

# CRUISING IS BELIEVING?: COMPARING INTERNET AND TRADITIONAL SOURCES ON MEDIA CREDIBILITY MEASURES

By Thomas J. Johnson and Barbara K. Kaye

*This study surveyed politically-interested Web users online to examine whether they view Web publications as credible as their traditionally-delivered counterparts. Credibility is crucial for the Internet because past studies suggest people are less likely to pay attention to media they do not perceive as credible. This study found online media tended to be judged more credible than their traditional versions. However, both online and traditional media were only judged as somewhat credible.*



## Introduction

A campaign analyst, while discussing how the Internet could be used to reach voters, fretted about whether the public would trust information on the Internet when "Joe from Dubuque" can create a Web page that appears as credible as one posted by the news media.<sup>1</sup>

But in the face of declining confidence in the media – a 1997 Roper poll shows that people are as likely to believe everything they hear from a lawyer or a Congressman (3 percent) as they are from a newspaper reporter (2 percent)<sup>2</sup> – a more pertinent question might be how much do people trust the *New York Times* online? Credibility is crucial if the public is going to continue to embrace and accept the Internet. If people do not trust or believe what they see or hear in the traditional media or from online media sources, they are less likely to pay attention to it.<sup>3</sup> Lack of trust in information obtained from the Web could keep it from becoming a major source of news in the immediate future.

While numerous studies have examined demographic characteristics of those who travel the Information Superhighway,<sup>4</sup> far less attention has been paid to the degree to which people trust the information they find there. This study surveyed politically-interested Web users online to examine whether they view Internet publications as credible as their traditionally-delivered counterparts and which demographic characteristics determine credibility. More specifically, this study compares online newspapers, news magazines, candidate literature, and issue-oriented sources to their traditionally delivered versions in terms of credibility. Credibility is measured as the degree to which politically-interested Web users judge information on the Internet to be believable, fair, accurate, and in depth. This study also explores the degree to which credibility of an online medium correlates with amount of reliance on it as well as the degree to which credibility is related to age, gender, income, and levels of education.



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**Media Credibility.** Widespread concern that the public's confidence in the media had dropped spurred a host of studies in the mid-to-late 1980s examining media credibility.<sup>5</sup> However, after studies suggested that the credibility crisis itself lacked credibility – that is, the public had a largely favorable impression of the media<sup>6</sup> – attention shifted away from media credibility to source and message credibility.<sup>7</sup> But media credibility deserves renewed attention for at least two reasons. First, credibility levels have dropped considerably during the 1990s. For instance, a 1996 National Opinion Research Center Poll showed that the percentage of those who had a great deal of faith in the press has declined from 18 percent to 11 percent from 1986 to 1996, and the numbers of those who had at least some confidence in the media dropped from 72 percent to 59 percent over the same time period.<sup>8</sup> Similarly, while a study by the Pew Charitable Trusts found that a solid majority of the public still views the three networks as credible (72 percent to 74 percent), believability ratings are ten points lower than a decade before.<sup>9</sup> Finally, a 1997 Roper study found out that while almost eight out of ten (78 percent) said that the source they rely on most delivers high-quality information, less than half (47 percent) thought the media in general were doing a good job. Also, from 1985 to 1997 the number of individuals who judged negativity, bias, and being manipulated by special interests as major problems in media coverage increased.<sup>10</sup> Second, most of the earlier credibility studies were conducted before the emergence of several new media, most notably the Internet.

Only a few studies have examined the credibility of Internet information. Brady showed 134 graduate and undergraduate students a Web page he created containing information on candidates running for Congress and asked the students to judge whether the information on the Web page was more or less in-depth and biased than similar televised information. Almost three-quarters (71 percent) judged the Web page more in-depth than television. While a slight majority (54.5 percent) said the Web page was just as biased as television, 43.3 percent said it was less biased.<sup>11</sup> Similarly, a study by the Pew Research Center also found that online users judged the Internet as a more credible source than traditional media. A majority (56 percent) agreed that “these days you’re more likely to find accurate information about what’s going on from the Internet than in the daily newspapers or on the network news,” while only 22 percent concurred that “a lot of what you find on the Internet cannot be believed.”<sup>12</sup> On the other hand, a Roper study for the Freedom Forum found that people rated leading traditional sources as more fair and unbiased than Internet information. While three-quarters claimed they trust CNN and six in ten had confidence in the *New York Times*, slightly more than half (54 percent) of those surveyed trusted the Internet to deliver fair and unbiased information about the presidential campaign. However, people put more faith in the Internet than in their local newspapers (52 percent).<sup>13</sup>

