CITIZEN JOURNALISM AND DEMOCRACY: HOW USER-GENERATED NEWS USE RELATES TO POLITICAL KNOWLEDGE AND PARTICIPATION

By Kelly Kaufhold, Sebastian Valenzuela, and Homero Gil de Zúñiga

The contribution of professional journalism to democratic citizenship is well-established, but the proliferation of online user-generated news begs the question of whether citizen journalism plays a similar role. Use and trust of both professional and citizen journalism were investigated for their associations with political knowledge and participation. User-generated journalism was negatively related with knowledge of national political figures, but strongly and positively associated with higher levels of online and offline participation; professional news media produced gains in knowledge and offline participation. Trust in user-generated news amplified the link between citizen journalism and online participation.

Journalism has long existed in the service of informed democracy, producing knowledgeable and politically engaged citizens. Nevertheless, most of the existing research is based on professional journalism as embodied by the mainstream press, which has suffered a steady decline for decades in the United States and elsewhere, accelerated by online news services. With the increasing popularity of so-called “citizen journalism,” the time is ripe for scholarly inquiry on the contribution of this type of news content to the production of an informed citizenry.

The well-established function of professional journalism in producing knowledge and motivating political participation is a benchmark to measuring the role of citizen journalism, which has been referred to as participatory journalism or user-centered news production. Social media strategist Lasica has described blogging as “committing a random act of journalism,” while others debate whether blogs compete with or complement mainstream news. Given the established role of consuming traditional media in political knowledge and participation, this study investigates whether consuming citizen journalism can, in some small way, fill that same role.
Literature Review

News Media Types. The present study examines professional media use across numerous platforms, including in print, on air, and online. At major newspapers, online unique visitors now exceed print subscribers by more than ten to one, and the online audiences are growing as print and on-air audiences contract. Still, newspaper subscribers spend much more time reading their print newspaper than visiting the online version, and while the number of households watching television online has doubled since 2006, broadcast TV still far outperforms the “second screen.” Given this complexity in the contemporary media environment, both online and offline traditional media were combined into a single professional news media use variable. By contrast, citizen journalism differs in that it is produced by amateurs, often with less editing and less rigor.

News Media Use and Political Knowledge. Political knowledge is a function of opportunity, motivation, and ability. While formal education increases the ability of individuals to process political information, and events such as election campaigns and political discussions can motivate people to follow public affairs, one of the most consistent findings in the communication literature is that news media use is positively associated with higher political knowledge.

Traditionally, newspapers outperform television and radio news in informing citizens, even when controlling for the larger audiences of television news, while high attention can increase the informative value of television news. Online information has also been found to make a unique contribution to political knowledge. While some online content producers, bloggers specifically, have been described as “people who are not journalists,” a substantial proportion of blogs is devoted to public affairs content. This study focuses more on Web sites sponsored by mainstream news outlets like CNN’s iReport. The source for news matters in producing knowledge.

H1: There will be a positive relationship between consuming professional journalism content and political knowledge.

RQ1: What is the relationship between consuming citizen journalism content and political knowledge?

News Media Use and Political Participation. Robert Park noted long ago that “the function of news is to orient man and society in an actual world.” Past research has found that news use enables political participation by providing mobilizing information, triggering discussions among people’s networks, and allowing audience members to reflect upon political issues.

U.S. political coverage is often strategic, depicting politics as a tactical power game and elections as a horse race, which can activate cynical responses among the public. This is challenged by proponents of the “mobilization” model, who assert that news use encourages democratic participation. Survey and panel data have shown both old and new media
correlate with participation, but most of the research in the area has been conducted on news produced by professional journalists and media organizations.

H2: There will be a positive relationship between consuming professional journalism content and political participation.

RQ2: What is the relationship between consuming citizen journalism content and political participation?

As Singer noted, there is no knowledge domain, entrance requirement, or accreditation for professional journalism. However, this does not prevent journalists from calling themselves professionals. On the other hand, citizen journalism has been applied to a wide variety of content, such as comments in a blog, user-generated videos and photos, and news stories in social networking sites, and has been called participatory journalism.

