Auntie Knows Best?

Public Broadcasters and Current Affairs Knowledge

Online Appendix

Survey Details

Surveys in the US, UK, Canada, Australia, Italy, Japan and Norway were conducted by YouGov-PMX. YouGov uses a matching methodology for delivering online samples that mirror target populations on key demographics. The approach is described in some detail in Shanto Iyengar and Lynn Vavreck, 'Online Panels and the Future of Political Communicaiton Research', in Holli A. Semetko and Margaret Scammell, eds, Sage Handbook of Political Communicaiton (Beverly Hills: Sage, 2011).

The samples for the US and UK are in this case based directly on existing YouGov panels. In other countries, YouGov applied their sampling techniques to panels maintained by Research Now (Canada, Norway, Japan, Australia) and Zapera (Norway).

The Korean survey was conducted by Nielsen KoreanClick, where respondents were drawn from a panel of 12,000 Internet users, with matching implement on gender, age and education.

Principle investigators are included as authors for the paper; funding sources are acknowledged in the paper as well.

Appendix Tables

Table 1 includes the the full matching models that precede the propensity score analyses in the main body of the paper.

Table 2 includes a sample battery of knowledge questions used to capture hard and soft news knowledge. Questions vary slightly across countries; specific questions are available in the country-level survey data files, from the principle investigators listed above.

Table 3 shows results of a comparison of television versus newspaper exposure on political knowledge. The models are estimated in exactly the same way as for the analyses of public versus private broadcasters in the text, with two minor changes: (1) the television viewing variable capture television viewing generally rather than public or private viewing, and (2) the “other media exposure” variable used in the estimation of propensity scores uses radio and newspaper reading in models of television viewing, and radio and television viewing in models of newspaper reading. Note that using just general television viewing allows us to include both US and Australian data as well. There is of course much more than can be done with these data, but for our purposes (see the Conclusions above) what is most critical is that the estimated impact of newspapers on knowledge is not consistently higher than the estimated impact of television viewing.

Tables 4 through 6 include results for the impact of public and private television viewing replicated using OLS. Those results are discussed in some detail below.

Matching vs. OLS Estimates of Media Effects

We have discussed in the main body of the paper the potential advantages of using propensity score matching to produce estimates of media effects. There are both advantages and disadvantages to that approach, however, and we discuss those in somewhat more detail here. That said, the most critical implication of the findings in Tables 4 through 6 is that they are not substantially different from those in the text — that is, media effects estimated by OLS are very similar to those estimated using matching methods above. Our results are robust to changes in estimation.

We have already noted the issue of endogeneity in the evaluation of media effects. In the present case, PSB may provide a greater amount of hard news information than commercial broadcasting, but it is also the case that people interested in, and with higher levels of hard news knowledge to begin with, choose to watch PSB. Statistical analyses must try to capture which comes first, knowledge or exposure.

There are several different possible approaches to this issue. The more common approach is to use a regular (e.g., OLS) regression model, including the other variables related to the likelihood of exposure. By including education and income, for instance, the media exposure variable is assumed to capture the impact of exposure above and beyond the impact of education and income. The coefficient is intended to capture the impact of exposure ceteris paribus, that is, holding other things equal.

There are serious weaknesses to this approach, however. First and foremost is the fact that the impact of exposure is only exposure per se to the extent that all other possible factors driving exposure (self-selection) are included in the model. Missing any of these factors leads to omitted variable bias, and an over-estimate of the coefficient for exposure. It is likely that most if not all existing work relying on standard regression models to estimate the impact of media exposure on knowledge makes this error.

Matching methods may provide more realistic estimates - realistic in the sense that they may capture the impact of exposure, more independent of the various factors that lead respondents to self-select into high- or low-exposure groups. As discussed in the text, whether this is the case is a function of the model which produces the propensity score. If that model includes the variables that account for self-selection, then matching methods will produce good estimates. If that model does not include the variables accounting for self-selection, however, all the problems associated with missing variable bias still apply. The impact of exposure may include the impact of other factors related to self-selection.

