to many of the same questions three times to hundreds of respondents. While a 1,514 person random sample of the American adult population was eventually interviewed over the course of the study, significantly fewer were actually interviewed all three times, due to death, changes of residence, and other circumstances. These missing respondents were replaced by new subjects for the subsequent years. Over 300 questions were asked each of the three years, including demographic, attitudinal, ideological, and background questions.

Philip Converse began to study the consistency of responses after the 1956-1958-1960 ANES panel study with his 1964 article, “The Nature of Belief Systems in Mass Publics.” In this article, among other things, Converse began the study of what became the focus of his 1970 and 1979 articles: the “non-attitudes” that he maintains are held by such large percentages of the American population as to jeopardize the value of many survey results. Converse studied response consistency in several ways, including across related issues and across time on the same issue. It is this latter method on which this project focuses. To study consistency across time,
Converse observed the temporal correlations between the three different responses given in different years by each respondent to eight policy questions that asked about a wide variety of subjects such as the government’s role in school desegregation, foreign aid, isolationism, and education spending.

Converse found that while test-retest Pearson correlations between subjects such as party identification could be 0.80 and higher, correlations between the eight policy questions were much lower, ranging between 0.23 and 0.46 (Converse 1970, 170.) Further, he observed that test-retest correlations between all three pairings for any given question remained relatively constant, e.g. correlations between a 1956 and 1958 response would be similar to that between a 1958 and 1960 response, and a 1956 and 1960 response. This suggested a lack of a meaningful shift in national opinion over time.

Based on these correlations, Converse outlined what he called the “black and white” model, in which the mass public is divided into two definitive groups: those who have well-formed, and therefore perfectly stable, opinions over time, and those who have beliefs which vary randomly. The people in the latter group, Converse wrote, “for lack of information about a particular dimension of controversy, offer meaningless opinions that vary randomly in direction during repeated trials over time” (Converse 1964, 243.) The clear shortcoming of this model is that it does not explicitly account for those people who belong in the second random group, but rather fall into the first group because they randomly chose the same answer three times, nor does it account for those people whose changes were meaningful and real but are placed by the model into the random change group.

After attempting to probabilistically account for the former case of three randomly chosen consistent answers, and after dropping responses with explicitly equivocal answers such
as “don’t know” and “no opinion.” Converse found that the responses to one specific question concerning energy and housing fit his model extremely well, while the other questions fit reasonably but not quite as well. Converse attributed the shortfall of the other questions fitting the model to the impossibility of distinguishing real opinion change from random variation. Overall, Converse concluded that “large portions of an electorate do not have meaningful beliefs, even on issues that have formed the basis for intense political controversy among elites for substantial periods of time” (Converse 1964, 245.)

In his 1970 and 1979 articles, Converse expanded on his “black and white” model, in more technical detail with the entire article devoted to it in 1970, and with the newer 1972-1976 ANES panel survey in 1979. In 1970, Converse explained the “black and white” model, related intuitively above, using the vocabulary of Markov chains and matrices (Converse 1970.) In 1979, Converse and Markus used the 1972-1976 study to conclude that despite many changes in party loyalties and national attitudes since the 1956-1960 study, the patterns of the “black and white” model remain very similar to those estimated in his earlier articles for the earlier data (Converse and Markus.)

Converse proceeded through much of these articles with the underlying principle that respondents who are higher up the intellectual chain, so to speak, should give more consistent answers on these political survey questions. He develops this notion while discussing the differences of consistency between a sample of the public and elites, such as congressional candidates, who he finds to be consistently more consistent on virtually all issues.

Other authors, such as Charles Brody, have expanded on Converse’s work and looked at specifics and different methods for working with attitude consistency. Brody attempted to look at the “black and white” model without eliminating the equivocal responses, but rather by
treated them probabilistically. He found that once the equivocal responses were taken into account using his method, Converse’s model no longer fit, and a more appropriate model would be called “black-gray-white” (Brody.)

Although Converse’s research appears discouraging regarding the usefulness of political survey data, certain authors have made efforts to show the data’s validity. A good example is the work of Page and Shapiro, who argue that despite the large proportions of adults who appear to muddle survey results with random answers, aggregated results remain consistent, coherent, and explainable with regard to historical circumstances. Survey respondents, they say, are constantly exposed to random bits of information from all sorts of different media outlets and opinion leaders, causing their opinions to vary randomly around their central tendencies. In the aggregate, if all these random variations are independent across individuals, they will tend to cancel each other out, leaving a coherent and remarkably consistent and useful public opinion (Page and Shapiro, 15-26.)

This project’s objective is to look at the specific individuals in these surveys to attempt to identify what sort of people they are, and to find a pattern of consistency to compare with the work of Converse. The data might also help draw conclusions about what a pattern in consistency implies for the aggregated public opinion advocated by Page and Shapiro.

DATA AND METHODS

The data for this project center on seven political issue questions that were repeated with exactly the same wording in all three panels of the 1956-1958-1960 ANES panel study. These questions deal with the issues of the government’s role in employment, world affairs, foreign aid, treatment of African Americans, education, power and housing, and school desegregation. An
eighth question, concerning policies for fighting communism, was left out of this analysis, although it was used in earlier analyses of this data, because of the specificity of the issue and the highly obsolete nature of the subject. The exact wording of these questions can be found below.

**Figure 1: Exacting wording of the seven political issue questions**

1. “The government in Washington ought to see to it that everyone who wants to work can find a job.”

2. “This country would be better off if we just stayed home and did not concern ourselves with problems in other parts of the world.”

3. “The United States should give economic help to the poorer countries of the world even if they can’t pay for it.”

4. “If Negroes are not getting fair treatment in jobs and housing, the government should see to it that they do.”

5. “If cities and towns around the country need help to build more schools, the government in Washington ought to give them the money they need.”

6. “The government should leave things like electric power and housing for private businessmen to handle.”

7. “The government in Washington should stay out of the question of whether white and colored children go to the same school.”

For each question, respondents chose from six alternatives: “agree strongly,” “agree, but not very strongly,” “not sure, it depends,” “disagree, but not very strongly,” “disagree strongly,” and “no opinion.” Before analyzing data gathered from these questions, it is important to talk for a moment about the wording of the questions themselves. It is widely understood that a question’s wording can have a dramatic effect on responses, and it appears that the above seven questions are susceptible to this. For instance, Questions 1, 5, and 7 ask about federalism, the size of government, and a specific issue all at once. They all ask whether “the government in Washington” should pursue a certain position. A respondent might answer based on whether he or she agrees with the issue position, whether he or she thinks it is the role of government to pursue that position, whether he or she thinks it is the national rather than the state or local
government that should be pursue the position, or some combination of the three. In Question 4, for example, a respondent might agree that African Americans deserve equal treatment in jobs and housing, but could disagree with the statement because he or she believes the government should stay out of social issues. A different sort of wording problem occurs, for example, in the combination of electric power and housing in Question 6. These two topics are not closely related, resulting in some respondents answering on the basis of one, some on the other, and some on both. Perhaps ambiguities like these are what led Converse to write that the wording of these questions could cause “an incredible degree of measurement unreliability” (Converse 1970, 171.) Christopher Achen also recognized the ambiguity of the questions in this panel study as a problem of measurement error, making it the focus of a project to devise a system to measure response consistency independent of measurement error (Achen 1975.) Nevertheless, this project will proceed, keeping in mind that responses were likely sensitive to the wording of questions and that the discussion of results from these responses necessarily are as well.