Although evidence remains scarce on whether individuals perceive the Internet to be credible, several analysts have examined whether Internet information *should* be judged as trustworthy as traditional sources. Several observers have noted that an assumed strength of the Internet – that it is a freewheeling, unregulated outpost for anyone to express his or her opinions – might also weaken its value as a credible information source. While traditional news sources are subject to both professional and social pressures to provide accurate and unbiased information, Web sites posted by “Joe from

Dubuque" are not subject to such constraints.<sup>14</sup> Worse, several parody sites have cropped up on the Internet which look like ones posted by official sources. Online parodies may mislead viewers, especially Web novices, into believing they are visiting official sites. For instance, during the 1996 presidential election, those looking for the Bob Dole home page may have stumbled upon a parody site that had the Dole fruit company logo emblazoned upon it and touted Dole as the "ripe man for the job."<sup>15</sup>

Messages from Usenet and other discussion forums may be judged even less believable than Web sites. Research on source credibility in traditionally-delivered media suggests that individuals use several standards in judging a source's believability, including the source's expertise and bias as well as the audience members' prior knowledge and impressions of a source. When knowledge of the source's credibility is limited, individuals examine the message to see if it is well presented, believable, and with specifics or supporting data.<sup>16</sup> Studies suggest that few of these standards are met in online discussions. Franke<sup>17</sup> found in a content analysis of political discussions on the Internet that most messages were too brief or strange to be considered serious dialogue. Most of the messages reflected users' "pre-established partisan views" and a majority were significantly sarcastic in tone.

**Credibility and Demographics.** Several studies have examined whether demographics influence judgments of media credibility. Some of the results of these studies can be applied to the Internet. For instance, past studies suggest that males and those with high levels of education, income, and media use tend to be the most critical of the media in general.<sup>18</sup> Internet studies suggest while the Information Superhighway is becoming more demographically mainstream,<sup>19</sup> it is still dominated by white males of high socioeconomic status.<sup>20</sup> Researchers also suggest that Internet users tend to be heavy media users in general, although the Internet has not yet replaced more traditional sources.<sup>21</sup> Rather, those who rely on the Internet for political information tend to be "political junkies" who watch CNN, Sunday public affairs programs, and C-SPAN, and who read more news magazines and political books than the average individual.<sup>22</sup> Therefore, several demographic characteristics associated with high use of the Internet are also related to negative perceptions of credibility.

On the other hand, some demographic variables may be associated with positive perceptions of Internet credibility. Two characteristics linked with high levels of media credibility are also associated with heavy Internet use: age and political ideology. Past studies suggest that young adults are the most likely to judge the media as credible<sup>23</sup> and are the most likely to use the Internet, although older individuals are beginning to enter cyberspace in greater numbers.<sup>24</sup> Similarly, liberals are more likely than conservatives to judge the media as credible and to support freedom of press issues.<sup>25</sup> While studies suggest that Democrats and Republicans use the Internet in about equal proportions<sup>26</sup> and that at least a quarter of Web users are Libertarian,<sup>27</sup> the number of Web users who identify themselves as liberals outnumber those who consider themselves conservatives.<sup>28</sup>

**Credibility and Media Use.** Finally, past studies suggest that how credible one views a medium is strongly related to how often one uses it.<sup>29</sup> Similarly, research suggests that people judge their preferred medium as the most credible.<sup>30</sup> Therefore, most studies find that television, the most relied upon source, is also judged the most credible.<sup>31</sup> Recent studies estimate the number of Americans who use the Internet as between 26.4 and 37 million

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people, less than 20 percent of the adult population.<sup>32</sup> These statistics, however, only measure those who have visited cyberspace, not the number of users who rely on it for news and information. Studies conducted during the 1996 presidential election found that about 12 percent of voting age Americans used the Internet for political news and 3 percent listed it as their primary source of information.<sup>33</sup> With so few people relying on the Internet for political information, it is doubtful whether the general population would judge it as credible as more traditional sources. However, as the study by the Pew Research Center of online users suggests, those who rely on the Internet for political news and information might judge it just as credible, or more so, than traditional news sources.

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## Research Questions

This study of the credibility of online sources examines four main questions:

1. To what degree will individuals who regularly use the Internet for political information judge online newspapers, news magazines, candidate literature, and issue-oriented sources as credible?