That said, the problems resulting from missing variable bias may be somewhat smaller in a propensity score analysis. First, the impact of missing variables, to the extent that they are correlated to variables included in the model of the propensity score, may be subsumed in part by the coefficients for those included variables. The result is an inaccurate (over-stated) estimate of coefficients in the model of the propensity score; but, as a consequence, an estimated propensity score that takes into account, at least in part, these missing variables. The coefficient estimates in the propensity score model are of course of little interest — what matters is the estimated treatment effect, which in this case may be somewhat more accurate as a consequence of shifting (some of) the impact of missing variables into the estimation of the propensity score (rather than leaving it in the estimate of treatment effects).

It is still the case that estimating propensity scores likely does not remove the bias produced by missing variables; put differently, matching cannot completely solve the problem of self-selection in the kinds of models explored above. Indeed, some work suggests that estimates resulting from matching may be no more reliable than those resulting from more traditional regressions. (For a particularly useful discussion, see Arceneaux et al. 2006.) It is, in sum, sensible to think of a propensity score analysis not as a method of solving the endogeneity problem, but rather as a method that may in the right circumstances reduce bias in the estimated treatment effect, in this case, news exposure.

There are some other advantages and disadvantages of matching methods and OLS, but those have been discussed in some detail elsewhere (see citations in the text). Here, the goal is mainly to confirm that results shown in the text are not driven by our choice of estimation strategy. To do this, we have both re-estimated results using a number of different matching algorithms, and re-estimated results using simple OLS models. We show the latter here.

OLS models rely on the same variables as the propensity score analysis, though here obviously we include all variables in a single model, predicting knowledge as a function of television viewing alongside the other controls. Note that while the matching models require that we run separate analyses for our two treatments — public and private television viewing — we can include both simultaneously in OLS models; and since doing so does not produce coefficients that are vastly different from OLS models that examine the two treatments separately, we just show just the combined models here.

There are some minor differences between the matching and OLS results, to be sure. OLS reveals no significant impact of television viewing on knowledge in Canada; and the ratio of the impact of public versus private television varies somewhat in certain countries from the matching to the OLS results. But these are relatively minor differences; and the general findings hold. That is, it is still the case that (a) in most countries, public television viewing has a significant positive impact on knowledge, while private television viewing does not, (b) this is particularly true for hard news knowledge, while for soft news knowledge private television viewing, particularly in Japan and Norway, (c) by far the largest gap in impact between public and and private broadcasters is in the UK, followed by, depending on whether it is combined, hard, or soft news knowledge, some combination of Norway and Japan.

In sum, these results make clear that analyses in the text are not a peculiar product of propensity score matching. That said, they do make clear that the advantages of propensity score matching may be rather limited where eliminating endogeneity is concerned. The magnitude of the effect as estimated using OLS is not consistently lower than the effect estimated using matching, for instance. (This is true in some but not all cases.) Endogeneity remains a concern, clearly, and panel data (in which respondents actually change their sources of news) may be the only way to solve that problem definitively. In the meantime, we suggest that our results come as close as they can with cross-sectional data; and while the overall impact of television news may be slightly over-stated overall, the differences between public and private television are both robust to changes in specification, and meaningful.

Online Appendix Table 1. Propensity Score Models, Public, Private and Semi-Private Television Viewing