For the purposes of this analysis, the six possible responses were trichotomized into an “agree,” a “disagree,” and an “equivocal” category, the latter of which contained all “not sure, it depends” and “no opinion” responses. Converse and then later, Brody, similarly trichotomized responses in order to do away with possible measurement error caused by the arbitrariness and subtleties of the difference between a strong agreement or disagreement and a weak agreement or disagreement. Achen agrees that this arbitrariness is a problem, saying: “respondents will not always respond the same way to the same question even if their attitudes remain unchanged. A subject may say ‘strongly agree’ one time and ‘agree’ the next, simply because of the ambiguity of the question asked or because he is uncertain how strong is ‘strongly’” (Achen 1975, 1220.) This sort of collapsing of responses may have some negative consequences for the analysis, in
that it allows some real change to count as consistency. A respondent who deliberately changes his or her response from “agree strongly” to “agree, but not very strongly” would, in this system, be considered not to have changed at all. But at the same time, trichotomizing responses does away with the subjective interpretation of “strongly” and “not very strongly” and the resulting measurement error, leaving only the clear definition between an agreement and a disagreement.

While many analyses of this data set omit equivocal responses in order to make clear the dynamics of the definitive switching of attitudes, this project attempts a logical system to incorporate them. There are several reasons that this was done. Firstly, over 90 percent of respondents gave an equivocal response for at least one of the 21 responses over the three surveys. Since this project investigates the sources of overall consistency, it simultaneously analyzes all 21 responses, and so excluding those respondents who have answered equivocally would drastically reduce the sample size. Secondly, to restrict analysis to respondents who always give definite answers might espouse problems of sample selection, which would cripple the effectiveness of linear regression because of the absence of a random sample. And finally, it makes sense that an equivocal response is valuable information when looking at response consistency because a change from a definite response to an equivocal one is a change. Hopefully, this inclusion of equivocal responses will improve the investigation, in the spirit of Brody, who included equivocal responses to avoid a large loss of data (Brody, 662.)

To quantify the degree of consistency in responses, each respondent is assigned an “overall consistency score” which essentially is a number that is higher if the respondent is more consistent with his or her answers and lower if the respondent is less consistent with his or her answers. Each respondent’s “overall consistency score” was created by assigning a consistency score for each series of responses for the seven political issue questions, and averaging those
seven scores to create the overall score. By incorporating the consistency of every question into
the overall score, this method identifies at one extreme those respondents who are consistently
consistent and at the other extreme those who are consistently inconsistent.

Respondents who did not have answers coded for all seven political questions in all three
panels were discarded. These people were mostly those who were unable to participate in all
three surveys, such as people who moved residences after the first or second survey, and were
replaced by new people. This eliminated 647 respondents, leaving 867 of the original 1,514.
Additionally, respondents were discarded who did not have three answers coded for all of the 28
demographic and attitudinal questions that were incorporated either directly in the analysis or
were used to make other variables. Most of these independent variables are taken from the
respondents’ answers in 1956, meaning that respondents were eliminated if they were missing a
response from 1956, not from the other two years. This eliminated 129 respondents, leaving the
final sample size of 738.

It is important to mention that this process of eliminations based on independent variable
responses could also espouse problems of sample selection, since keeping only respondents who
always have answers coded for their demographics and attitudinal characteristics might not
constitute a random sample. It is unclear from the survey data what exactly occurred in the
survey situation that would have resulted in missing responses, and this makes it difficult to
speculate as to what sort of sample selection might be occurring. One possible way to speculate
might be to compare the demographic breakdowns of the samples before and after eliminations
to see if the reduced group is significantly different than a random sample of the original. This
was not attempted in this project, but is recommended for future research.
In order to create each respondent’s “consistency score,” respondents were first given a point value for each of their seven questions, according to the system detailed in Table 1. Lower scores were given for a time series of answers that reflected inconsistency, and higher scores for series that reflected consistency. Series that had zero or one substantive response, and could therefore not reflect a degree of consistency, occupy the middle of the spectrum, and could therefore not reflect a certain degree of consistency.

**Table 1: System for consistency score**

<table>
<thead>
<tr>
<th>Case</th>
<th>Responses</th>
<th>Example</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Three substantive and consistent</td>
<td>agree, agree, agree</td>
<td>12</td>
</tr>
<tr>
<td>B</td>
<td>Two substantive and consistent, one equivocal</td>
<td>disagree, equivocal, disagree</td>
<td>8</td>
</tr>
<tr>
<td>C</td>
<td>One substantive, two equivocal</td>
<td>equivocal, equivocal, agree</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
<td>Zero substantive, three equivocal</td>
<td>equivocal, equivocal, equivocal</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>Two substantive but inconsistent, one equivocal</td>
<td>equivocal, disagree, agree</td>
<td>5</td>
</tr>
<tr>
<td>F</td>
<td>Three substantive but inconsistent, inconsistent not from 1958</td>
<td>disagree, agree, agree</td>
<td>4</td>
</tr>
<tr>
<td>G</td>
<td>Three substantive but inconsistent, inconsistent from 1958</td>
<td>disagree, agree, disagree</td>
<td>0</td>
</tr>
</tbody>
</table>

The highest score was given to series of responses in which all responses were substantive and consistent (Case A). This sort of series would reflect the highest degree of consistency possible in a three point time series. A series with two substantive and consistent responses and one equivocal response was assigned the next highest score because it is the next clearest expression of consistency (Case B). Such a series might imply that the respondent held reasonably consistent opinions, but not so solidly that he or she did not express any sort of doubt. In other words, such a respondent may appear to “lean” in the same direction consistently.

Series with zero or only one substantive response were assigned neutral scores in the middle of the spectrum, because these series could neither reflect consistency nor inconsistency.
(Cases C and D). 44 percent of respondents had at least one series which was accordingly assigned a neutral score, reflecting the importance of equivocation in this dataset.

The scores below 6 reflect decreasing amounts of consistency. A series with two substantive and one equivocal response where the substantive responses are inconsistent was assigned the first score below six (Case E). This case shows inconsistency, but is tempered by the indecision reflected in the equivocal answer.

The final two scores require some explanation. In this analysis, there are two distinct ways in which three substantive responses in a series could be inconsistent. The response inconsistent with the other two could be the first or the last (1956 or 1960) response or it could be the middle (1958) response. These two cases were made distinct because the former simply contains less individual inconsistencies than the latter. In Case G, the respondent changes opinion once between 1956 and 1958, and again in the opposite direction between 1958 and 1960, making for two inconsistencies. Changing twice in four years is more inconsistent than changing once. In his analyses, Converse does not distinguish between these two cases, because his test-retest correlations cover only the attitude consistency between two years. And in Page and Shapiro, all cases of substantive but inconsistent responses are grouped together (Page and Shapiro 1992, 7).

Finally, an explanation is required for why Cases A and G are assigned such extreme point values in comparison to the other cases. Those first and last cases seem to be those which most clearly reflect consistency and inconsistency, respectively. While it is unclear how exactly an equivocal response should be interpreted or whether three substantive but inconsistent responses with the inconsistent response from 1956 or 1960 reflect real or random change, it seems that three consistent responses can be thought to solidly reflect consistency of opinion,
and that three consistent responses with the inconsistent response from 1958 can be thought to solidly reflect inconsistency of opinion. Therefore, those two outside cases were weighted more heavily because they more dependably indicate the situations that are being studied here.

By assigning more moderate scores to series in which there is equivocation, the system puts a heavier weight on locating respondents who switch their opinions. If this analysis were identifying characteristics of respondents who simply had the least congealed opinions, higher point values would be assigned to series with most equivocal responses, because those responses clearly reflect a lack of opinion. Instead, such series are put in the middle of the point system, with series that appear to reflect real consistency having higher scores and series that appear to reflect the sort of inconsistency and false consistency which concerns Converse having lower scores.

After assigning consistency scores for each of the seven political issue questions, the next step to determine each respondent’s “overall consistency score” is simply to average their seven consistency scores from each policy question by adding and dividing by seven. In this way, respondents who are consistent with their answers question after question have high scores, and those who are repeatedly inconsistent have low scores. Because of the arbitrariness of the absolute values of the consistency scores, there is little to be gained from looking at what the actual “overall consistency score” is for a respondent, but rather how it compares to the scores of the other respondents. So that these comparisons may be made later, Table 2 contains a percentage breakdown of the “overall consistency score.” Something to notice from this table is that 45% of respondents have scores between 7 and 9 points, a high concentration in a small range, compared to the overall possible range of scores, which goes from 0 to 12.
Of course, this point system has been chosen somewhat arbitrarily even given the rationalizations of the point values above.