Professional journalism is defined here as news content produced by paid, trained, and supervised journalists delivered via media outlets, including newspapers, television, radio, and the Internet, who work within established editorial norms. Citizen journalism is defined by a number of attributes which make it distinct from professional journalism, including unpaid work, absence of professional training, and often unedited publication of content, and may feature plain language, distinct story selection and news judgment, especially hyper-local issues, free accessibility, and interactivity. As Rosen put it: “When the people formerly known as the audience employ the press tools they have in their possession to inform one another, that’s citizen journalism.”

In some cases, such as the 2003 anti-war protests and the Iran election protests of 2009, citizen journalism on blogs or public contributor sites like YouTube offered better access than was afforded professional journalists. The popularity of this type of user-generated news has led to its embrace among some traditional outlets—CNN’s iReport has received more than 378,000 contributions since it began in 2006.

For this study, professional journalism was operationalized as an index of consumption of newspapers (both online and offline), radio, local television, network television, and cable television news. Citizen journalism, in turn, was operationalized as an additive index of frequency of using and contributing news on user-generated sites like CNN’s iReport.

Trust as a Moderator of News Use Effects. Fewer Americans trust the news media now than at any period since Pew began querying about trust. Newspapers expand the number of issues salient to readers if the readers trust the value of the source. Trust in the media correlates with political trust—and media trust is negatively correlated with political cynicism—so trust in media seems good for democracy. Newspaper readers are both more trusting and better informed than television news viewers, while those with the least trust in mainstream media, espe-
cially public affairs content, are “the largest user group of online news forms.” Yet, existing news outlets that use new media to allow citizens “to become a part of the daily conversation” in their communities cultivate increased trust for the news providers. Allowing citizens greater involvement with “their” media seems to improve trust. Whether this holds for user-generated news content has not been well addressed.

**RQ3:** Does trust moderate the association of consuming professional and citizen journalism content with political knowledge and participation?

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**Method**

The data used in this study were collected via a Web-based survey of a national sample of adults living in the United States between December 15, 2008, and January 5, 2009.

**Sample.** Respondents were selected from a panel of registered participants administered by the Media Research Center at the University of Texas at Austin. The Media Research Lab based this sample on two U.S. Census variables: age (30%, 18-34; 39%, 35-54; 31%, 55 or more) and gender (50.2%, male; 49.8%, female). Compared to the most recent American Community Survey, the MRL sample was older, had more females, and was slightly more educated. Voter turnout levels were similar to those reported by the Pew Internet & American Life 2008 post-election survey, which used RDD sampling and was conducted at roughly the same time.

**Survey.** Participants were e-mailed invitations with the survey URL. The questionnaire gauged respondents’ media use, political knowledge, and a variety of political attitudes and political behaviors, as well as demographic characteristics (N = 1,159). Based on the American Association for Public Opinion Research’s RR3 calculation the response rate was 22.8%. Compared to U.S. Census data, this sample was older, had more females, was slightly better-educated and was not skewed in regard to income or political participation online or offline, race, or education.

**Operationalization of Variables.** Three dependent variables and eleven independent variables were constructed. Dependent variables were:

**Political Knowledge.** Respondents were asked four questions related to public figures, including identifying the speaker of the U.S. House of Representatives, the vice president-elect, the name of the British Prime Minister, and the state of then-governor Sarah Palin. Correct responses were coded as 1 and incorrect or missing responses were coded as 0, and were summed to create an index of political knowledge (range = 0 to 4, \( M = 3.05, \text{ sd} = .91 \)).

**Offline Political Participation.** Respondents were asked if during the past twelve months they had attended a public meeting, hearing, political rally, protest, or march; contacted a public official or news organization; or participated in any political interest groups; and whether they voted in the 2008 presidential election. Responses to each statement were added into a single index (\( \alpha = .82, \text{ range} = 0 \) to \( 10, M = 2.89, \text{ sd} = 2.35 \)).
Online Political Participation. Respondents rated on a 10-point scale how often they used the Internet to contact, contribute to, or sign up to follow a politician, to volunteer for a campaign/issue, e-mail a political message, or write a letter to the editor of a newspaper, for an index of online political participation ($\alpha = .87$, range = 6 to 60, $M = 15.02$, sd = 10.75).\(^6\)

Independent variables were:

Professional News Media Use. Respondents rated on a 7-point scale how often they used the following to get political information: network television news, cable television news, local television news, radio news, print newspapers, and online newspapers, which were combined into an additive index ($\alpha = .60$, range = 0 to 36, $M = 20.53$, sd = 7.13).