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | DV: Public TV Viewing | | | | | | Semi(private |
|  | CA | IT | JP | NO | UK | KR | UK |
| Age: 35(54 | 0.076 | 0.121 | .315\*\* | .526\*\* | .350\*\* | .351\*\* | (0.061 |
|  | (0.130) | (0.127) | (0.152) | (0.121 | (0.112 | (0.089 | (0.127 |
| Age: 55+ | 0.173 | .450\*\* | .882\*\* | 1.225\*\* | .662\*\* | .819\*\* | (0.038 |
|  | (0.129) | (0.136) | (0.167) | (0.156 | (0.138 | (0.132 | (0.150 |
| Education | 0.026 | 0.055 | .333\*\* | 0.102 | (0.114 | (0.033 | 0.057 |
|  | (0.091) | (0.076) | (0.131) | (0.088 | (0.082 | (0.049 | (0.101 |
| Interest, cat1 | -1.182\*\* | 0.038 | (.707\*\* | (.486\*\* | (.523\*\* | (.352\*\* | (0.212 |
|  | (0.182) | (0.151) | (0.231) | (0.223 | (0.177 | (0.163 | (0.187 |
| Interest, cat2 | -1.049\*\* | .227\* | -.290 | (.587\*\* | (.393\*\* | (0.169 | (.491\*\* |
|  | (0.149) | (0.126) | (0.214 | (0.171 | (0.164 | (0.138 | (0.167 |
| Interest, cat3 | -.616\*\* | .318\*\* | -.024 | (0.063 | (0.104 | (0.125 | (0.138 |
|  | (0.137) | (0.121) | (0.214 | (0.166 | (0.167 | (0.139 | (0.154 |
| Media Use | .300\*\* | .265\*\* | .223\*\* | .350\*\* | .298\*\* | .286\*\* | .358\*\* |
|  | (0.067) | (0.054) | (0.076 | (0.072 | (0.067 | (0.055 | (0.070 |
| Constant | -0.241 | (.941\*\* | -1.026\*\* | -.963\*\* | 0.360 | -.633\*\* | -1.540\*\* |
|  | (0.279) | (0.246) | (0.445 | (0.319 | (0.276 | (0.192 | (0.314 |
| N | 759 | 904 | 926 | 922 | 867 | 1192 | 878 |
|  | DV: Private TV Viewing | | | | | |  |
|  | CA | IT | JP | NO | UK | KR |  |
| Age: 35(54 | .322\*\* | 0.065 | .355\*\* | .388\*\* | .247\*\* | .386\*\* |  |
|  | (0.123 | (0.140 | (0.167 | (0.117 | (0.110 | (0.092 |  |
| Age: 55+ | .693\*\* | 0.026 | .701\*\* | .723\*\* | .242\* | .601\*\* |  |
|  | (0.124 | (0.151 | (0.171 | (0.147 | (0.126 | (0.132 |  |
| Education | (0.046 | 0.070 | (0.042 | (0.081 | (.420\*\* | 0.055 |  |
|  | (0.094 | (0.085 | (0.134 | (0.089 | (0.079 | (0.050 |  |
| Interest, cat1 | (.758\*\* | (.300\* | (0.257 | (0.242 | 0.122 | (.370\*\* |  |
|  | (0.175 | (0.169 | (0.280 | (0.210 | (0.165 | (0.164 |  |
| Interest, cat2 | (.658\*\* | (0.180 | 0.100 | (0.245 | 0.133 | (.344\*\* |  |
|  | (0.150 | (0.135 | (0.263 | (0.157 | (0.147 | (0.140 |  |
| Interest, cat3 | (.324\*\* | (0.208 | 0.161 | (0.239 | 0.016 | (0.191 |  |
|  | (0.142 | (0.127 | (0.255 | (0.157 | (0.145 | (0.139 |  |
| Media Use | .312\*\* | .359\*\* | .248\*\* | .115\*\* | .243\*\* | .263\*\* |  |
|  | (0.067 | (0.060 | (0.085 | (0.020 | (0.062 | (0.056 |  |
| \_cons | (0.285 | (1.386\*\* | 0.348 | (.913\*\* | (0.054 | (.942\*\* |  |
|  | (0.283 | (0.271 | (0.515 | (0.319 | (0.262 | (0.194 |  |
| N | 752 | 875 | 919 | 913 | 877 | 1192 |  |

\* p < .10; \*\* p < .05. Cells contain probit regression coefficients with standard errors in parentheses.

Online Appendix Table 2. Knowledge Questions: Cross-National and UK Domestic

As noted in the text, hard and soft news knowledge is based on a battery of knowledge questions asked in each country. Some questions were the same from country to country; others were country-specific (the goal being to capture a combination of national and international affairs knowledge). We list below the knowledge questions asked in the Canadian survey, indicating whether they were common to all surveys or specific to the Canada. Other country-specific questions are available in the the datafiles and codebooks for each country; these are available from the Principle Investigators for each survey.