Table 2:
Percentages of respondents with a given overall consistency score (upper limit inclusive)

<table>
<thead>
<tr>
<th>Score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>0%</td>
</tr>
<tr>
<td>3-4</td>
<td>1%</td>
</tr>
<tr>
<td>4-5</td>
<td>2%</td>
</tr>
<tr>
<td>5-6</td>
<td>8%</td>
</tr>
<tr>
<td>6-7</td>
<td>17%</td>
</tr>
<tr>
<td>7-8</td>
<td>23%</td>
</tr>
<tr>
<td>8-9</td>
<td>22%</td>
</tr>
<tr>
<td>9-10</td>
<td>19%</td>
</tr>
<tr>
<td>10-11</td>
<td>7%</td>
</tr>
<tr>
<td>11-12</td>
<td>1%</td>
</tr>
</tbody>
</table>

Future work would benefit from experimentation with other scoring systems, specifically with the use of heavier and lighter weightings for the extremities of those scores in the current system. This is touched upon again in the results section to show how different weightings can change results. A possible goal for the scoring system might be to achieve a normal distribution for the distribution of scores. It is possible to see in Table 2 that the current score system is distributed somewhat normally, with a decreasing tails at both extremities. But on the other hand, another possible goal could be to expand the concentrated middle range of scores, a high percentage of which are located within a two point window.

The scoring system could also be changed depending on the logic used to determine what different response combinations mean for consistency. For instance, in the current system, three equivocal responses garner a neutral score of 6. It is conceivable that three equivocal responses could be interpreted as reflecting consistency, in that the respondent consistently and dependably did not have an opinion, meaning that it would deserve a higher score. Ultimately, all different scoring systems depend on the somewhat arbitrary justification of the researcher. This project
will proceed with the scoring system laid out above, and will leave other scoring systems for further research.

But while the arbitrariness of the values of the scoring system causes the problem of interpreting magnitude, the system still allows for a productive multivariate regression analysis to determine factors associated with having a higher or lower score.

Twenty-three demographic, participation, and attitudinal factors were included as independent variables in all regressions. Names of the variables are given in regression tables, and full explanations can be found in the Appendix. Most variables are binary, or answered on simple three or five point scales. Two variables were constructed for the regressions from other original variables: the political participation aggregation and the political attitude aggregation. As can be seen in the Appendix, these were each made by averaging the responses to several similar questions that asked about the level of a respondent’s political participation and attitude toward the functioning of government, respectively.

A note about measurement error in the independent variables is necessary. This dataset has been notorious for high levels of measurement error due to ambiguity in question wording, but Achen recognizes the error that may come from human mistakes and other problems in coding responses (Achen 1975, 1222.) Such issues are evident simply from the fact that a handful of respondents were coded with different genders in different years. Experimental efforts have been made here to reduce this type of error by averaging responses across the years for the sorts of demographic background questions whose answers are not expected to change. Those sorts of questions include age, gender, education level, and size of hometown. In this project, averaging has been attempted only with education level, and could be extended in the future to include other variables. Education, however, seemed to be a particularly large source of
measurement error, with instances when a respondent might indicate a decreasing level of education over time.

RESULTS

The results section is divided into three subsections. The first, aggregated regression, contains one regression with “overall consistency score” as the dependent variable. The results from this regression inspired the regressions in the second subsection. This subsection, individual regressions, uses the seven different consistency scores of the seven political issue questions as dependent variables. This section contains the bulk of analysis and discussion. The third section preliminarily explores the variance of responses inside communities as a possible associate of individual response consistency.

Aggregated Regression

Before any sort of interpretation of the results from the regressions in this project, it is important to mention that the meaning of the magnitudes of the coefficients is made difficult to interpret both by the arbitrariness of the scoring system discussed above and the arbitrariness of some of the answer codes from the survey itself. For example, the “interest in campaigns” variable is coded on a three point scale, making it difficult to make statements about the effect on a respondent’s consistency score of moving from “not much interested” to “somewhat interested.” Efforts have been made, however, to rescale variables to make as much sense as possible, as can be seen in the Appendix. Given these reservations, the magnitudes of the coefficients can still be useful in comparison to each other and to the scale of the scoring system.

But despite these problems of magnitude, the statistical significances and direction of the coefficients in Table 3 are very real and useful. Three factors are statistically significant at the
10% level, and one at the 1% level. While in the social sciences, significance at the 10% level is generally worth considering, it is important to mention that using a 10% significance level in a regression with over 20 variables runs the risk of generating false positive results.

Fortunately, some of the results that are significant only at the 10% level in the aggregated regression in Table 3 are found to be caused by the influence of more highly significant

Table 3:

Multivariate regression of personal characteristics on “overall consistency score”

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Overall consistency score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party identification and strength</td>
<td>-0.04 +</td>
</tr>
<tr>
<td>case which party wins</td>
<td>0.02</td>
</tr>
<tr>
<td>Perceived personal financial state</td>
<td>-0.06</td>
</tr>
<tr>
<td>Perceived change in personal financial state</td>
<td>0.09</td>
</tr>
<tr>
<td>Voting frequency in presidential elections</td>
<td>0.06</td>
</tr>
<tr>
<td>Interest level in campaigns</td>
<td>0.04</td>
</tr>
<tr>
<td>Political attitude aggregation</td>
<td>0.15</td>
</tr>
<tr>
<td>Thinks politics is too complicated</td>
<td>0.13</td>
</tr>
<tr>
<td>African American</td>
<td>0.95 **</td>
</tr>
<tr>
<td>Number of children in household</td>
<td>0.02</td>
</tr>
<tr>
<td>Protestant</td>
<td>-0.54</td>
</tr>
<tr>
<td>Catholic</td>
<td>-0.46</td>
</tr>
<tr>
<td>Jewish</td>
<td>-0.43</td>
</tr>
<tr>
<td>Other religion</td>
<td>-0.56</td>
</tr>
<tr>
<td>Church attendance</td>
<td>0.08 +</td>
</tr>
<tr>
<td>Male</td>
<td>0.07</td>
</tr>
<tr>
<td>Married</td>
<td>-0.14</td>
</tr>
<tr>
<td>Education</td>
<td>0.02</td>
</tr>
<tr>
<td>Size of hometown</td>
<td>0.01</td>
</tr>
<tr>
<td>Income</td>
<td>0.00</td>
</tr>
<tr>
<td>Political participation aggregation</td>
<td>-0.22</td>
</tr>
<tr>
<td>Has participated in a political meeting</td>
<td>0.33</td>
</tr>
<tr>
<td>Age</td>
<td>0.01 +</td>
</tr>
</tbody>
</table>

R-squared 0.056
F test: Education=0, Income=0 (p-value) 0.349
n 738

Note: Coefficients with “***” are significant at the 1% level, coefficients with “**” are significant at the 5% level, and coefficients with “+” are significant at the 10% level.
component variables in the next section on individual regressions. This will be revisited in the next section.

Additionally, significances in this analysis are to some extent dependent on the specifics of the arbitrary scoring system used. Experimenting with other point systems yielded different results. For example, one attempt further emphasized the extremity of Cases A and G from Table 1, by adding and subtracting five points from their scores, respectively, to make them further from the neutral value of six. This resulted in raising the significance of “party identification” to the 5% level, and raising the significances of “voting frequency,” “religiousness,” and “participation in a political meeting” to the 10% level. This sort of change should be taken as anecdotal evidence that a refined scoring system would allow a more confident discussion of the results whose importance are suggested by the analysis done in this and the following regressions. Experimenting with several different scoring systems would shed light on exactly how the system affects regression results.