Citizen News Media Use. Using a 7-point scale ranging from “never” to “everyday,” respondents shared how frequently they both visited and contributed to a user-generated news site; the two scores were added to create an index (inter-item correlation = .48, range = 2 to 14, $M = 3.86$, sd = 2.57).

Professional News Media Trust. Levels of trust in “traditional news media” and “online traditional news media” scored on a 10-point scale were added into a single index (inter-item correlation = .88, range = 2 to 20, $M = 8.38$, sd = 4.58).

Citizen News Media Trust. Trust in “alternative media online, such as blogs and citizen journalism,” was indicated on a 10-point scale (range = 1 to 10, $M = 3.68$, sd = 2.19).

Control variables included:

Strength of Party Identification was measured using an 11-point scale ranging from strong Republican (8.7% of respondents) to strong Democrat (13.2% of respondents), with the midpoint being Independent (29.1% of respondents). This item was folded into a 6-point scale from weak to strong partisanship ($M = 3.31$, sd = 1.79).

Political Discussion. Respondents used a 10-point scale to indicate how often they talked about politics or public affairs, whether online or offline, with family and friends, co-workers and acquaintances, strangers, who disagree with them, and people who agree with them, for an index of political discussion ($\alpha = .84$, range = 0 to 45, $M = 19.69$, sd = 10.00).

Demographics. Age ($M = 45.79$, sd = 11.31), gender (67% females) and ethnicity (70% non-Hispanic whites) were straightforward. Education asked the highest level of formal education completed ($Md$ = 2-year college degree); and total annual household income was reported using 15 categories ($Md$ = $50,000 to $59,999).

Hypotheses were tested using three sets of hierarchical regressions, one for each dependent variable. The independent variables were entered causally in separate blocks (demographics, political orientations, news media trust, and news media use) to assess the impact of each block of variables on each dependent variable and to examine the effects of professional and citizen news media use controlling for each other.

Analysis
TABLE 1
Zero-order Correlations of Media Type, Knowledge, and Political Participation

<table>
<thead>
<tr>
<th></th>
<th>Online Participation</th>
<th>Offline Participation</th>
<th>Political Knowledge</th>
<th>Citizen Journalism</th>
<th>Professional Journalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Participation</td>
<td>1</td>
<td>.625 **</td>
<td>.047</td>
<td>.376 **</td>
<td>.269 **</td>
</tr>
<tr>
<td>Offline Participation</td>
<td>.625 **</td>
<td>1</td>
<td>.181 **</td>
<td>.190 **</td>
<td>.222 **</td>
</tr>
<tr>
<td>Political Knowledge</td>
<td>.047</td>
<td>.181 **</td>
<td>1</td>
<td>-.075 *</td>
<td>.066 *</td>
</tr>
<tr>
<td>Citizen Journalism</td>
<td>.376 **</td>
<td>.190 **</td>
<td>-.075 *</td>
<td>1</td>
<td>.437 **</td>
</tr>
<tr>
<td>Professional Journalism</td>
<td>.269 **</td>
<td>.222 **</td>
<td>.066 *</td>
<td>.437 **</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < .05; ** p < .01
Note: Sample size = 958.

Both professional and citizen journalism use related to participation, although only professional journalism use was related to political knowledge (see Table 1).

As shown in Table 2, the statistical models explained greater variance of political participation online ($R^2 = 28.5\%$) and offline ($R^2 = 25.7\%$) than political knowledge ($R^2 = 12.4\%$). Consistent with previous research, older, more educated, and politically interested individuals reported higher levels of political knowledge and participation, both online and offline.$^{17}$

As predicted in H1, there was a positive relationship between professional news media use and political knowledge (beta = .07, $p < .05$), but not with using outlets of citizen journalism (beta = -.10, $p < .01$), which addresses RQ1.