|  |  |
| --- | --- |
| Hard News |  |
| Common |  |
| Angela Merkel holds what position?   * Chancellor of Germany * US Attorney General * European Union chairman * Austrian Prime Minister * Can't say | Vladimir Putin serves as:   * Prime Minister of Russia * Coach of the Edmonton Oilers * Owner of the Yokos Oil Company * Russia’s UN ambassador * Can't say |
| In Thailand the 'red shirts' are:   * Demonstrators sympathetic to ousted prime minister, Thaksin Shinawatra * Buddhist social movement * Pro-communist demonstrators * A section of the armed forces violently suppressing dissent * Can’t say | Angela Merkel holds what position?   * Chancellor of Germany * US Attorney General * European Union chairman * Austrian Prime Minister * Can't say |
| The Copenhagen Summit refers to a:   * Conference on climate change * Meeting of EU Heads of State * Free Trade Treaty * Agreement to increase foreign aid for developing nations * Can’t say | The term Taliban refers to:   * The Rulers of Afghanistan 1996-2001 * An Iranian political party * A Province in the disputed Kashmir region * Supporters of the former dictator of Iraq * Can't say |
| Please identify the UN secretary  General:   * Ban Ki-Moon * Hu Jintao * Wen Jiabao * Pratibha Patil * Can’t say | The national unemployment rate at the moment is around:   * 10 percent * 15 percent * 5 percent * 20 percent * Can’t say |
| Canada Only |  |
| The Speaker of the House of Commons recently issued a ruling related to what issue?   * Afghan detainees * Illegal immigration * Private healthcare * Unemployment * Can’t say | The current Secretary of State of the United States is   * Hillary Clinton * Barak Obama * Joe Biden * John McCain * Can’t say |
| Former Conservative MP Rahim Jaffer is involved in a parliamentary investigation about what?   * Lobbying activities and parliamentary ethics * Using undisclosed personal finances to pay for his campaign * Unauthorized publication of government documents * Human rights violations * Can’t say |  |
|  |  |
| Soft News |  |
| Common |  |
| The 2010 World Exposition is taking place in:   * Shanghai * Paris * Mumbai * Vancouver * Can’t say | American golfer Tiger Woods recently took a break from the professional tour. Why did he stop taking part in tournaments?   * He was undergoing marital counseling * Other commercial interests took precedence over golf * He was recovering from back surgery * His was working on his technique with his golf coach * Can't say |
|  |  |
| Canada Only |  |
| Who was voted “best actress” at the last Academy Awards ceremony?   * Sandra Bullock * Helen Mirren * Meryl Streep * Jodie Foster * Can’t say | Sidney Crosby is a member of which professional sports team?   * Pittsburg Penguins * Toronto Maple Leafs * Saskatchewan Rough Riders * Vancouver Whitecaps * Can’t say |
|  |  |

Online Appendix Table 3. The Effect of Television versus Newspapers

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TV |  |  |  |  |  |  |  |  |  |  |  |
|  | N | | All News | | | Hard News | | | Soft News | | |
|  | treat | control | ATTR | se | t-ratio | ATTR | se | t-ratio | ATTR | se | t-ratio |
| AS | 711 | 228 | 0.276 | 0.083 | 3.331 | 0.057 | 0.019 | 2.981 | 0.276 | 0.088 | 3.136 |
| CA | 469 | 299 | 0.157 | 0.084 | 1.876 | 0.034 | 0.024 | 1.440 | 0.173 | 0.086 | 2.017 |
| IT | 778 | 140 | 0.307 | 0.120 | 2.568 | 0.028 | 0.024 | 1.167 | 0.426 | 0.120 | 3.554 |
| JP | 771 | 155 | 0.298 | 0.114 | 2.625 | 0.049 | 0.027 | 1.803 | 0.420 | 0.117 | 3.593 |
| NO | 606 | 323 | 0.464 | 0.074 | 6.243 | 0.114 | 0.020 | 5.807 | 0.347 | 0.079 | 4.400 |
| UK | 662 | 240 | 0.300 | 0.085 | 3.517 | 0.061 | 0.022 | 2.843 | 0.311 | 0.089 | 3.488 |
| US | 606 | 312 | 0.084 | 0.082 | 1.030 | -0.003 | 0.020 | -0.133 | 0.219 | 0.082 | 2.673 |
| KR | 707 | 485 | 0.387 | 0.061 | 6.354 | 0.070 | 0.012 | 5.794 | 0.326 | 0.063 | 5.174 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Newspapers | |  |  |  |  |  |  |  |  |  |  |
|  | N | | All News | | | Hard News | | | Soft News | | |
|  | treat | control | ATTR | se | t-ratio | ATTR | se | t-ratio | ATTR | se | t-ratio |
| AS | 426 | 513 | 0.172 | 0.068 | 2.537 | 0.037 | 0.016 | 2.355 | 0.145 | 0.068 | 2.141 |
| CA | 385 | 383 | 0.205 | 0.078 | 2.616 | 0.056 | 0.022 | 2.556 | 0.143 | 0.080 | 1.796 |
| IT | 551 | 367 | 0.176 | 0.074 | 2.369 | 0.029 | 0.015 | 2.014 | 0.153 | 0.075 | 2.036 |
| JP | 579 | 347 | 0.216 | 0.077 | 2.817 | 0.038 | 0.019 | 2.014 | 0.283 | 0.077 | 3.651 |
| NO | 727 | 202 | 0.252 | 0.093 | 2.709 | 0.050 | 0.024 | 2.146 | 0.273 | 0.103 | 2.660 |
| UK | 451 | 451 | 0.160 | 0.069 | 2.325 | 0.030 | 0.017 | 1.772 | 0.186 | 0.069 | 2.680 |
| US | 413 | 505 | 0.169 | 0.068 | 2.475 | 0.028 | 0.017 | 1.694 | 0.185 | 0.069 | 2.677 |
| KR | 567 | 625 | 0.472 | 0.058 | 8.118 | 0.094 | 0.012 | 8.100 | 0.320 | 0.059 | 5.391 |