2. How do online newspapers, news magazines, candidate literature, and issue-oriented sources compare with their traditionally-delivered versions in terms of credibility?

3a: How does reliance on online media compare with reliance on their traditional counterparts in terms of credibility?

3b: Does reliance correlate more strongly with credibility than general use measures?

4. To what degree is credibility of online sources correlated with age, gender, income, and educational levels?

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## Method

**Data Collection.** This study is based on an online survey designed to attract politically-interested Web users. The survey was posted on the World Wide Web during the two weeks before and the two weeks after the 1996 presidential election (23 October – 20 November 1996). Additionally, links were established to the survey from other politically-oriented Web sites and notices were sent to media and politically-oriented discussion groups, forums, Usenet groups, and listservs informing them of the survey. The intent was not to generate a random sample,<sup>34</sup> but to attract politically-interested Web users – those who would be more likely to use online media sources. A total of 308 individuals completed the survey during the four-week period. While this is a convenience sample, demographic comparisons with other online surveys, as well as with ones conducted by the traditional method of random telephone calls, suggest the sample may be representative of the Internet population.<sup>35</sup>

**Dependent Measures.** Although credibility is typically defined in terms of worthiness of being believed,<sup>36</sup> it is typically measured as a multidimensional construct. Media credibility has been measured several ways, and studies suggest that how credibility is measured influences the degree to which individuals judge the media as credible.<sup>37</sup> Believability, accuracy, bias,

and depth or completeness are four measures that have consistently emerged from several past studies that have examined how media credibility should be gauged.<sup>38</sup>

#### *Independent Measures.*

*Traditional vs. Online Sources.* For this survey, respondents were asked to compare traditionally-delivered and online media in terms of believability, fairness, accuracy, and depth of political information. The media examined were newspapers, news magazines, candidate literature, and political issue-oriented sources. Respondents were asked to rate on a five-point scale the degree of believability, fairness, accuracy, and depth of each online and traditional source. The five-point scale ranged from not at all believable (fair, accurate, or in-depth) to very believable (fair, accurate, or in-depth), with a "don't know" option. Scores for the four measures of credibility were combined into a credibility index for each traditional and online medium. The standardized Cronbach's alpha for the eight scales ranged from .83 to .91.

*Source Reliance and Use.* Research on traditional media suggests that credibility is strongly related to how often individuals use that particular medium.<sup>39</sup> Past studies also suggest that reliance is more strongly associated with media credibility than with general use measures.<sup>40</sup> This study employed four different measures of media use: average number of hours per week on the Web, the average hours per week on political sites, the number of times the Internet has been accessed, and the degree of reliance on the Web. The three different use measures (hours per week and times accessing the Web and hours per week on political sites) were open-ended. Respondents were also asked to judge on a five-point scale: "How much do you rely on the following sources (newspapers, news magazines, and the World Wide Web) for your political information?" Responses ranged from "don't rely at all" to "heavily rely on."

*Demographics.* Past studies suggest that those who are older and have high levels of income and education are the least likely to view the media as credible, and males judge the media as less credible than females.<sup>41</sup> Therefore, this study also employed traditional measures of age, gender, income, and education<sup>42</sup> to see if relationships between credibility and demographics typically found for traditionally-delivered media hold true for their online counterparts.

*Data Analysis.* The data were analyzed in four stages:

First, frequencies were run on the four traditional and the four online credibility indexes.

Second, paired t-tests were calculated to compare each of the online media with its traditionally-delivered counterpart on the credibility indices. "Don't know" responses were excluded to compare responses only from those who stated an opinion concerning the differences between online and traditionally-delivered media.<sup>43</sup>

Third, Pearson correlations were run between the four media use measures and credibility of online newspapers, online news magazines, online candidate literature, and online issue sources to determine whether the amount of Internet use influences whether individuals judge the Web to be credible. Similarly, reliance on traditional sources and the World Wide Web were correlated with credibility measures both to ascertain whether reliance influences credibility and to determine if reliance is more strongly related to perceptions of Web credibility than Internet use.

