

Changing Values - does Age or Gender Affect  
Voting Preference according to the  
Socialist/Laissez Faire Scale?

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### **Abstract**

An extensive existing dataset of 3900 participants was used to explore the hypothesis that gender and age have a significant influence on how a member of the British electorate votes. The study uses a version of Heath et al. [1994] Socialist/Laissez Faire scale, which was developed to measure of core beliefs and values. The study revealed some unexpected findings, which were deemed unsatisfactory due to the weakness of reliability in the scale developed.

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# 1 Introduction

Since 1964, a cross-sectional survey of the UK electorate, called the British Election Study (BES), has been carried out. The datasets collected are overseen by a team at University of Essex. This report makes use of the data from the 2001 General Election.

The survey is designed to cover subject areas: Political preferences and values; economic perceptions; social attitudes; dispositions to engage in different forms of political activity; and individual and household socio-demographic characteristics.

The survey comprises four components:<sup>1</sup>

- Component 1. A 3000-person probability sample, face-to-face survey of Great Britain residents over the age of 18.
- Component 2. A free-standing 4500-person rolling election campaign survey. This will be conducted during the general election campaign. Approximately 150 interviews will be conducted each day, by telephone. Respondents interviewed in the pre-election rolling cross-section survey will be reinterviewed immediately after the election.
- Component 3. A face-to-face panel survey, to be conducted in the 3 weeks immediately after the general election.
- Component 4. A telephone survey of Component 3 panel respondents. This survey will be conducted approximately 12 months after the date of the general election. [BES, 2001]

This study uses an existing dataset - the British Election Study (2001) - to explore whether the age and the gender of British voters influences their voting habits. If true, further conclusions about a ageing population becoming a more conservative population could be inferred. Perhaps more alarmingly, if it is found that simply the voters gender, and no other confounding factors, influences the way we vote, then political parties could start targeting gender to achieve their support. This could potentially result in a nationwide (gender) divide and conquer scenario which could easily compound the trend toward an ageing population.

There have been a number of serious studies that have explored whether or not gender has an impact on the way that we think about politics. Campbell asks "Is there such a thing as a political women's interest in Britain?" Chappell and Hill [2006]. This question is important if we are to presume that women's interests cannot be fairly represented by a patriarchal political system that

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<sup>1</sup>The original questionnaires can be found here: <http://www.essex.ac.uk/bes/questionnaire.html> (accessed 13 Feb 2015)

is under-represented by female politicians, and that a quota system is required Phillips [1995]. We need evidence to reinforce a claim that women as a collective subset have different ways of thinking. For example, would a middle-class woman be more likely to think in alignment with a middle-class man or a working-class woman?

From the BES dataset described above, containing data from 3900 interviewed participants, we can test whether a voters left-right ideological preference is determined, or changes, with age or with gender.

## 2 Method

The BES questionnaire asks a range of questions that can be used to compile a socialist/laissez faire scale based on Heath’s research on core beliefs and values Heath et al. [1994]. Participants were asked to rate the following statements on a 5-point Likert scale (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree):

1. Ordinary working people get their fair share of the nation’s wealth
2. There is one law for the rich and one for the poor
3. There is no need for strong trade unions to protect employees’ working conditions and wages
4. Private enterprise is the best way to solve Britain’s economic problems <sup>2</sup>.

Using IBM’s SPSS<sup>3</sup> statistics software (v22), statement variables 1, 3 and 4 were recoded so that each one ranges from 1:most left-wing value through to 5:most right-wing value, ensuring consistency across the set. To test whether these combined create a reliable scale, and it has an internal consistency, a Cronbach’s Alpha test was used. The test result was 0.536 which indicates that the scale is not very reliable. A further pro-socialist statement was included “Big international companies are a threat to democratic government in Britain” which increased the reliability of the new five item scale to 0.558. Although not very reliable, this combined scale is suitable for some preliminary research.