Propensity scores are based on probit models with age, education, political interest and other media use as IVs. Results are estimated using radius matching method.

Online Appendix Table 4. All Knowledge, OLS estimates

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | DV: All Knowledge | | | | | |
|  | CA | IT | JP | NO | UK | KR |
| Public | -.092 | -.165\* | .339\*\* | .213\*\* | .375\*\* | -.086 |
|  | (.076) | (.066) | (.076) | (.078) | (.077) | (.061) |
| Private | -.007 | .045 | .137 | -.028 | -.383\*\* | -.038 |
|  | (.075) | (.074) | (.098) | (.074) | (.066) | (.063) |
| Age: 35-54 | .359\*\* | .099 | .056 | .158\* | .384\*\* | .256\*\* |
|  | (.080) | (.096) | (.096) | (.079) | (.078) | (.066) |
| Age: 55+ | .784\*\* | .227\* | .160 | .470\*\* | .422\*\* | .196 |
|  | (.081) | (.103) | (.099) | (.093) | (.084) | (.100) |
| Education | .390\*\* | .307\*\* | .465\*\* | .308\*\* | .169\*\* | .027 |
|  | (.060) | (.059) | (.069) | (.058) | (.054) | (.034) |
| Interest, cat1 | -.915\*\* | -.639\*\* | -.832\*\* | -.848\*\* | -.849\*\* | -.631\*\* |
|  | (.116) | (.116) | (.128) | (.131) | (.114) | (.126) |
| Interest, cat2 | -.607\*\* | -.327\*\* | -.490\*\* | -.511\*\* | -.513\*\* | -.355\*\* |
|  | (.103) | (.096) | (.118) | (.098) | (.097) | (.115) |
| Interest, cat3 | -.183 | -.145 | -.296\*\* | -.087 | -.223\* | -.079 |
|  | (.096) | (.087) | (.112) | (.087) | (.091) | (.115) |
| Media Use | .097\* | .212\*\* | .174\*\* | .279\*\* | .263\*\* | .346\*\* |
|  | (.044) | (.042) | (.046) | (.050) | (.040) | (.039) |
| Constant | -.929\*\* | -.844\*\* | -1.367\*\* | -1.432\*\* | -.865\*\* | -.487\*\* |
|  | (.197) | (.195) | (.248) | (.199) | (.187) | (.151) |
| N | 752 | 875 | 919 | 913 | 877 | 1192 |
| Rsq | .278 | .137 | .330 | .329 | .276 | .155 |

\* p < .05; \*\* p < .01. Cells contain OLS regression coefficients with standard errors in parentheses