Finally, correlational analysis between the online media variables and age, gender, education, and income was used to determine whether the

**TABLE 1**  
*Credibility of Online Media*

Online Newspapers (N=232)	%
Not at all/not very...	13.4
Somewhat...	71.9
Moderately/very....	14.7
Online News Magazines (N=168)	
Not at all/not very...	14.3
Somewhat...	71.4
Moderately/very....	14.3
Online Candidate Literature (N=204)	
Not at all/not very...	55.9
Somewhat...	40.7
Moderately/very....	3.4
Online Political Issue-Oriented Sources (N=201)	
Not at all/not very...	11.4
Somewhat...	66.2
Moderately/very....	22.4

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relationships found for traditional media will also appear for online media in terms of credibility.

## **Results**

This study examines 308 responses to an online survey assessing Web users' perceptions of credibility of online political information sources. Respondents spend an average of 13.2 hours per week on the Web; three of those hours are spent seeking online political information. Overall, three-quarters (75.5%) of the respondents browse the Web between 10 and 20 hours per week on average. The respondents are an experienced group of users who have accessed the Web an average of 1,723 times, including 11 people who said they have accessed the Internet more than 10,000 times.

**Credibility of Online Sources.** Anyone with access to a server can post information on the Web without restriction, calling the Web's credibility into question. The degree to which individuals judge online sources as credible is the focus of this study's first research question.

Online newspapers, news magazines, and political issue-oriented sites are judged as "somewhat" credible by the majority of respondents. Online candidate literature, however, is thought of as "not at all" to "not very" credible by slightly more than half of the respondents (Table 1). Compared to other online information sources, political issue-oriented sites are deemed the most credible.

**Newspapers and News Magazines Online.** Respondents perceive online newspapers and online news magazines to be equally credible. About 7 out of 10 respondents generally perceive these two information sources as "somewhat" credible. The remaining respondents are evenly divided between not at all/not very credible and moderately to very credible (Table 1).

TABLE 2

*Credibility of Traditionally Delivered Information Sources versus Online Counterparts*

Means and Paired Samples t-scores	Credibility
Newspapers	11.7
Online Newspapers	12.4
t-score	3.1*
News Magazines	12.3
Online News Magazines	12.4
t-score	-2
Candidate Literature	8.2
Online Candidate Literature	9.2
t-score	-6.5*
Issue-Oriented Sources	12.9
Online Issue-Oriented Sources	13.0
t-score	-8

\* = < .025, two-tailed

*Online Candidate Literature:* Candidate information posted online by politicians is seen as the least credible source by almost 6 out of 10 (55.9%) respondents. Only 3.4% indicate that online candidate literature is moderately to very credible.

*Online Political Issue-Oriented Sources:* Online sources that post political issue information are considered "somewhat" credible by two-thirds of the respondents. Also, almost one quarter (22.4%) of those responding marked these Web sources as being moderately to very credible.

*Online vs. Traditional Sources.* Traditional information sources are generally heavily scrutinized for accurate and unbiased reporting, while Internet sources are not subject to these same pressures. The Internet's unregulated flow of information may cause many people to question its credibility. Studies probing credibility report mixed results; some claim that online sources are more credible than their traditionally-delivered counterparts, while others have concluded the opposite. Therefore, paired sample t-tests were run to compare traditional sources to the Internet versions in terms of credibility.

Generally, neither traditional nor online sources are rated much above "somewhat" credible. However, online newspapers and online candidate literature are judged as significantly more credible than their traditional counterparts. On the other hand, the mean credibility scores for online news magazines and online issue-oriented sources are nearly identical to their traditional versions (Table 2).

*Web and Media Reliance and Credibility.* Studies indicate that the more credible the public finds a particular medium the more they rely on it as their primary news source. Therefore, the most relied-upon sources are deemed the most credible. Relationships between reliance on the Web and judgments of credibility are examined next, as are comparisons between reliance on traditional media and credibility.



TABLE 3

*Reliance and Credibility of Traditional and Online Information Sources*

Correlation Coefficients	Credibility
Rely on Newspapers Newspapers	.64***
Rely on News Magazines News Magazines	.48***
Rely on Web Online Newspapers	.16*
Rely on Web Online News Magazines	.19*
Rely on Web Online Candidate Literature	.23***
Rely on Web Online Issue-Oriented Sources	.24***

> .05 = \*

> .01 = \*\*

> .001 = \*\*\*

This study also finds that there is a strong correlation between reliance on traditionally-delivered print media and perceptions of credibility with both relationships significant at the .001 level. The more politically-interested users rely on printed newspapers and news magazines, the more those media are considered credible (Table 3). Reliance on the Web is also significantly related to credibility assessments of all four online sources examined. However, none of the scores for the online media is as high as the traditional ones.