The first important result in Table 3 is the lack of fulfillment of expectations, namely the lack of statistical significance and miniscule magnitude of the coefficients on income and education, and the reflections of greater political involvement, namely caring which party wins, voting frequency, campaign interest level, political attitude, and political participation. These are variables that according to Converse’s thinking should be the most important factors determining consistency of opinion. Given Converse’s belief that response inconsistency is related to ignorance and indifference, this result is a surprising one, and is the first interesting finding of this project.

Since income and education are often important variables in social science investigations, extra care was given to confirm their lack of significance in this regression. The possibility
existed that multicollinearity between the two was inhibiting either of their significant properties to be captured in the regression output. The joint F-test results for income and education are given at the bottom of Table 3 and show that effect not to exist here.

Given the lack of significance of most of these variables, this regression suggests that there is not a single unifying factor that predicts response consistency along the general framework outlined by Converse. In other words, there do not appear to be certain characteristics that would separate those respondents in the “black and white” model with perfectly stable opinions from those respondents whose opinions change randomly. It appears, therefore, that looking at aggregated consistency scores might be too broad a method for identifying the sources of response consistency.

Although the regression has a very low R-squared at 0.056, there are significant variables: party identification, African American, church attendance, and age. All of these variables are discussed in the next subsection, but a quick comment about the African American variable suggests a clue as to what might be happening in this regression. It is relatively large and highly significant, dictating that on average, and controlling for all other factors, an African American respondent would have about a one-point increase in consistency score. This one point increase is large given that 45% of overall consistency scores lie between 7 and 9 (see Table 2.) The surprising importance of this variable inspired the regressions in the next subsection. Looking at the seven political issue questions, two of them deal directly with African American welfare. It appeared possible that the personal relevance of these questions for African American respondents might increase their consistency on those answers sufficiently to raise their aggregated consistency scores significantly. It turns out that this effect does seem to be
occurring, but only with one of the questions related to African American issues. The next section pursues regressions on the individual survey questions in order to examine this effect.

**Individual Regressions**

Decomposing the aggregated consistency score back into its original seven component questions yields many results. The results are presented in Table 4 and are the central results of this project. They suggest that response consistency is not as heavily associated with education, political interest, or political involvement as it is with personal relevance of the issue at hand and the ease with which a respondent can evaluate the benefit to his or her own life of answering one way or the other. As the regression results are presented, this section proposes a possible methodology for interpreting them logically. Admittedly, this method is subjective and makes assumptions, but should be taken for one possible way to look at the results.

One set of assumptions involves interpreting the meaning of the survey questions themselves and about the way respondents will interpret them. For example, several of the questions ask about whether government should enforce a given policy. It is impossible to tell whether a respondent would interpret it as a question on federalism, separation of powers, about the actual policy at hand, or some combination of the three. This is likely a problem that affects all results, since in order to interpret results, it was necessary to make assumptions on the interpretations of these questions.

*Insignificant Variables: leaning away from the Converse view*

One of the most important things to notice is the variables which are statistically significant in none of the twelve regressions, because these contain many of the variables that should be significant given the Converse view. ‘Perceived change in personal financial state,’ ‘other religion,’ marital status, ‘caring which party wins the presidential election,’ voting
frequency in presidential elections, interest level in political campaigns, income, and political participation level were statistically insignificant for response consistency on all survey questions.

Table 4:
Multivariate regression of personal characteristics on individual consistency scores

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dept.</td>
<td>Isolation</td>
<td>Foreign</td>
<td>Mental Health</td>
<td>School</td>
<td>Pervasive</td>
<td>Delegation</td>
</tr>
<tr>
<td>Party identification and strength</td>
<td>-0.06</td>
<td>-0.03</td>
<td>-0.11</td>
<td>0.05</td>
<td>-0.05</td>
<td>0.14</td>
<td>-0.24</td>
</tr>
<tr>
<td>Care which party wins</td>
<td>0.05</td>
<td>-0.04</td>
<td>0.15</td>
<td>-0.01</td>
<td>0.07</td>
<td>-0.02</td>
<td>-0.10</td>
</tr>
<tr>
<td>Perceived personal financial state</td>
<td>-0.38</td>
<td>0.20</td>
<td>-0.11</td>
<td>0.09</td>
<td>-0.38</td>
<td>0.01</td>
<td>0.16</td>
</tr>
<tr>
<td>Perceived change in personal financial state</td>
<td>0.10</td>
<td>-0.02</td>
<td>0.25</td>
<td>0.06</td>
<td>0.12</td>
<td>-0.11</td>
<td>0.20</td>
</tr>
<tr>
<td>Voting frequency in presidential elections</td>
<td>-0.09</td>
<td>0.05</td>
<td>0.13</td>
<td>0.15</td>
<td>0.00</td>
<td>0.14</td>
<td>0.06</td>
</tr>
<tr>
<td>Interest level in campaigns</td>
<td>0.13</td>
<td>-0.03</td>
<td>-0.05</td>
<td>-0.07</td>
<td>0.13</td>
<td>0.19</td>
<td>0.01</td>
</tr>
<tr>
<td>Political attitude aggregation</td>
<td>0.52</td>
<td>-1.24</td>
<td>0.18</td>
<td>0.23</td>
<td>0.86</td>
<td>0.11</td>
<td>0.37</td>
</tr>
<tr>
<td>Thinks politics is too complicated</td>
<td>0.13</td>
<td>-0.13</td>
<td>0.03</td>
<td>-0.28</td>
<td>0.50</td>
<td>0.04</td>
<td>-0.01</td>
</tr>
<tr>
<td>African American</td>
<td>2.62</td>
<td>0.45</td>
<td>-0.07</td>
<td>3.30</td>
<td>1.05</td>
<td>-0.57</td>
<td>-0.13</td>
</tr>
<tr>
<td>Number of children in household</td>
<td>0.03</td>
<td>-0.09</td>
<td>0.13</td>
<td>0.05</td>
<td>0.08</td>
<td>0.13</td>
<td>-0.19</td>
</tr>
<tr>
<td>Protestant</td>
<td>-0.49</td>
<td>-1.47</td>
<td>-1.72</td>
<td>-0.80</td>
<td>-0.08</td>
<td>0.26</td>
<td>0.55</td>
</tr>
<tr>
<td>Catholic</td>
<td>-0.45</td>
<td>-1.44</td>
<td>-1.97</td>
<td>-0.26</td>
<td>0.32</td>
<td>0.45</td>
<td>0.15</td>
</tr>
<tr>
<td>Jewish</td>
<td>-0.47</td>
<td>-2.48</td>
<td>-1.21</td>
<td>-0.15</td>
<td>2.04</td>
<td>-0.85</td>
<td>0.14</td>
</tr>
<tr>
<td>Other religion</td>
<td>1.88</td>
<td>-2.80</td>
<td>-0.24</td>
<td>-2.35</td>
<td>0.99</td>
<td>-1.19</td>
<td>-0.19</td>
</tr>
<tr>
<td>Church attendance</td>
<td>0.16</td>
<td>0.16</td>
<td>0.16</td>
<td>-0.04</td>
<td>0.04</td>
<td>0.06</td>
<td>0.00</td>
</tr>
<tr>
<td>Male</td>
<td>-0.36</td>
<td>0.41</td>
<td>0.45</td>
<td>-0.35</td>
<td>-0.14</td>
<td>0.28</td>
<td>0.19</td>
</tr>
<tr>
<td>Married</td>
<td>-0.01</td>
<td>-0.21</td>
<td>-0.38</td>
<td>-0.16</td>
<td>-0.52</td>
<td>0.14</td>
<td>0.17</td>
</tr>
<tr>
<td>Education</td>
<td>-0.17</td>
<td>0.34</td>
<td>0.03</td>
<td>-0.05</td>
<td>-0.15</td>
<td>0.13</td>
<td>-0.01</td>
</tr>
<tr>
<td>Size of hometown</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.04</td>
<td>-0.13</td>
<td>0.04</td>
<td>0.04</td>
<td>0.06</td>
</tr>
<tr>
<td>Income</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Political participation aggregation</td>
<td>0.52</td>
<td>-0.77</td>
<td>-0.67</td>
<td>-1.18</td>
<td>0.54</td>
<td>0.55</td>
<td>-0.52</td>
</tr>
<tr>
<td>Has participated in a political meeting</td>
<td>0.42</td>
<td>0.39</td>
<td>0.68</td>
<td>0.34</td>
<td>-0.43</td>
<td>0.11</td>
<td>0.27</td>
</tr>
<tr>
<td>Age</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.00</td>
<td>0.03</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Note: Coefficients with "***" are significant at the 1% level, coefficients with "**" are significant at the 5% level, and coefficients with "+" are significant at the 10% level.

