**Table A1. Online Sample Comparison with 2012 ANES Sample**

|  |  |  |
| --- | --- | --- |
|  | **Online Sample** | **2012 ANES Sample** |
| **Party Identification** |  |  |
|  % Democrat | 38% | 35% |
|  % Republican | 30% | 27% |
|  % Independent | 32% | 32% |
|  |  |  |
| **Race** |  |  |
|  White  | 72% | 71% |
|  Black | 12% | 12% |
|  Hispanic | 11% | 11% |
|  Other | 5% | 6% |
|  |  |  |
| **Education** |  |  |
|  < high school | 1% | 10% |
|  High school | 16% | 24% |
|  Some college | 39% | 33% |
|  Four-year degree | 31% | 19% |
|  Advanced degree | 13% | 19% |
|  |  |  |
| **Discuss Politics** |  |  |
|  Never | 17% | 11% |
|  1 day/ week | 26% | 16% |
|  2 days / week | 17% | 15% |
|  3 days / week | 13% | 8% |
|  4 days / week | 7% | 5% |
|  5 days / week | 8% | 4% |
|  6 days / week | 3% | 1% |
|  7 days/ week | 10% | 6% |
| ***N*** | **1,600** | **5,916** |

**Table A2. Control Measures, Demographic, and Political Profile of Sample**

|  |  |  |
| --- | --- | --- |
| **Variable** | **Scale (Overall Distribution)** | **Average** **(std. dev.)** |
| ***Beliefs*** |  |  |
| Importance(Environment) | Response to “When it comes deciding whether to insulate your home and/or lower your thermostat, how important to you is the effects of your decision on sustaining the environment?” (1= extremely unimportant (2%); 2 = very unimportant (2%); 3 = somewhat unimportant (3%); 4 = neither unimportant nor important (7%); 5 = somewhat important (18%); 6 = very important (29%); 7 = extremely important (39%)). | 5.80(1.39) |
| Personal Influence | Agreement with “taking actions that reduce my own personal consumption have an impact on the nation’s energy situation.” (1= strongly disagree (2%); 2= moderately disagree (3%); 3= slightly disagree (5%); 4= neither disagree nor agree (13%); 5= slightly agree (29%); 6= moderately agree (26%); 7= strongly agree (23%)). | 5.34(1.37) |
| Collective Efficacy | Agreement with “taking actions that reduce my own personal consumption have an impact on the nation’s energy situation.” (1= strongly disagree (3%); 2= moderately disagree (4%); 3= slightly disagree (6%); 4= neither disagree nor agree (19%); 5= slightly agree (29%); 6= moderately agree (22%); 7= strongly agree (17%)). | 5.01(1.46) |
| Belief Importance (Costs) | Response to “When it comes to deciding whether to insulate your home and/or lower your thermostat, how important to you is the cost involved?” (1= extremely unimportant (1%); 2= very unimportant (2%); 3= somewhat unimportant (4%); 4= neither unimportant nor important (10%); 5 = somewhat important (25%); 6= very important (32); 7= extremely important (25%)).  | 5.52(1.32) |
| ***Values*** |  |  |
| Post-Materialist Values | More important to “protect the environment” or “maintain prosperous economy”? (1= definitely protect environment (8%); 2= very likely protect environment (9%); 3= probably protect environment (10%); 4= equally important (43%); 5= probably maintain prosperous economy (13%); 6= very likely maintain prosperous economy (10%); 7= definitely maintain prosperous economy (7%)).  | 4.03(1.55) |
| Hierarchy | Agreement with “We have gone too far in pushing equal rights in this country.” (1= strongly disagree (21%); 2= moderately disagree (9%); 3= slightly disagree (9%); 4= neither disagree nor agree (19%); 5= slightly agree (16%); 6= moderately agree (11%); 7= strongly agree (16%)). | 3.95(2.07) |
| Individualism | Agreement with “If the government spent less time trying to fix everyone’s problem, we’d all be a lot better off.” (1= strongly disagree (6%); 2= moderately disagree (6%); 3= slightly disagree (7%); 4= neither disagree nor agree (19%); 5= slightly agree (17%); 6= moderately agree (16%); 7= strongly agree (28%)). | 4.96(1.82) |
| ***Demographics*** |  |  |
| Political Knowledge | Know majority required to over-ride veto (56% correct)Know which party has majority in U.S. House = (72% correct)Know whose responsibility it is to declare law unconstitutional = (76% correct)Know current U.S. Sec. of State = (67% correct) | .68(.33) |
| Energy Knowledge | Know the world’s largest exporter of oil = (63% correct)Know renewable energy sources = (63% correct)Know most U.S. oil not imported from ME = (24%) | .50(.30) |
| Income | Estimate of family income (before taxes)< $30,000 (24%); $30,000 – $69,999 (42%); $70,000 – $99,999 (19%); $100,000 - $200,000 (13%); > 200,000 (2%) | N/A |
| Age | What is your age?  | 44.75(16.43) |
| Female | Are you male (50%) or female (50%) | N/A |
| Media | How often do you obtain energy information from… newspapers, TV, online (0-1 scale, alpha = .54) | .51(.27) |
| Pays Own Utilities | Do you pay directly for the utilities in your home (e.g., gas and/or electric bill), or is this paid for by someone else (e.g., a landlord)? Pay directly = 90%; Do NOT pay directly = 10% | N/A |
| House or Apt. | Do you live in a house (73%) or apartment (27%)? | N/A |
| Government Responsibility | Listed below are different sources people tend to see as responsible for addressing (or fixing) the energy situation. Rate how responsible you think each source is for dealing with the U.S.’s energy problems.  | 5.35(1.46) |
| Consumer Approaches | Response to “Do you think the success of energy policy depends on whether individual citizens take actions that reduce energy demand?” (1= not at all (2%); 2 = not much (3%); 3 = a little (7%); 4 = somewhat (14%); 5 = a good amount (29%); 6 = a great deal (29%); 7 = completely depends (17%))  | 5.18(1.38) |