*Number of Times Accessed and Hours per Week on the Web.* Reliance is a much stronger measure of credibility than use of the Web. Hours of weekly use is not significantly related to credibility for any of the four online sources. Moreover, the amount of online use of candidate literature tends to be negatively related to levels of credibility. Use of the Web specifically for political information is, however, significantly correlated with perceptions of credibility of online issue sources (Table 4).

The number of times the Web has been accessed and the number of hours individuals spend on the Web do not seem to influence perceptions of credibility. Exposure to specific political content is only slightly more influential. The Web is a new medium still in its infancy, thus experience may not yet be a factor when judging the credibility of online sources (Table 4).

*Associations between Demographics and Credibility.* While studies indicate the Internet is becoming more demographically diverse, it is still dominated by white males of higher socioeconomic status, a group least likely to assess the media as credible. On the other hand, studies indicate



**TABLE 4**  
*Demographics and Online Source Credibility*

Correlation Coefficients	Credibility
<u>Hours per Week on Web</u>	
Online Newspapers	.01
Online News Magazines	.14
Online Candidate Literature	-.05
Online Issue Sources	.05
<u>Hours per Week on Political Sites</u>	
Online Newspapers	.08
Online News Magazines	.07
Online Candidate Literature	.05
Online Issue Sources	.18*
<u>Times Accessed the Web</u>	
Online Newspapers	.05
Online News Magazines	.00
Online Candidate Literature	.04
Online Issue Sources	-.06
<u>Gender</u>	
Online Newspapers	.18**
Online News Magazines	.22**
Online Candidate Literature	.18**
Online Issue Sources	.17**
<u>Age</u>	
Online Newspapers	-.22***
Online News Magazines	-.22**
Online Candidate Literature	-.16**
Online Issue Sources	-.10
<u>Education</u>	
Online Newspapers	-.13*
Online News Magazines	-.15
Online Candidate Literature	-.31***
Online Issue Sources	-.22**
<u>Income</u>	
Online Newspapers	-.12
Online News Magazines	-.14
Online Candidate Literature	-.19**
Online Issue Sources	-.07

> .05 = \*  
> .01 = \*\*  
> .001 = \*\*\*

young adults are most likely to perceive the media as credible. The last research question probes the relationships between several demographic variables and judgments of online source credibility.

This study finds that gender, age, and education are significantly associated with online media use among the respondents, while income is only linked to use of online candidate literature (Table 4).

*Gender.* Gender is the only variable significantly associated with perceptions of credibility of all four online sources. Generally, females in this study view the Web as more credible and trustworthy than males.

*Age.* Age is significantly related to credibility judgments of three of the four online sources. Significant negative correlations indicate that as age increases, respondents perceive online newspapers, news magazines, and candidate literature to be less credible. Age is not a factor when judging the credibility of online issue sources.

*Education.* Education is negatively associated with perceptions of online credibility. Significant associations are found for online newspapers, online candidate literature, and political issue-oriented sites, indicating that those who are better educated tend to view online political information as less credible. Judgments of credibility of online news magazines are not influenced by levels of education.

*Income.* Income is generally a poor indicator of online credibility with only the relationship between income and online candidate literature proving significant. All the relationships are negative, suggesting that as income increases those surveyed tend to judge online media as less credible. Even though high income is generally associated with higher levels of education, apparently increased income has little bearing on perceptions of online credibility.

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## Discussion

This study employed an online survey of politically-interested Web users to examine whether those individuals view online publications as credible as their traditionally-delivered counterparts in the face of studies that suggest that trust in the media is declining. Credibility is a crucial issue for the Internet because past research suggests that people are less likely to pay attention to media they do not perceive as credible.

This study found that among the sample of politically-interested Web users that online newspapers and online candidate literature are viewed as more credible than their traditionally-delivered counterparts while no differences exist for news magazines and issue-oriented sources.

Respondents did not judge any of the online or traditionally-delivered sources as very credible, however. The majority of respondents judge online media and political issue-oriented publications as somewhat credible, while online candidate literature is perceived as not at all or not very credible. Traditionally-delivered media follow the same trend. This study, then, offers some support to polls that suggest the media are suffering from a crisis in credibility. However, it should be noted that while other studies look at the general population, this one is limited to those who use the Web for political information. Some analysts suggest that "netizens" are generally distrustful and disconnected from the government and other major institutions.<sup>44</sup> Indeed, studies of Internet users suggest that they are alienated from government.<sup>45</sup> Thus, the low credibility scores may result, in part, because Internet users trust major institutions less than do the general public.