Professional news media consumption related positively to offline political participation (beta = .06, $p < .05$), but the same did not apply to online participation. Thus, H2 was partially supported.

Consuming citizen journalism content was positively related to political participation online and offline (RQ2, betas = .20, $p < .001$ and .07, $p < .05$, respectively).

In response to RQ3, in two out of six possible cases, media trust moderated the relationship between media use and two of the three dependent variables (see Table 3). Specifically, trust in professional news organizations negatively moderated the relationship between professional news media use and political knowledge (beta = -.24, $p < .05$), while trust in citizen journalism positively moderated the association between citizen news media use and online political participation (beta = .30, $p < .001$).
### Table 2
Type of News Media Use Predicting Political Knowledge and Political Participation

<table>
<thead>
<tr>
<th>Block 1: Demographics</th>
<th>Political Knowledge</th>
<th>Offline Participation</th>
<th>Online Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.066*</td>
<td>.140***</td>
<td>.052*</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>-.045</td>
<td>.026</td>
<td>.007</td>
</tr>
<tr>
<td>Education</td>
<td>.208***</td>
<td>.215***</td>
<td>.116***</td>
</tr>
<tr>
<td>Income</td>
<td>.126***</td>
<td>.095**</td>
<td>-.044</td>
</tr>
<tr>
<td>Race (White)</td>
<td>-.028</td>
<td>.016</td>
<td>.007</td>
</tr>
<tr>
<td>ΔR² (%)</td>
<td>10.7***</td>
<td>11.7***</td>
<td>2.9***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 2: Political Orientations</th>
<th>Political Knowledge</th>
<th>Offline Participation</th>
<th>Online Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of Partisanship</td>
<td>.032</td>
<td>.068**</td>
<td>.122***</td>
</tr>
<tr>
<td>Political Discussion</td>
<td>.065*</td>
<td>.250***</td>
<td>.256***</td>
</tr>
<tr>
<td>ΔR² (%)</td>
<td>0.5*</td>
<td>10.9***</td>
<td>17.0***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 3: News Media Trust</th>
<th>Political Knowledge</th>
<th>Offline Participation</th>
<th>Online Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in Professional News Media</td>
<td>-.069*</td>
<td>-.112***</td>
<td>-.061*</td>
</tr>
<tr>
<td>Trust in Citizen News Media</td>
<td>.061</td>
<td>.158***</td>
<td>.208***</td>
</tr>
<tr>
<td>ΔR² (%)</td>
<td>0.4</td>
<td>2.1***</td>
<td>4.5***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 4: News Media Use</th>
<th>Political Knowledge</th>
<th>Offline Participation</th>
<th>Online Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional News Media Use</td>
<td>.067*</td>
<td>.059*</td>
<td>.044</td>
</tr>
<tr>
<td>Citizen News Media Use</td>
<td>-.103**</td>
<td>.074*</td>
<td>.202***</td>
</tr>
<tr>
<td>ΔR² (%)</td>
<td>0.8**</td>
<td>1.0***</td>
<td>4.1***</td>
</tr>
<tr>
<td>Total R² (%)</td>
<td>12.4***</td>
<td>25.7***</td>
<td>28.5***</td>
</tr>
</tbody>
</table>

Note: Sample size = 958. Cell entries are final-entry OLS standardized coefficients.
* p < .05; ** p < .01; *** p < .001.

For a better understanding of these relationships, both statistically significant interactions were probed by estimating the effect of minimum and maximum news media use at low (one sd below the mean) and high (one sd above the mean) media trust. As shown in Figure 1, for those who trusted professional news media, frequency of professional news media use was unrelated to political knowledge, t(944) = -0.95, p > .10, but among those who did not trust professional media, political knowledge was significantly higher for professional media users compared to nonusers, t(944) = 3.38, p < .001.