Online Appendix Table 5. Hard News Knowledge, OLS estimates

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | DV: Hard Knowledge | | | | | |
|  | CA | IT | JP | NO | UK | KR |
| Public | -.018 | -.034\* | .075\*\* | .070\*\* | .097\*\* | -.018 |
|  | (.022) | (.013) | (.017) | (.021) | (.019) | (.012) |
| Private | -.005 | .005 | .008 | -.041\* | -.102\*\* | -.008 |
|  | (.021) | (.015) | (.020) | (.020) | (.016) | (.013) |
| Age: 35-54 | .097\*\* | .042\* | .027 | .044\* | .102\*\* | .053\*\* |
|  | (.022) | (.019) | (.020) | (.020) | (.019) | (.013) |
| Age: 55+ | .185\*\* | .075\*\* | .060\*\* | .138\*\* | .123\*\* | .049\* |
|  | (.022) | (.021) | (.023) | (.024) | (.021) | (.020) |
| Education | .105\*\* | .062\*\* | .108\*\* | .096\*\* | .060\*\* | .003 |
|  | (.017) | (.012) | (.015) | (.015) | (.013) | (.007) |
| Interest, cat1 | -.259\*\* | -.102\*\* | -.216\*\* | -.244\*\* | -.199\*\* | -.132\*\* |
|  | (.033) | (.023) | (.029) | (.033) | (.028) | (.025) |
| Interest, cat2 | -.182\*\* | -.059\*\* | -.126\*\* | -.153\*\* | -.119\*\* | -.087\*\* |
|  | (.029) | (.019) | (.028) | (.026) | (.024) | (.023) |
| Interest, cat3 | -.047 | -.024 | -.077\*\* | -.038 | -.050\* | -.035 |
|  | (.027) | (.018) | (.027) | (.024) | (.023) | (.023) |
| Media Use | .025\* | .034\*\* | .035\*\* | .056\*\* | .061\*\* | .067\*\* |
|  | (.012) | (.008) | (.011) | (.012) | (.010) | (.008) |
| Constant | -.235\*\* | -.182\*\* | -.286\*\* | -.355\*\* | -.263\*\* | -.076\* |
|  | (.055) | (.038) | (.053) | (.051) | (.047) | (.030) |
| N | 752 | 875 | 919 | 913 | 877 | 1192 |
| Rsq | .261 | .117 | .316 | .334 | .283 | .148 |

\* p < .05; \*\* p < .01. Cells contain OLS regression coefficients with standard errors in parentheses

Online Appendix Table 6. Soft News Knowledge, OLS estimates

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | DV: Soft Knowledge | | | | | |
|  | CA | IT | JP | NO | UK | KR |
| Public | -.111 | -.104 | .302\*\* | .022 | .183\* | -.055 |
|  | (.081) | (.067) | (.105) | (.085) | (.087) | (.064) |
| Private | .015 | .056 | .326\* | .237\*\* | -.154\* | -.025 |
|  | (.078) | (.075) | (.143) | (.079) | (.071) | (.065) |
| Age: 35-54 | .252\*\* | -.079 | -.081 | .078 | .160 | .157\* |
|  | (.091) | (.095) | (.137) | (.095) | (.089) | (.070) |
| Age: 55+ | .743\*\* | -.046 | -.084 | .177 | .061 | .040 |
|  | (.090) | (.103) | (.136) | (.106) | (.095) | (.097) |
| Education | .278\*\* | .193\*\* | .365\*\* | .075 | -.084 | .040 |
|  | (.065) | (.061) | (.104) | (.061) | (.058) | (.036) |
| Interest, cat1 | -.563\*\* | -.584\*\* | -.444\* | -.360\* | -.615\*\* | -.374\*\* |
|  | (.123) | (.116) | (.188) | (.164) | (.126) | (.124) |
| Interest, cat2 | -.304\*\* | -.254\*\* | -.268 | -.167 | -.384\*\* | -.090 |
|  | (.104) | (.096) | (.164) | (.099) | (.107) | (.105) |
| Interest, cat3 | -.142 | -.125 | -.152 | .063 | -.184 | .122 |
|  | (.097) | (.088) | (.155) | (.085) | (.098) | (.103) |
| Media Use | .074 | .192\*\* | .185\*\* | .301\*\* | .195\*\* | .254\*\* |
|  | (.047) | (.043) | (.060) | (.054) | (.046) | (.038) |
| Constant | -.772\*\* | -.460\* | -1.356\*\* | -1.042\*\* | -.020 | -.524\*\* |
|  | (.199) | (.200) | (.393) | (.215) | (.203) | (.146) |
| N | 752 | 875 | 919 | 913 | 877 | 1192 |
| Rsq | .161 | .091 | .190 | .158 | .101 | .085 |

\* p < .05; \*\* p < .01. Cells contain OLS regression coefficients with standard errors in parentheses.