The respondent’s perceived change in personal financial state is understandably insignificant, being sort of a ‘first derivative’ of the respondent’s perception of personal financial
state. The former is also highly correlated with the latter, helping to explain its lack of additional descriptive properties.

Only six respondents were coded to have “other religions.” Given this extremely low number of respondents, the lack of significance here is not important for this analysis.

Marital status is in this group as well, and its lack of significance is neither expected nor unexpected. This variable is highly correlated with age and with number of children, and much of its variation is possibly captured in those variables, both of which are significant in certain regressions. Since there were no particular expectations for this variable, and it turns out to be insignificant, it will not be given more attention in the analysis.

The following variables remain: caring which party wins the presidential election, voting frequency in presidential elections, interest level in political campaigns, political participation level, and income. As an aside, for the same reasons as in the previous section, F-tests were carried out to determine any joint significance between income and education that might not have been captured due to multicollinearity. The F-test results are at the bottom of Table 4 and are not significant for any regressions in which education is not already significant on its own.

These remaining variables are surprising. Given Converse’s view, all of them could be expected to be significant, because aside from income, these define, more than any others with the exception of education, the respondents who are more intellectual, informed, and otherwise engaged in the political process. Three other similar variables, ‘political attitude aggregation,’ ‘thinks politics is too complicated’ and ‘has participated in a political dinner’ do appear significant in some regressions, and will be discussed later. But it is important to note that these three are not among the more frequently appearing significant variables.
This reinforces the suggestion fostered by the regression in the previous section that political involvement or passion categorizes more consistent individuals. A person who more closely participates or cares about politics is not more consistent in general, nor even on specific issues and questions. As will be suggested with the statistically significant variables to be addressed below, following politics does not seem to generate the same kind of response consistency as having a personal stake or interest in a certain policy.

*Significant Variables: leaning toward issue based consistency*

Fifteen variables were significant in one or more regressions. Not all of the significant variables are given complete treatment here, but the most noteworthy and important variables which form the backbone of the concept promoted here are the ones that are discussed in full.

It is possible that some of these are false positive results, given the high number of independent variables and the fact that significances at the 90% level were used. However, 15 of 24 variables significant in any of these seven regressions were significant at the 95% level and above, showing that most statistical results are rather robust.

The discussion will begin with a specific example from the African American binary variable, because of the intuitiveness with which its behavior can be understood. The coefficient on this variable in the ‘African American treatment’ regression (Question 4) is one of the most highly significant of all the variables in all the regressions. The coefficient is positive and very large: being African American is associated with a 3.30 increase in consistency score on Question 4. It makes sense that African American respondents would answer consistently on a question that essentially asks whether they think the government should improve their lives. In fact, 58 of the 66 African American respondents answer positively in all three years. Only three ever give a negative response, and only six ever give an equivocal response. When African
Americans are faced with this question, it appears that it is easy for them to make a consistent decision, because they can simply apply the question to their own lives, without needing to remember how they answered the last time or anything else more complex. This is in contrast to non-African Americans whose decision could be more complex, having to be made on a higher, more abstract level, and more likely to involve issues of federalism, racism, and personal experiences.

Given these results from the question on African American treatment, one might think that a similar situation might exist with the other question involving African Americans, the ‘desegregation’ question (Question 7.) African American is not a significant variable in this regression, meaning that African Americans are not significantly more or less consistent than the rest of the sample concerning their responses on school desegregation.

These combined results illustrate the theme that runs through the analysis of most of the other significant variables: that respondents answer more consistently on issues that are more personal and in which they can more easily discern the cost or benefit of the result of their answer. African Americans may answer more consistently on the ‘African American treatment’ question (Question 4) and not on the ‘desegregation’ question (Question 7) because it is clear that improved treatment in jobs and housing results in a better quality of life for African Americans while school desegregation was not as clearly positive or negative for African Americans.

There is more to be said about the African American variable, and it will be returned to later in this section and in the next one. For now, this discussion will begin in earnest with the variable for education. Education was conspicuously insignificant in the original aggregated regression, but now emerges as a positive and significant variable in the ‘isolationism’ regression
(Question 2) about whether the United States should get involved in problems around the world and the ‘power and housing’ regression (Question 6). It is negative and significant for the ‘jobs’ regression (Question 1) and the ‘school help’ regression (Question 5).

To summarize those results: more highly educated respondents tend to be more consistent on Questions 2 and 6 while less educated respondents tend to be more consistent on Questions 1 and 5. Following the line of interpretation with the African American variable, it can be seen that less highly educated respondents answer more consistently on two survey questions that they can easily connect to their lives. They may be more likely than educated respondents to be dealing with the problems addressed those two questions: bad schools, and being out of work. And since they are confronted with them, they may have developed opinions or can easily apply the question to their personal situation to repeatedly come up with the same opinion. More educated respondents, on the other hand, are responding to something more abstract. To that group, who are possibly more likely to have steady work and live near better schools, these questions are about weighing a policy that does not directly affect them, and so their decision could be more about what is a better policy in general than about what is better for them and their community.

By this logic, one would expect the less educated, more consistent respondents to have answers tending toward agreement with higher government involvement for both questions. This turns out to convincingly be the case.

Table 5:
Means of responses by respondents below the 50 percentile of education level

<table>
<thead>
<tr>
<th>Year</th>
<th>Question 1</th>
<th>Question 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>1.483</td>
<td>1.361</td>
</tr>
<tr>
<td>1958</td>
<td>1.542</td>
<td>1.419</td>
</tr>
<tr>
<td>1960</td>
<td>1.464</td>
<td>1.539</td>
</tr>
</tbody>
</table>
Table 5 gives the mean response to Questions 1 and 5 from respondents with an education level below the 50 percentile. Note that these are the actual trichotomized responses to the survey question, not the consistency scores. All are less than two, showing tendency to agree with higher government involvement on these issues. While more highly educated respondents also tend to agree with higher government involvement on these questions, they do not do so as strongly as less educated respondents. The bivariate regressions in Table 6 show that agreement with higher government involvement, denoted by a lower coefficient, is more pronounced for less educated respondents.

Table 6:
Bivariate regressions of Questions 1 and 5 on education level

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Question 1</td>
<td>Question 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.127 **</td>
<td>0.120 **</td>
<td>0.093 **</td>
<td>0.064 **</td>
<td>0.093 **</td>
</tr>
<tr>
<td>R squared</td>
<td>0.108</td>
<td>0.096</td>
<td>0.062</td>
<td>0.038</td>
<td>0.069</td>
</tr>
<tr>
<td>n</td>
<td>738</td>
<td>738</td>
<td>738</td>
<td>738</td>
<td>738</td>
</tr>
</tbody>
</table>

Note: All coefficients are marked with “**” meaning that all are significant at the 0.01 level

All the regressions have extremely significant positive coefficients with p-values smaller than 0.001. These positive coefficients indicate that a more educated respondent would be more likely to disagree with higher government involvement, and therefore that the opposite is true with less educated respondents.