**Table A3. Determinants of Support for Investment and Curtailment Behaviors with Controls**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Exp. Condition** | **Likely to Insulatea** | **Max WTP Weatherizeb** | **Email on Insulationc** | **Likely to Curtaila** | **Email on Smart Mtr.c** |
|  No Conseq. + Indiv. Attrib. (*Condition 2*) | .01 (.11) | 3.90 (17.21) | .08 (.16) | .08 (.11) | -.13 (.16) |
|  No Conseq. + Gov. Attrib. (*Condition 3*) | -.30 (.11)\*\* | -42.82 (17.26)\*\* | -.28 (.17)# | -.24 (.11)\* | -.64 (.19)\*\* |
|   Cost Conseq. + No Attrib (*Condition 4*) | -.32 (.11)\*\* | -42.80 (17.21)\*\* | -.25 (.16) | .37 (.12)\*\* | .29 (.15) # |
|   Cost Conseq. + Indiv. Attrib. (*Condition 5*) | -.26 (.11)\* | -34.57 (17.32)\* | -.33 (.17)# | .37 (.12)\*\* | .28 (.16) # |
|   Cost Conseq. + Gov. Attrib. (*Condition 6*) | -.36 (.11)\*\* | -49.99 (17.21)\*\* | -.23 (.16) | .27 (.12)\* | .31 (.15)\* |
|   Envir. Conseq. + No Attrib. (*Condition 7*) | .07 (.11) | 18.43 (17.22) | .20 (.15) | .16 (.11) | -.14 (.16) |
|   Envir. Conseq. + Indiv.Attrib. (*Condition 8*) | .33 (.11)\*\* | 63.51 (17.27)\*\* | .42 (.15)\*\* | .31 (.11)\*\* | .37 (.15)\* |
|   Envir. Conseq. + Gov. Attrib. (*Condition 9*) | -.30 (.11)\*\* | -43.65 (17.16)\*\* | -.17 (.16)\* | -.27 (.11)\* | -.45 (.18)\*\* |
| **Beliefs** |  |  |  |  |  |
|  Importance of Environment | .05 (.02)# | 7.24 (3.79)# | -.03 (.04) | .03 (.03) | .01 (.04) |
|  Importance of Costs  | .03 (.02) | .30 (3.57) | .03 (.03) | .03 (.02) | .03 (.03) |
|  Collective Efficacy  | .12 (.03)\*\* | 14.83 (3.96)\*\* | .14 (.04)\*\* | .13 (.03)\*\* | .08 (.04)\* |
|  Group Success  | .09(.02)\*\* | 10.14 (3.66)\*\* | .01 (.03) | .10 (.02)\*\* | .07 (.04)\* |
|  Government Responsible | .04 (.02)\* | .84 (3.11) | .04 (.03) | .05\* (.02) | .02 (.03) |
|  Consumers Responsible | .01 (.02) | 10.50 (3.47)\*\* | .01 (.03) | .01 (.02) | -.02 (.03) |
|  Consumer Approaches | .03 (.02) | .61 (3.68) | .11 (.04)\*\* | .06 (.02)\* | .04 (.04) |
| ***Continue to next page*** |  |  |  |  |  |
|  | **Likely to Insulatea** | **Max WTP Weatherizeb** | **Email on Insulationc** | **Likely to Curtaila** | **Email on Smart Mtr.c** |
| **Values** |  |  |  |  |  |
|  Post-materialism  | -.04 (.02)# | -10.79 (3.08)\*\* | -.05 (.03)# | -.02 (.02) | -.03 (.03) |
|  Hierarchy | .01 (.02) | -2.23 (2.40) | -.01 (.02) | -.00 (.02) | .01 (.02) |
|  Individualism | .03 (.02)# | .03 (2.82) | -.00 (.03) | .03 (.02)# | .02 (.03) |
| **Demographics** |  |  |  |  |  |
|  Income | .00 (.03) | 15.55 (4.46)\*\* | -.00 (.04) | -.04 (.03) | .05 (.04) |
|  Education | .03 (.03) | 11.21 (4.84)\* | .02 (.05) | .10 (.03)\*\* | -.01 (.05) |
|  Age | -.01 (.00)\*\* | .00 (.28) | .00 (.00) | -.00 (.00) | .00 (.00) |
|  Female | -.01 (.06) | -27.13 (8.62)\*\* | -.05 (.08) | .14 (.06)\* | -.14 (.08)# |
|  Minority | .07 (.06) | -17.78 (10.01)# | .07 (.09) | -.03 (.07) | .10 (.09) |
|  Pay own utility | -.20 (.09) | -9.99 (14.34) | -.29 (.15) | -.33 (.09)\*\* | -.10 (.14) |
|  House (1) or Apartment (2) | -.52 (.06)\*\* | -84.15 (9.67)\*\* | -.15 (.09) | -.20 (.06)\*\* | -.19 (.09)\* |
| **Political Characteristics** |  |  |  |  |  |
|  Trust Government | .05 (.04) | -3.49 (6.65) | .08 (.06) | -.03 (.04) | .15 (.06)\* |
|  Media use | -.11 (.13) | 2.39 (20.02) | -.05 (.19) | .02 (.13) | .20 (.19) |
|  Party Identification (Dem = 1) | .02 (.02) | -.504 (3.19) | -.02 (.03) | .01 (.02) | .02 (.03) |
|  Talk about politics | .05 (.02)\*\* | 2.96 (2.33) | .00 (.02) | .00 (.02) | .01 (.02) |
|  Political Knowledge | .19 (.10)# | 47.56 (15.49)\*\* | -.15 (.15) | .33 (.10)\*\* | -.05 (.14) |
|  Energy Knowledge | .22 (.10)\* | 26.36 (16.21)# | .21 (.15) | .06 (.11) | -.13 (.15) |
|  Ideology  | -.02 (.02) | -1.56 (3.72) | -.03 (.03) | -.02 (.02) | -.05 (.03)# |
|  Constant  | ----- | 51.28 (49.56) | -2.04 (0.48) | ------ | -2.18 (0.47) |
|  **Log-likelihood / R2** | -2771.32 | .23 | -710.12 | -2390.11 | -712.65 |
|  **Number of observations** | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 |