A similar analysis was conducted for the significant interaction between citizen news media use and trust in the model for participation online. As represented in Figure 2, for those with low trust in citizen news media, use of these media was positively related to their online political engagement, t(944) = 1.80, p < .05. Among individuals with higher trust in citizen news media, this positive effect was exacerbated; that is, participation was highest among individuals who use and trust citizen news, t(944) = 7.51, p < .001.
### TABLE 3

**Interactive Effects of News Media Use and Trust on Political Knowledge and Participation**

<table>
<thead>
<tr>
<th></th>
<th>Political Knowledge</th>
<th>Offline Participation</th>
<th>Online Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Previous Blocks (1-4):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$ (%)</td>
<td>12.4***</td>
<td>25.7***</td>
<td>28.5***</td>
</tr>
<tr>
<td><strong>Block 5: Interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional News Media Use x Trust</td>
<td>-.237**</td>
<td>.140</td>
<td>.090</td>
</tr>
<tr>
<td>Citizen News Media Use x Trust</td>
<td>-.091</td>
<td>.071</td>
<td>.298***</td>
</tr>
<tr>
<td>$\Delta R^2$ (%)</td>
<td>0.9**</td>
<td>0.4</td>
<td>1.9***</td>
</tr>
<tr>
<td><strong>Total R^2 (%)</strong></td>
<td>13.3***</td>
<td>26.1***</td>
<td>30.5***</td>
</tr>
</tbody>
</table>

*Note: N = 958. Cell entries are final-entry OLS standardized coefficients.*

* $p < .05$; ** $p < .01$; *** $p < .001$.

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**Discussion**

The purpose of this study was to expand the current literature on journalism and its role for political knowledge and participation. The fact that professional journalism is one of the cornerstones of democracy is not new. Nevertheless, today's digital environment provides a more interactive realm where audiences may also become news producers. Among the many newly formed informational mechanisms taking place in this new digital world, citizen journalism may well lead this trend. This is one of the first studies to compare the unique contribution of professional journalism side-by-side with citizen journalism on two key indicators of democratic citizenship: political knowledge and political participation.

Results indicate that both professional and citizen journalism have an effect on the political discourse, although the picture is complex. As with previous findings, professional journalism fosters political learning. Those who consume news through professional news outlets—online and off—tended to score marginally higher in political knowledge than citizen journalism consumers. In retrospect, considering the nature of citizen journalism—hyperlocal, lacking professional oversight or editing, or training in the norms of reporting—it is reasonable to expect some differences between professional and citizen journalism in terms of knowledge. The knowledge questions employed, drawn as they were from the headlines of the day, likely favored those who consume traditional, professional news. In any case, in order to obtain a robust, reliable, and valid political knowledge measurement, outliers were excluded and the latency of the response was normalized with a baseline response, as recommended in other studies. Significance was found on this variable for citizen journalism, but not for professional journalism, which invites future investigation.

In relation to political involvement, both types of journalism seem to have a positive impact. Consuming news through either of these two types of information sources led people to better understand politics and
FIGURE 1
Political Knowledge as a Function of Professional News Media Use and Trust

Note: The figure plots point estimates of political knowledge for individuals with minimum and maximum levels of professional news media use and with one sd below the mean and one sd above the mean of professional news media trust, holding all other variables constant at their means.

participate offline by voting in elections, donating money, etc. Citizen journalism seems to lead to more mobilizing online, with a greater impact on the way politics are constructed in cyberspace. This is information made by citizens online for an online world, causing effects on online political participation. It is important to note that our large sample size (N = 958) helped illuminate a marginally significant relationship between professional news consumption and offline participation.

One limitation to the discussion of trust is the single item used to measure it and its mention of "alternative media online, such as blogs and citizen journalism," which obviously failed to isolate citizen journalism (i.e., as defined by submitting an item to CNN's iReport). That said, blogs tend more toward citizen journalism in that they are largely maintained by amateurs, lack rigorous editing, rely on an individual source, feature more casual language, and tend toward a narrow issue focus.