On the other end of the education spectrum, more educated respondents are more consistent on Questions 2 and 6. This might be understood by recognizing that the issues in these questions are difficult to relate to daily life. This is an example of a specific situation where a broad assumption about the consistency of more educated individuals applies.
One question deals entirely with foreign affairs, and the other with a policy that Converse calls the most ideological of all because of its abstract embodiment of the conflict between liberalism and conservativism.

More highly educated people might be expected to be paying closer attention and to have had more exposure to foreign policy and abstract political concepts. Ole Holsti confirms this in his book on the sources of foreign policy beliefs, *Public Opinion and American Foreign Policy*. Based on his research of public opinion polls, he wrote: “Education is also strongly correlated to interest in international affairs” (Holsti 2004, 224.) Topics dealing with foreign policy would, therefore, be more closely connected to the lives of more highly educated respondents given their heightened interest in the subject. But the fact that this expectation only applies on these two questions might be additional evidence that the expectation is too narrow to explain consistency across all topics. Consistency among more educated respondents for these two questions can be viewed as a specific case of a situation in which consistency is related to personal relevance.

A similar situation to that of the education variable may be occurring with the variable that records each respondent’s level of satisfaction with their personal financial state. Respondents who report that they are less satisfied with the financial state are more consistent on the same two questions as less educated respondents. Although these two effects cannot be happening for the exact same reasons because of the nature of linear regression, it is possible that they are related, having to do with the poorer working and schooling situation experienced by people with less satisfying financial conditions.

One would think that if people who are dissatisfied with their financial situation are more consistent on Questions 1 and 5, they would tend to be for government involvement on those issues. Taking the means and bivariate regressions in the same way as for the education variable,
it is seen that similar results arise. Lower financial satisfaction levels yield means less than two, and are also significantly associated with agreement with higher government involvement for five of the six times that Questions 1 and 5 were asked.

Returning to the African American variable, we see the same effect occurring. Being African American is significantly and positively associated with higher consistency on those same two questions, 1 and 5. With similar means and bivariate regressions as with the previously discussed variables, African Americans also tend to favor increased government support with both of these topics, both in general and in comparison to non-African Americans. Along the same lines as with the financial situation variable, this effect may be associated with a greater need for African Americans for help in the job market and school quality.

It is important to remember that the correlations of these variables must be, by the assumptions of linear regression, independent of each other, and independent of income, which is of course already controlled for. Because of this, they cannot have income or any of the other demographic variables being controlled for as their unifying factor. In fact, when race, perception of financial situation, and education are dropped from the regression, income becomes drastically less significant and the R-squared is halved.

Race and education are the factors that provide the strongest evidence for the view investigated by this project. Other significant variables also support the concept, but in less dependable and concrete ways. Nevertheless, the fact that these assorted demographic variables are statistically significant in these regressions is evidence in itself that consistency is multidimensional and complex.

While education had a significant and positive effect on consistency for the isolationism question, it was not consistent for the other foreign policy question on the level of foreign aid
(Question 3.) A look at the variables which were consistent for that question suggests that this is because the question was less abstract and more readily connected to daily life through the tangible concept of aid to people in need.

Consistency on Question 3 is positively and significantly correlated with frequency of church attendance, meaning that the more regularly a respondent attends church, the more consistent he or she will be on the response to Question 3. This is true regardless of specific religious denomination, since type of religion is controlled for. In fact, when the various religion variables are left out of the regression, the church attendance variables loses statistical significance, indicating that it is a respondent’s level of religiousness that plays a role in their consistency on the foreign aid question. Such an effect might conceivably exist because of strong charitable values present in many religions. A more religious person might have more exposure to such values through their regular involvement in the religious community, rendering a question about charity one that is closer to their own personal values. For a less religious person, answering Question 3 might involve a more abstract consideration of foreign and economic policies or history, making the decision less clear-cut and more prone to inconsistency.

### Table 7:
Bivariate regressions of Question 3 on church attendance

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>1956</th>
<th>1958</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church attendance</td>
<td>-0.0558</td>
<td>-0.0245</td>
<td>-0.0152</td>
</tr>
<tr>
<td>R squared</td>
<td>0.0097</td>
<td>0.002</td>
<td>0.0008</td>
</tr>
<tr>
<td>n</td>
<td>738</td>
<td>738</td>
<td>738</td>
</tr>
</tbody>
</table>

Note: The coefficient marked with “**” is significant at the 0.01 level

If this were the case, one would expect respondents with more frequent church attendance to be in favor of more foreign aid. The mean responses of those respondents who describe
themselves as regular church attendees are all less than two, indicating a propensity to be in favor of increased foreign aid.

The bivariate regressions in Table 7 give some evidence that more religious respondents are more in favor of higher foreign aid, but not particularly strong evidence. The coefficients are all negative, but only the coefficient from 1956 is statistically significant.

The one independent variable that gives results going somewhat against the idea that consistency is related to personal relevance is the number of children in the respondent’s household. The coefficient on this variable is significant and negative in the regression with the consistency scores from the school desegregation question (Question 7.). According to the pattern discussed above, one would expect that having more children would likely mean having more children in school, giving the respondent a greater connection to and consistency on school related issues. One thing to consider is that this issue was particularly volatile during the period of the survey, with many of the most important events related to school desegregation occurring between the years of 1956 and 1960. Since the status of the issue itself was so inconsistent, it may not be one of the better questions for viewing consistency in responses. Perhaps it is even possible to say that the high volatility of the issue caused those closer to it to be changing their opinion more often, an interesting possibility that could be explored more in depth.

Attempts at explanations for certain other significant variables would be tenuous and would require arbitrary and perhaps inappropriate assumptions. The results from these variables will be mentioned and briefly discussed.

The coefficient on the variable indicating whether a respondent is Jewish is significant and positive for the question on government help to schools (Question 5). In similar bivariate regressions as those in previous figures, identifying as Jewish is somewhat statistically
significantly associated with supporting government involvement in funding schools. The implication here is ambiguous, and could invoke any number of cultural implications.

The variable indicating the size of a respondent’s hometown was significant and negative in the question on African American treatment (Question 4.) This was the only significant variable in this regression other than race itself. The coefficient implies that being raised in a smaller town or rural atmosphere is associated with greater consistency on Question 4, and bivariate regressions show that for two of the three survey years, respondents from those smaller towns and rural areas were more likely to disagree with government assurance of equal treatment for African Americans in jobs and housing.

Age is significantly correlated only with the consistency scores for the question on power and housing (Question 6.) It is positively correlated, meaning that as respondents are older, they tend to be more consistent when answering this question. The link between age and consistency does not appear clear, and it is also confusing that this effect only exists with this one question, since age does not seem to have any special significance in the topic or wording of the question.

Several other puzzling variables remain. The political attitude aggregation is associated with lower consistency on Question 2: as a respondent’s attitude about the benevolence of government is more negative, consistency rises. The variable indicating whether a respondent believes politics is too complicated to understand is associated with higher consistency on the power and housing question (Question 6.) Being male is associated with higher consistency on the foreign aid question (Question 3.) As can be observed from the regression with Question 3 on foreign aid, both being Protestant and Catholic is significantly associated with decreases in consistency, and the coefficients on the other two religions are also negative but not significant.
It is difficult to interpret the variables in the last few paragraphs, and further regressions would hopefully explain their behavior.

Finally, one of the most interesting independent variables is party identification. This variable is coded on a scale from zero to six, with lower numbers being assigned to stronger Democrats and higher numbers being assigned to stronger Republicans. The coefficient on this variable is positive and significant for the question on power and housing (Question 6), meaning that Republicans tend to be more consistent. It is negative and significant for the questions on school desegregation (Question 7) and foreign aid (Question 3), meaning that Democrats tend to be more consistent.