aEntries are ordered probit coefficients with standard errors in parentheses; b Entries are ordinary least squares (OLS) coefficients with standard errors in parentheses; c Entries are probit regression coefficients with standard errors in parentheses. \*\* *p* < .01; \* *p* < .05; # *p* < .10 (one-tailed tests). The excluded condition in all models is no attribution frame + no consequence frame (condition 1, baseline).

*Note*: We highlight a number of sensible results in assessing the impact of the additional covariates included in Table A3. First, there is a highly significant and large impact across models in the belief that one’s actions affect the national energy situation (see *collective efficacy*, Table A2). However, the impact of many of the other control variables is spotty. *Post-materialist* values increase willingness to make capital investments; however, they have no effect on curtailment behaviors. Political and energy knowledge tend to increase willingness to take action across models, which is consistent with extant work on knowledge lowering the costs associated with taking a collective action (e.g., see Lubell et al. 2007). There are several other variables that are significant in one or two models only; however, the impact of the remainder of the control variables is not overwhelming. It is notable that across both types of behavior party identification and ideology largely are insignificant predictor variables - although liberals are marginally more likely than conservatives to request information about Smart Energy Meters.

**Power Analysis:**

This power analysis uses the procedures outlined by Bloom (1995) for estimating the minimum detectable effect of an experimental treatment. As outlined by Bloom, the minimum detectable effect begins by estimating the standard error of the treatment effect. This can be done via the following equation:

$$σ\_{c}=\sqrt{\frac{σ^{2}\left(1-R^{2}\right)}{T(1-T)n}}$$

Where:

σc = The standard error of the treatment estimator

σ = The standard deviation of the outcome variable

T = the proportion of the study in treatment

n = The size of the study sample

R2 = The explanatory power of the impact regression

 The values of R2 and σ must be assumed. Once the standard error of the treatment is estimated, it may be multiplied by an appropriate interval, as laid out by Bloom, connected to a specific power level and degree of significance. For instance, if one wishes to compute the minimum detectable effect for a treatment at the 0.05 level and with 70% statistical power, one would multiple the standard error, as computed above, by 2.17.

 Based on previous measures, we estimate the standard deviation of our 7 pt. outcome variable to be 1.87. We also estimate the explanatory power of the treatment will be 0.20. There are nine experimental groups, so the proportion of the study in treatment is 0.89. Our n is 1600. These procedures produce a standard error of the treatment estimator of .134. Consistent with Bloom (1995) we then multiply this number by the appropriate standard error for the varying levels of statistical power and significance levels. Consistent with directional hypotheses, standard errors are based on one-sided tests of significance. The results produce the minimum detectable effects at various significance levels and statistical power levels.

**Table A4: Minimum Detectable Effects**

|  |  |
| --- | --- |
|  | **Significance Level** |
| **Statistical Power** | **0.10** | **0.05** | **0.01** |
|  |  |  |  |
| **90%** | 0.342 | 0.392 | 0.482 |
| **80%** | 0.283 | 0.333 | 0.424 |
| **70%** | 0.241 | 0.290 | 0.381 |