While professional journalism is much more commonly used than citizen journalism, the overall level of trust in both forms of journalism does not differ greatly. Those who trust one type of journalism trust the other (r = .353, p < .001). However, people who tend to trust professional journalism will tend to participate less in political activities, whereas people who have higher levels of trust in citizen journalism will tend to get more involved in politics.

More important, trusting professional or citizen journalism regulates the effect of using either of these outlets, and how much people
FIGURE 2
Online Political Participation as a Function of Citizen News Media Use and Trust

Note: The figure plots point estimates of online political participation for individuals with minimum and maximum levels of citizen news media use and with one sd below the mean and one sd above the mean of citizen news media trust, holding all other variables constant at their means.

know about and participate in politics. The first interesting finding is the negative correlation between trust in professional journalism and political knowledge. Being distrustful may provoke a more careful and reflective reading of the news and perhaps spur the seeking of alternative sources of information. A second interaction reveals that people who trust citizen journalism are substantially more active online. Trusting citizen journalism indeed serves as a valuable antecedent for online political engagement. Those who really trust that information are motivated to seek it out, engage with it, and may feel more compelled to mobilize accordingly, especially given the often hyper-local nature of this news.

These findings help compare the effects of professional and citizen journalism in the democratic process; however, there are a number of drawbacks in evidence, with one of the most noticeable being the nature of the data. Based on national U.S. data, the findings are generalizable; nonetheless, this study relies on cross-sectional data, and, strictly speaking, causal direction should be interpreted with caution, particularly with respect to the relationship between trust and the type of journalism individuals consume. Another suggestion for future research would be to include different dimensions of knowledge, local and national, to understand the mechanisms between political knowledge and professional journalism and citizen journalism.
Limitations notwithstanding, this article contributes to political communication research. Given the growing popularity and penetration of citizen journalism, and the way it is embraced by professional journalism, this relatively immature news source bears further investigation. This study establishes benchmarks in political knowledge and political participation by which to compare citizen journalism to professional journalism and by which to measure its evolution into a mature news source. While the hypotheses were only partly supported, the contribution of citizen journalism—trust and use—to political participation is now established. Given the continuing demise of traditional professional journalism in the United States, this finding offers additional hope for the continuation of a better-informed democracy.

NOTES


32. Lasica, “Blogs and Journalism Need Each Other.”


43. Deuze, Bruns, and Neuberger, “Preparing for an Age of Participatory News,” 337.


45. American Association for Public Opinion Research RR3 formula is (complete interviews) / (complete interviews + eligible nonresponse + e [unknown eligibility]), where e was estimated using the proportional allocation method, i.e., (eligible cases) / (eligible cases + ineligible cases).

46. We conducted a comparison between the two items that were most comparable across offline/online participation in terms of wording and activities involved: contacting media organizations and contacting elected officials. We created dichotomous dummy variables for the online version of these items: all responses between 1 and 9 were recoded as 1, while those who responded 0 were left intact.

Comparison of Online Participation Scales, Original and Dummy-coded

<table>
<thead>
<tr>
<th>Offline</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contacting News Org. (0/1)</td>
</tr>
<tr>
<td>Contacting News Org. (0/9)</td>
<td>.53</td>
</tr>
<tr>
<td>Contacting News Org. (0/1)</td>
<td>.53</td>
</tr>
<tr>
<td>Contacting a Politician (0/9)</td>
<td>—</td>
</tr>
<tr>
<td>Contacting a Politician (0/1)</td>
<td>—</td>
</tr>
</tbody>
</table>

All correlations are significant at p < .01.

47. Please note: while professional news consumption correlated significantly with offline participation but not with online participation at p < .05, the distinctions are small. In fact, the marginal significance of offline participation is likely due to our large sample size, N = 958, which enabled the elucidation of even small effects.

48. High and low trust were crafted using the pick-a-point procedure described by Hayes and Matthes: Andrew F. Hayes and Jörg Matthes, “Computational Procedures for Probing Interactions in OLS and Logistic Regression: SPSS and SAS Implementations,” *Behavior Research Methods* 41 (August 2009): 924-36. This procedure holds all other variables constant at their means, so that the estimated values of the dependent variables apply to “average” individuals who differ only in news use and news trust.