Since many of the conceivable demographic factors that could characterize differences between the two parties are controlled for in these regressions, it is a fascinating prospect that something inherent about party identification would contribute to consistency, and that consistency is different for the two parties on different topics. (Nevertheless, there are variables that could have changed the way these regressions had resulted, such as union membership, because of its likely correlation with party identification.)

While the results of party identification may have some pertinence to the question of the roots of response consistency, the variable might be particularly interesting to explore in historical context. One interesting thought is that inconsistency might have some link to changes and instability with a given party’s platform or leadership. This opens up the question of how an individual’s response consistency is related to the consistency or variance of a response within a group, something that will be preliminarily explored in the next subsection.

Finally, to return to the previous subsection with the aggregated regression, an attempt at explaining the four consistent variables can be made. It appears that being significant in the
aggregated regression means that the variable is either strongly significant in an individual regression or repeatedly significant in individual regressions. The former seems to be the case with church attendance and age, and the latter more the case with party identification and African American. It appears unlikely that any of the significant coefficient in the aggregated regression should be taken as evidence that their respective variables are determinants of broad consistency or inconsistency for individuals. Race might possibly be viewed this way because it is positive and significant for three out of the seven questions, and negative for none. But in general, the individual regressions seem to communicate that consistency is complex enough that no one characteristic determines it.

**Experiment with Group Cohesiveness**

A question that has lurked in the background throughout the analysis in the previous section is about the link between a respondent’s personal consistency and the cohesiveness of the respondent’s community on that issue. This inquiry is applicable firstly in the general sense of whether consistency scores on a given survey question are related to the variance of answers to that question in a given year. Or in a more focused manner, one could ask the same thing within a specific demographic group or on a specific question. A few preliminary analyses that scratch the surface of this question reflect a possible link, but within specific demographic communities.

To address the initial question of consistency across the whole sample, a bivariate regression is run with the independent variable being the variance of responses to the seven questions for each of the three years, resulting in 21 possible values. The dependent variable is each individual’s consistency score for that question, resulting in 21 entries for each individual. Note that the variances are from the actual trichotomized responses to the survey questions, not the consistency scores.
Table 8:  
Bivariate regression of consistency scores on variances of question responses for all respondents

<table>
<thead>
<tr>
<th>Dependent variable: consistency scores</th>
<th>Coefficient</th>
<th>Stand. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variances</td>
<td>-0.492</td>
<td>0.347</td>
<td>0.156</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>15498</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The regression results in Table 8 are from the entire sample, and while they are not statistically significant at a 90% level, the p-value here, 0.156, is not dismally high. The coefficient, however, is negative, which would imply a decrease in response consistency as the variance of responses increases, and so there is a weak suggestion of a relationship.

To investigate this further, the exact same regression is carried out, this time only using data from the 66 African American respondents. Results were much stronger.

Table 9:  
Bivariate regression of consistency scores on variances of question responses for African American respondents

<table>
<thead>
<tr>
<th>Dependent variable: consistency scores</th>
<th>Coefficient</th>
<th>Stand. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variances</td>
<td>-6.301</td>
<td>0.365</td>
<td>0.000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.1775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>1386</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9 shows that the correlation between personal response consistency and cohesiveness in the population’s responses is strong within the African American community. The coefficient is negative and highly statistically significant. This suggests a link within specific demographic groups, and could interestingly be pursued with additional regressions involving other groups, such as Catholics or Republicans.
If such a link were to exist, it might open up this discussion to applications of historical context. For example, it is interesting that African American respondents are very consistent on the African American treatment question (Question 4), but are not particularly more or less consistent than non-African Americans on the school desegregation question (Question 7.) Admittedly, Question 7 does not ask as directly about the issue at hand as Question 4, since it really is asking about the federal government’s involvement in desegregation, rather than the merit of desegregation itself. But this difference between the results from the two racially related questions might also have roots in the link pursued above. The mean variance of responses of African Americans to Question 4 across the three years is 0.76, while for Question 7 it is 0.11. Perhaps African Americans answered less consistently on Question 4 because their community was less unified of opinion.

CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This project was an attempt to ‘zoom in,’ so to speak, on the dynamics of response inconsistency first investigated by Philip Converse in 1964 using the 1956-1958-1960 American National Election Studies panel surveys. Converse proceeded with a general principle that more highly educated or more politically attuned individuals would be more consistent across time in their responses to political issue questions. Looking in detail at this situation, it appears that no single factor determines a general propensity in a respondent to be consistent, and that in one possible interpretation, education or political attunement might only be one of the many factors that characterize consistency for specific issues.

In the first regression of the project, dealing with the overall propensity of respondents to answer consistently, none of the variables that Philip Converse would have said characterize
response consistency turned out to be significant. Other variables were consistent, and they hinted at several strong determinants of consistency being confined to specific issues for specific groups of people. The regressions in the next section pursued that hint and found many significant correlations. By making some assumptions based on logic or common knowledge, and doing some secondary regressions, the section attempts to illustrate one possible narrative of response consistency.

The results suggest a narrative in which respondents are more consistent when answering questions that are relevant to their own lives, and have clear positive or negative consequences to them and their community. This was most clear in the case of African American respondents, who in their responses to a question asking if the government should protect their rights in the workplace and housing market were highly consistent (and in agreement with protection.) But on a question that was equally explicitly related to African Americans, about whether the government should be involved in school desegregation, African American respondents were not significantly more consistent than other respondents. In the first question, the outcome for agreement with government protection was quite clear: a better situation in the workplace and housing market. But in the second question, the merit of the outcome could be seen to be much less clear, given that the process and result of school desegregation were not obviously good or bad for African American respondents. Certain results from other independent variables and other political issue questions follow a similar pattern, in which respondents are more consistent on questions that are relevant to their lives and have clearer consequences for them and their communities. The conclusion here is that variables that describe higher political attunement, most importantly education, appear not to be the main determinants of response consistency. The results suggest that there does not appear to be any determinant of overall response
consistency, but rather that consistency for a given respondent depends on the issue being addressed in relation to many characteristics of the respondent.

Given this interpretation of the results, it is worthwhile to turn to an interesting moment from Converse’s 1964 article in which he used strikingly similar language to that in the above paragraph to describe response behavior. During a discussion of response consistency across issues, Converse proposed a system of hierarchical groupings of political conceptualization. This system categorized respondents into five levels based on how abstract and deep their grasp of issues was. The middle level of the five levels contained what Converse called “group interest” people, meaning that “Unless an issue directly concerns their grouping in an obviously rewarding or punishing way…they lack the contextual grasp of the system to recognize how they should respond to it without being told by elites who hold their confidence” (Converse 1964, 216.) Here, Converse is saying that only a certain group of people have response consistencies affected primarily by relevance and clarity of the issue, and that this group is confined by a certain level of political sophistication. Admittedly, Converse was discussing response consistency across related issues rather than across time on the same issue, the explicit topic of this project. But it is still interesting that Converse saw issue relevance as a smaller determinant of consistency inside the larger framework of political sophistication while this project does the opposite, noting political sophistication (in the form of education level) as a smaller determinant of consistency within a larger framework of issue relevance.

Returning to the work of Page and Shapiro mentioned in the section on background, it appears that the results here have positive implications. If it had been confirmed that education, for example, were the overall determinant of response consistency, it would imply that the aggregated public opinion described by Page and Shapiro would consist only of the opinions of
highly educated respondents, since the random responses given by less educated respondents would have canceled out. But since it appears possible that there is no overall determinant of response consistency, the public opinion described by Page and Shapiro seems more egalitarian, including opinions from all parts of society on different issues.

These final paragraphs are devoted to ways in which this project could be improved and expanded upon. One major expansion of this research could possibly be the construction of an experiment to explicitly test the hypothesis set forward above by observing response consistency as it relates to personal relevance and clarity of the consequences of the issue at hand. Questions would be carefully written to probe different degrees of relevance and clarity on assorted political issues. This would allow the study of many more than the seven political issues questions used in this project, and would hopefully shed further light on the sources of response consistency.