Respondents do not judge each media as equally credible. Scores for candidate literature are significantly lower than for the other media. The low scores for candidate literature are hardly surprising as both candidate flyers and Web sites may be viewed as propaganda.

Past studies suggest that a medium's credibility is strongly related to the degree to which people rely on it. Indeed, in this study reliance is linked to credibility, particularly for traditional sources where all correlations are

significant at the .001 level. However, correlations for online sources are weaker than for traditionally-delivered ones, even though the politically-interested Web users indicate they rely more on Internet sources and judge them as more credible than the traditional ones.

This study of politically-interested Internet users discovered that reliance on the Web is more strongly associated with credibility than amount of use. These findings support earlier research on traditionally-delivered media which also found that reliance is a stronger indicator of credibility than amount of use.<sup>46</sup> Rimmer and Weaver<sup>47</sup> suggest that reliance measures should be more strongly linked to media credibility than use because media use taps behaviors while reliance measures examine attitudes toward individual media. Amount of Internet use may also not be linked to credibility because the Web is an emerging medium, so levels of experience may not yet influence judgments of credibility.

Previous studies of traditional media have found those who are older, male, and of high socioeconomic status tend to be the most critical of the media; this study found an identical pattern with the Internet. The young are the heaviest users of the Internet, which may contribute to their higher credibility scores. But while Internet use is highest among those who are male and have a high income and education, such users are less likely to view the Internet as credible.

The findings from this study are limited by the small sample size and because the online survey method constitutes a convenience rather than a random sample. Results cannot be generalized to the general population or even to the general Internet population. But demographic comparisons with other online Internet surveys, as well as with ones conducted by telephone, suggest this sample may be representative of the Internet population. Also, because this study did not directly compare a traditional source with its corresponding Internet one (e.g., compare the *Washington Post* with the *Washington Post* online), it is unclear whether findings result from perceived channel differences or from different content on the Internet and traditional sources. Finally, results from this study may differ from past research because the wording for some of the credibility questions were not identical.

This study examined media credibility among those who regularly use the Internet for political information. Future studies could be conducted among the general population to determine the degree to which the Internet is viewed as credible and whether it is indeed judged as more trustworthy than traditionally-delivered counterparts.

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## NOTES

1. Phil Noble, "Net the Vote," *Campaigns & Elections*, July 1996, 27-33. The authors will be using the terms "Internet" and the "Web" interchangeably throughout the article for the sake of variety, although they are aware that the World Wide Web is only a portion of the larger Internet.

2. Freedom Forum, "News Junkies, News Critics: How Americans Use the News and What They Think About it," available at <http://www.newseum.org/survey/summary.html>, January 1997.

3. Cecile Gaziano, "How Credible is the Credibility Crisis?" *Journalism Quarterly* 65 (summer 1988): 267-78, 375.

4. For instance, see Jupiter Communications, "1997 Consumer Internet Report," available at <http://www.jup.com/research/reports/>

consumer.shtml; CommerceNet and Neilsen Research, "The CommerceNet/ Neilsen Internet Demographics Survey: Executive Summary," available at <http://www.commerce.net/information/surveys>, October 1995; D.L. Hoffman, W.D. Kalsbeek, and T. P. Novak, "Internet Use on the United States: 1995 Baselines for Commercial Development," available at <http://www2000.orgsm.vanderbilt.edu/baseline/1995.Internet.estimate.html>; J. McGavey, "Latest Net Study; 9.5 Million Active Surfers," *Inter@ctive Week*, January 1996, 9; MIDS, "Third MIDS Internet Demographic Survey, Matrix Information and Directory Services," available at <http://www3.mids.org/ids3/pr9510.html>.

5. American Society of Newspaper Editors, *Newspaper Credibility: Building Reader Trust*, conducted by MORI Research Inc., 1985; Times Mirror, *The People & the Press: A Time Mirror Investigation of Public Attitudes Toward the News Media*, conducted by Gallup in collaboration with Michael J. Robinson (Los Angeles: Times Mirror Company, 1986); *The People and the Press: Part 5*, conducted by the Gallup Organization (Washington, DC: Times Mirror Company, 1989); *The People and the Press: Part 3* (Los Angeles: Times Mirror Company, 1987); D. Charles Whitney, *The Media and the People: Soundings from Two Communities* (New York: Gannett Center for Media Studies, Columbia University, 1985); David Shaw, "Public and the Press - Two Viewpoints," *Los Angeles Times*, 11 August, 1985, sec. A, pp. 1, 12-13; Associated Press Managing Editors Association, *Journalists and Readers: Bridging the Credibility Gap*, conducted by MORI Research, Inc. (San Bernardino, CA: The Sun, October 1985); William Schneider and I.A. Lewis, "Views on the News," *Public Opinion*, August-September 1985, 6-11, 58-59; Ralph S. Izard, "Public Confidence in the News Media," *Journalism Quarterly* 62 (spring 1985): 247-55.