To use the scale against other variables a new variable was compiled from the existing five detailed above to create an amalgamated left-right scale. This enabled a way to test for significant relationships between other variables and whether certain voter attributes made a them more or less libertarian (left-wing). Key independent variables from the BES 2001 dataset used for this study were gender and age (for all respondents).

## 3 Discussion

### 3.1 Gender and the Socialist/ Laissez Faire scale

From the gender dataset (see table 1), it can be seen that 55.6% of participants were female, this may be significant in a smaller sample size but not in this instance where the total sample is 3900.

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<sup>2</sup>The questionnaire can be seen here <http://www.essex.ac.uk/bes/questionnaires/Postelectionmailback.pdf>

<sup>3</sup><http://www-01.ibm.com/software/uk/analytics/spss/>

	Frequency	%
Male	1728	44.3
Female	2169	55.6
Not recorded	3	0.1
Total	3900	100

Table 1: Breakdown of male & female survey respondents (BES2001)

Using the customised socialist/laissez faire scale, a 2-sided Chi-Square test was used to look for significant association with gender with the full dataset. This test was chosen as most appropriate for an unordered nominal variable (var name:genall) and an ordered nominal variable (var name:leftrightscale). The result was  $P < 0.001$  which indicates a very strong evidence against the null hypothesis which means the probability of gender having an effect on the way different sexes vote is true. This result does not tell us whether men or women are more likely to vote toward the Left, however scanning the cross-tab table we can see that there is a higher percentage of women leaning toward the left.

SPSS reported that 20% of the sample had an expected count of less than 5, which means that the recommended level of at least 80% of the expected frequencies were over 5, so no cases were excluded.

To double-check these findings, as they were not as expected, and to ensure that the larger number of female participants (55.6%) did not sway the result, the Chi-Square significance test was run with a randomised sample of 10%. This test produced a P value of 0.760, which gave no evidence against the null hypothesis, so it can be concluded that the data appears to suggest that there is no evidence that gender affects left-right voting preference.

The two results above contradict each other significantly, so the tests were run again, plus a third test using a random sample of 10%. This final test produced a P value of 0.013 indicating there is some reason to believe that gender leads to a socialist bias.

### 3.2 Age and the Socialist/ Laissez Faire scale

The ages of the participants ranged from 18 to 98, with an average age of 49 (mean and median). The mode of the data is 36, which gives a positively skewed distribution, see figure 1, with no problematic outliers.

To test whether age of a voter steers them toward the Left, a bivariate correlation test (using Pearson's R correlation coefficient) was run using the socialist/laissez faire scale. This test was chosen for the combination of an ordered nominal variable (var name:leftrightscale) and an ordinal variable (var name:ageall). A P value of 0.026 indicated that there is no real evidence against the