This project would also benefit from many additions that were noticed over the course of its undertaking. Though many were mentioned throughout the exposition, some are repeated here and others are added. Firstly, and most glaring, is the need to explain many of the independent variables that appeared significant and were left unaccounted for in this project. This might be done through additional regressions. Regressions that identify whether a demographic that is more consistent on a particular issue question leans toward a certain position on that issue could help shed light on what is happening within that demographic to affect its consistency. Regressions with different selections of the 23 independent variables could in many situations help explain the behavior of the variables by identifying cases of multicollinearity and bringing out the individual roles of certain variables.
Testing and improvement of the scoring system has already been discussed, and would affect coefficients and their significances. The system is admittedly arbitrary, and different systems should be experimented with, perhaps with the objective to expand the distribution of scores, or to fit the distribution of scores to a normal distribution. These sorts of experiments would test the sensitivity of the regressions to the scoring system, which would shed light on the robustness of results.

The addition of geographic variables for states or regions of the country could improve analysis on topics like school desegregation. The addition of union membership as a binary variable might be valuable with respect to several questions as well as for improving possible omitted variable bias with party identification and other independent variables. The project could also benefit from the use of standardized coefficients, which allow one to compare the effects of variables that are coded on totally different scales, such as income and race. This is accomplished by subtracting the mean and dividing by the standard deviation of the variable, and would be able to identify, for example, whether being African American has a stronger association with consistency than does education on a given question.
APPENDIX

A. Exact wording of the seven analyzed political issue questions.

For each statement, respondents were asked to choose one of the following six options: “agree strongly,” “agree, but not very strongly,” “not sure, it depends,” “disagree, but not very strongly,” “disagree strongly,” “no opinion.”

1. “The government in Washington ought to see to it that everyone who wants to work can find a job.”

2. “This country would be better off if we just stayed home and did not concern ourselves with problems in other parts of the world.”

3. “The United States should give economic help to the poorer countries of the world even if they can’t pay for it.”

4. “If Negroes are not getting fair treatment in jobs and housing, the government should see to it that they do.”

5. “If cities and towns around the country need help to build more schools, the government in Washington ought to give them the money they need.”

6. “The government should leave things like electric power and housing for private businessmen to handle.”

7. “The government in Washington should stay out of the question of whether white and colored children go to the same school.”

B. Description of the thirty demographic, attitudinal, and participation variables, with response codes in parentheses. All variables are from the 1956 survey.

African American: *Responses:* Unity if respondent’s race is “negro” or “other,” zero if race is “white.”

Age: coded as the discrete age given by each respondent in 1956.

Church Attendance: Respondent answers how often he or she attends church. *Responses:* regularly (4), often (2), seldom (1), never (0).

Party identification and strength: respondent locates self on a six point scale. *Responses:* strong Democrat (0), not very strong Democrat (1), independent closer to Democrats (2), independent or no identification or other party (3), independent closer to Republicans (4), not very strong Republican (5), strong Republican (6).
**Voting frequency in presidential elections**: respondent answers how consistently he or she has voted in past presidential elections since he or she has been eligible to vote. **Responses**: all of them (5), most of them (3), some of them (2), none of them (0). Respondents who were unable to vote in previous elections either because of age, not yet having citizenship, or living in Washington, DC were assigned the average score from the rest of the respondents of 3.48.

**Has participated in a political meeting**: This variable might have been included in the Political Participation Aggregation variable, but gave sufficiently different results in regressions that it was instead included on its own. “Did you go to any political meetings, rallies, dinners, or things like that?” **Responses**: yes (1), no (0).

**Protestant**: **Responses**: Unity if respondent is Protestant, zero otherwise.

**Income**: Respondent places expected family income for the year in one of the given brackets. Responses were coded with the median for each bracket, and the last bracket was coded with an estimate of the national median for incomes over $10,000 based on The United States Department of Commerce Statistical Abstract of 1958.

**Responses**: under $1,000 (500), $1,000-$1,999 (1500), $2,000-$2,999 (2500), $3,000-$3,999 (3500), $4,000-$4,999 (4500), $5,000-$5,999 (5500), $6,000-$6,999 (6750), $7,000-$9,999 (8250), $10,000 and over (15189).

**Perceived change in personal financial state**: respondent answers about recent changes in personal financial state. **Responses**: getting better (2), stayed the same (1), getting worse (0).

**Catholic**: **Responses**: Unity if respondent is Catholic, zero otherwise.

**Thinks politics is too complicated**: This variable might have been included in the Political Attitude Aggregation variable, but gave sufficiently different results in regressions that it was instead included on its own. Agree or disagree with this statement: “Sometimes politics and government seem so complicated that a person like me can’t really understand what’s going on.” **Responses**: agree (1), disagree (0).

**Jewish**: **Responses**: Unity if respondent is Jewish, zero otherwise.

**Other religion**: **Responses**: Unity if respondent is religion other than Protestant, Catholic, or Jewish, zero otherwise.

**Married**: **Responses**: Unity if respondent is married, zero otherwise.

**Perceived personal financial state**: respondent gives opinion on current family financial state. **Responses**: satisfied (2), more-or-less satisfied (1), not satisfied (0).

**Male**: **Responses**: Unity if respondent is male, zero otherwise.
**Political Participation Aggregation:** this variable was an average of the following four questions, for which agreement indicated a higher level of participation in the political process.

“Did you give any money or buy tickets or anything to help the campaign for one of the parties or candidates?”  *Responses: yes (1), no (0).*

“Did you do any other work for one of the parties or candidates?”  *Responses: yes (1), no (0).*

“Do you belong to any political clubs or organizations?”  *Responses: yes (1), no (0).*

“Did you wear a campaign button or put a campaign sticker on your car?”  *Responses: yes (1), no (0).*

**Education:** this variable is an average of the three answers given by each respondent to the same question about education in the three panels. Respondents were given the options below for 1956 and 1958, and in 1960 were asked to indicate the number of grades or years of schooling they had completed. These responses were simply reduced to their more general equivalents from the previous two years. As can be seen from the codes next to each option, the “other non-college schooling” options were eliminated for added simplicity, since it is difficult to interpret what such schooling might mean.

*Responses: none (0), some grade school (2), completed grade school (3), some high school (4), incomplete high school plus other non-college schooling (4), completed high school (6), completed high school plus other non-college schooling (6), some college (8), completed college (10).*

**Political attitude aggregation:** this variable was an average of the following four questions, for which agreement indicated a cynical view of government and political participation.

Agree or disagree with this statement: “People like me don’t have any say about what the government does.”  *Responses: agree (1), disagree (0).*

Agree or disagree with this statement: “It isn’t so important to vote when you know your party doesn’t have any chance to win.”  *Responses: agree (1), disagree (0).*

Agree or disagree with this statement: “So many other people vote in the national elections that it doesn’t matter much to me whether I vote or not.”  *Responses: agree (1), disagree (0).*

Agree or disagree with this statement: “I don’t think public officials care much about what people like me think.”  *Responses: agree (1), disagree (0).*

**Interest in campaigns:** respondent answers how interested he or she has been in the political campaigns of the year.  *Responses: very much interested (2), somewhat interested (1), not much interested (0).*
**Number of children in household:** Coded with the number of children under 18 years of age living in the respondent’s household.

**Care which party wins:** respondent answers on a five point scale regarding how much they care which party wins the 1956 presidential election. *Responses:* care very much (4), care or care pretty much (3), pro-con or depends (2), don’t care very much or care a little (1), don’t care at all (0).

**Size of hometown:** Respondent is asked the size of the place in which he or she was brought up. *Responses:* farm (0), town (1), city under 10,000 (2), city from 10,000 to 50,000 (3), city from 50,000 to 100,000 (4), city from 100,000 to 250,000 (5), city over 250,000 (6), small city (3), large city (5).
WORKS CITED