6. Gaziano, "How Credible is the Credibility Crisis?"; Times Mirror, *The People & the Press*, 1986.

7. For instance, see Michael D. Slater and Donna Rouner, "How Message Evaluation and Source Attributes May Influence Credibility Assessment and Belief Change," *Journalism & Mass Communication Quarterly* 73 (winter 1996): 974-91; Erica Weintraub Austin and Qingwen Dong, "Source v. Content Effects on Judgments of News Believability," *Journalism Quarterly* 71 (winter 1994): 973-83; Keith Stamm and Ric Dube, "The Relationship of Attitudinal Components to Trust in Media," *Communication Research* 21 (February 1994): 105-123; Albert Gunther, "Attitude Extremity and Trust in Media," *Journalism Quarterly* 65 (summer 1988): 279-87.

8. "Political Institutions, the Press, and Education Show Big Declines," *The Public Perspective*, February/March 1997, 4.

9. Pew Research Center for the People and the Press, "TV News Viewership Declines: Network TV News Credibility Slips," available at <http://www.people-press.org/medmor.htm>, May 1996. Another Pew Charitable Trusts survey found that favorability ratings for network news have fallen from 82% to 73% from 1992 to 1997 (Pew Research Center for the People and the Press, "Fewer Favor Press Scrutiny of Political Leaders: Press 'Unfair, Inaccurate and Pushy,'" available at <http://www.people-press.org/97medrpt.htm>).

10. The 1997 Freedom Forum study ("News Junkies, News Critics") found that 63% said negative coverage was a major problem, while 52% said bias and 63% said bowing to special interests were serious problems. The 1997 Pew Charitable Trusts study ("Fewer Favor Press Scrutiny") found that 67% said press coverage tends to favor one side.

11. Dwight J. Brady, "Cyberdemocracy and Perceptions of Politics: An Experimental Analysis of Political Communication on the World Wide Web" (paper presented at the annual meeting of the Midwest Association for Public Opinion Research, Chicago, IL, 1996).

12. Pew Research Center for the People and the Press, "One-in-Ten Voters Online for Campaign '96," available at <http://www.people-press.org/tec96-1.htm>, November 1996.

13. John W. Mashek with Lawrence T. McGill and Adam Clayton Powell III, *Lethargy '96: How the Media Covered a Listless Campaign* (Arlington, VA: The Freedom Forum, 1997). It should be noted, however, that these responses were among those who used the medium and felt comfortable enough to rate it on fairness and bias. Roper found that 70% did not use the Internet and another 16% did not know if it was fair and unbiased. Therefore, the 54% fairness rating was based on the 14% of the survey who used the Internet and expressed an opinion on it. Also, while this study found that the public rated local media lower than national ones, some studies find the opposite to be true (Andrew Kohut and Robert C. Toth, "The Central Conundrum: How Can the People Like What They Distrust?," *The Harvard International Journal of Press/Politics* 3 [winter 1998]: 110-117).

14. Paul Starobin, "On the Square," *National Journal*, 25 May 1996, 1145-1149; Andrew Calabrese and Mark Borchert, "Prospects for Electronic Democracy in the United States: Rethinking Communication and Social Policy," *Media, Culture and Society* 18 (April 1996): 249-68.

15. Frank Houston, "The Virtual Trail," *Columbia Journalism Review*, January/February 1996, 26-28; Pam Greenberg, "Political Possibilities," *State Legislatures* 22 (March 1996): 19-23.

16. Slater and Rouner, "Message Evaluation and Source Attributes"; Austin and Dong, "Source v. Content Effects."

17. Gordon Franke, "Participatory Political Discussion on the Internet," *Votes and Opinions* 2 (July/August 1996): 22-25.