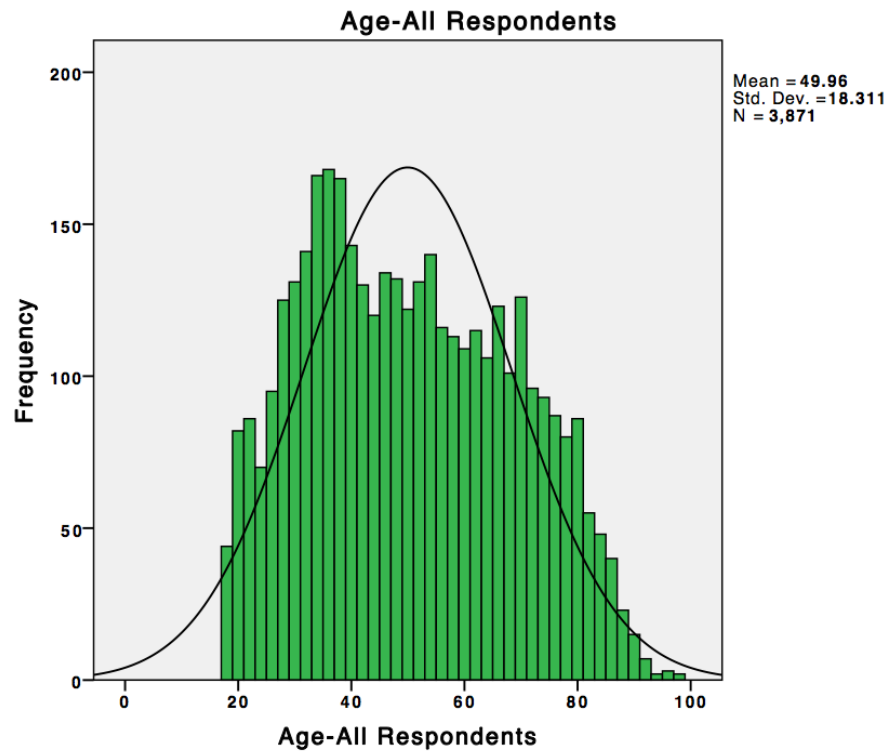


Figure 1: Age distribution (BES2001)

null hypothesis  $H^0$ . The positive direction of the result, coupled with the very low probability, does not tell us that as voters get older they tend slightly away from Socialist values, and toward the right.

This is further confirmed by visualising the data (see figure 2) where we can see that there seems to be no visible trend in any direction.



[h]

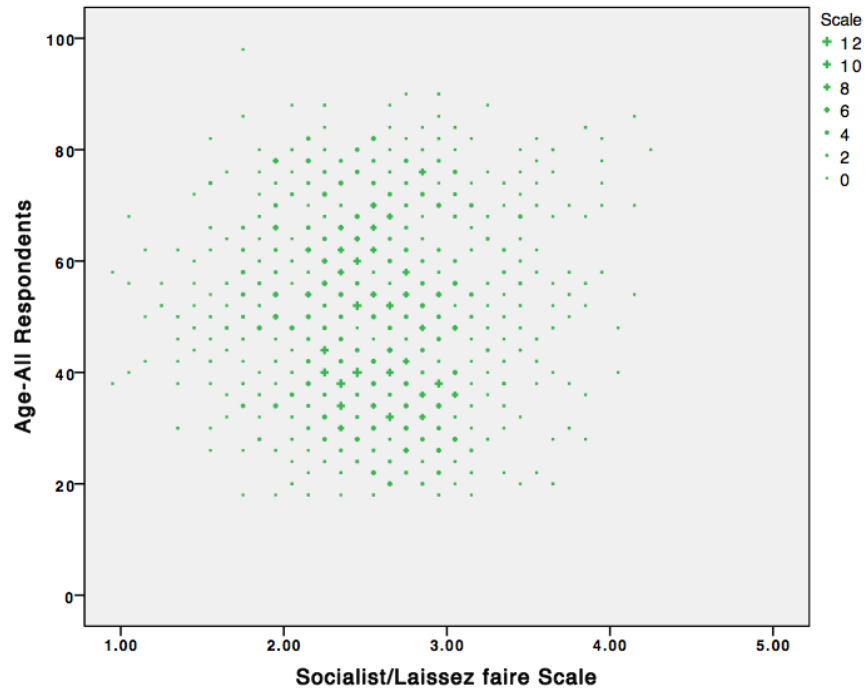


Figure 2: Age & Socialist/Laissez faire scale (BES2001). Scale values indicate frequency.

## 4 Conclusion

These results provide us with somewhat dubious conclusions. We can say that from the BES 2001 dataset and the vaguely reliable Socialist-Laissez faire Scale that there seems to be a relationship between the gender and their political nature, however with a barely reliable scale and smaller sample tests that indicate otherwise, we are hesitant to draw any conclusions from this very rudimentary statistical analysis.

With less ambiguity, it is possible to conclude that there is little, or no significant correlation between age and Socialist values.

However, we must remember that the Socialist/Laissez Faire scale, which played a key part in this study, was not very reliable and so the recommendation would be to test these hypotheses more fully with a wider data range and in collaboration with other BES datasets from a selection of general elections over time.

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