

Data Appendix for “Altruism and the Demand for Environmental Quality”

This data appendix describes the data used in my working paper entitled “Altruism and the Demand for Environmental Quality.” The data from the paper are taken from a March 1990 *Washington Post* poll, which is available from the Inter-university Consortium for Political and Social Research, Ann Arbor Michigan (ICPSSR #9456). 1,016 adults aged 18 and older living in the 48 contiguous United States and the District of Columbia were contacted by phone for the survey. Respondents who did not answer any of the relevant questions for this paper were eliminated, leaving 951 observations for analysis.

The question of interest for the paper is the following:

“Would you support or oppose a \$ t increase in your personal income taxes that would go just to cleaning up the nation’s air and water?”

For one-half of the respondents, t =\$100, while for the other half, t =\$300. The values of t were randomly chosen for each respondent.

Results of the referendum question for these 951 people are shown in table A1.

Table A1 - Results of the Referendum

	t =\$100		t =\$300		total	
	n	pct.	n	pct.	n	pct.
yes	247	49.5%	190	42.0%	437	46.0%
no	252	50.5%	262	58.0%	514	54.0%
total	499		452		951	

In addition, the survey includes information on personal characteristics that are used as explanatory variables in the paper. Most important explanatory variable in the paper is the life expectancy variable. In the survey, respondents were asked to give their age in years. This information was translated into life expectancy using data from the *Statistical Abstract of the United States: 1993*. Life expectancy is given in years.

The information on income comes from grouped data. Respondents were asked to place their household's annual income in one of six categories, which were coded as follows:

- 1) Under \$8,000
- 2) \$8,000 but less than \$12,000
- 3) \$12,000 but less than \$20,000
- 4) \$20,000 but less than \$30,000
- 5) \$30,000 but less than \$50,000
- 6) More than \$50,000

Since the size of these groups is not identical, the midpoint of each income range was used. I treated the two open-ended groups as follows. For the first group, \$7,000 was used, since it seems more likely that individuals would be closer to \$8,000 than to \$0. Incomes in the last grouping were set equal to \$70,000. Of the nearly 25 percent of the population with income over \$50,000, nearly 2/3 of these were in the range of \$50,000 to \$75,000. Thus, choosing a number in this range seems reasonable. To account for the fact that there still are those whose income is higher, a value at the high end of this range was chosen.¹

Education was grouped in a similar fashion. The relevant information was the last grade of school completed by the respondent:

- 1) 8th grade or less
- 2) Some high school
- 3) Graduated high school
- 4) Some college²
- 5) Graduated college
- 6) Post-graduate

Tables A2 presents the descriptive data for the survey.

Table A2 - Descriptive Data for Combined Referendum (n=951)

Variable	Description	Mean	Std. Dev.
INCOME	In 10,000's of dollars	3.608	2.170
LE	Years of life expected, based on respondent's age	35.675	13.824
EDUCATION	Coded value of respondent's education level	3.700	1.239

Other variables from the survey that I made use of include a variable describing the area in which a person lives (urban or rural) and a question asking respondents whether they felt that

¹ Data on income distributions were taken from the *Statistical Abstract of the United States: 1993*.

² Technical schools were coded as 3, for high school.

the world was currently facing an environmental crisis. The location variable was used in previous versions of the regressions, but was dropped because it was always insignificant.

I include information on whether individual's feel that the world faced an environmental crisis to check for differences in environmental tastes across age cohorts. Because life expectancy is a linear function of age,³ it is not possible to identify separate age cohort effects. For example, although theory predicts that self-interest behavior would result in a negative correlation between life expectancy and an individual's valuation, this would not be the case if older generations simply expressed greater concern for the environment. Fortunately, this is not the case. Younger generations are more likely to believe that there is an environmental crisis. Thus, *independent of concern for self interest*, we would expect life expectancy to be negatively correlated with an individual's valuation. The results of this survey question reinforce the interpretation that altruism for future generations exists.

Table A3 – Is There an Environmental Crisis?

age	yes	no	don't know	% yes	% no	% don't know
< 20	11	11	0	50.0%	50.0%	0.0%
20-29	112	79	1	58.3%	41.1%	0.5%
30-39	149	108	1	57.8%	41.9%	0.4%
40-49	109	56	0	66.1%	33.9%	0.0%
50-59	64	57	3	51.6%	46.0%	2.4%
60-69	48	56	2	45.3%	52.8%	1.9%
70-79	35	27	2	54.7%	42.2%	3.1%
80-89	10	7	1	55.6%	38.9%	5.6%
90+	2	0	0	100.0%	0.0%	0.0%

³ 99% of the variation in life expectancy can be explained by the simple linear regression $LE = a + bAGE$.