18. Ronald Mulder, "A Log-Linear Analysis of Media Credibility," *Journalism Quarterly* 58 (winter 1981): 635-38; Michael J. Robinson and Andrew Kohut, "Believability and the Press," *Public Opinion Quarterly* 52 (summer 1988): 174-89; American Society of Newspaper Editors, *Newspaper Credibility*; Times Mirror, *The People & the Press*; Whitney, *The Media and the People*.

19. "American Internet User Survey Finds More than 41.5 Million U.S. Adults are Actively Using the Internet," available at <http://www.cyberdialogue.com/marketing/>, 27 January 1998; Hoffman, Kalsbeek and Lovak, "Internet and Web Use."

20. Guido H. Stempel III and Thomas Hargrove, "Mass Media Audiences in a Changing Media Environment," *Journalism & Mass Communication Quarterly* 73 (autumn 1996): 549-58; Georgia Institute of Technology's Graphic, Visualization and Usability Center, "GVU's 7th WWW User Survey," available at [http://www.gvu.gatech.edu/user\\_surveys/survey-1997-04/#exec](http://www.gvu.gatech.edu/user_surveys/survey-1997-04/#exec); David S. Birdsell, Douglas Muzzio, Humphrey Taylor and David Krane, "A New Political Marketplace: The Web Snares Voters," *The Public Perspective*, June/July 1996, 33; "Who's Surfing the Net?" *The Public Perspective*, June/July 1996.

21. Rebekah V. Bromley and Dorothy Bowles, "Impact of Internet on Use of Traditional News Media," *Newspaper Research Journal* 16 (spring 1995): 14-27; Barbara K. Kaye, "Uses and Gratifications of the World Wide Web: From Couch Potato to Web Potato," *New Jersey Journal of Communication* 6 (spring 1998): 21-40; GVU, "GVU's 7th WWW User Survey." Some studies suggest,

however, that Internet use has cut into time for other media, particularly television (WebCensus, "Media Usage and the Internet," available at <http://webcensus.com/result.html>, March 1998; Pew Charitable Trust, "TV News Viewership Declines").

22. "Cybercampaigns Preach to the Choir," *Media and Campaigns 96 Briefing No. 1* (New York: Media Studies Center, 1996), 8-10.

23. Bruce H. Westley and Werner J. Severin, "Some Correlates of Media Credibility," *Journalism Quarterly* 41 (summer 1964): 325-35; Richard F. Carter and Bradley S. Greenberg, "Newspapers or Television: Which Do You Believe?," *Journalism Quarterly* 42 (winter 1965): 29-34; Bradley S. Greenberg, "Media Use and Believability: Some Multiple Correlates," *Journalism Quarterly* 43 (winter 1966): 665-70, 732; *People and the Press: Part 3*; Mulder, "Log-Linear Analysis." The survey for the Pew Research Center ("TV News Viewership Declines"), however, indicates that declines in news credibility ratings were highest among young adults.

24. Stempel and Hargrove, "Mass Media Audiences"; GVU, "GVU's 7th WWW User Survey"; Birdsell, Muzzio, Taylor, and Krane, "A New Political Marketplace"; "Who's Surfing the Net?"

25. Thomas J. Johnson, "Exploring Media Credibility: How Media and Nonmedia Workers Judged Media Performance in Iran/Contra," *Journalism Quarterly* 70 (spring 1993): 87-97; Cecilie Gaziano, "News People's Ideology and the Credibility Debate," *Newspaper Research Journal* 9 (fall 1987): 1-18.

26. "Who's Surfing the Net?" Our study also suggests that there were an equal proportion of Republicans (32%) and Democrats (34%).

27. GVU, "GVU's 7th WWW User Survey."

28. Douglas Muzzio and David Birdsell, "The 1996 'Net Voter,'" *The Public Perspective*, December/January 1997; GVU, "GVU's 7th WWW User Survey."

29. Wayne Wanta and Yu-Wei Hu, "The Effects of Credibility, Reliance, and Exposure on Media Agenda-Setting: A Path Analysis Model," *Journalism Quarterly* 71 (spring 1994): 90-98; Westley and Severin, "Some Correlates of Media Credibility"; Greenberg, "Media Use and Believability"; American Society of Newspaper Editors, *Building Reader Trust*.

30. Tony Rimmer and David Weaver, "Different Questions, Different Answers? Media Use and Media Credibility," *Journalism Quarterly* 64 (spring 1987): 28-36, 44; Carter and Greenberg, "Newspapers or Television." But while people judge their preferred medium as more credible, it does not necessarily mean they view it as credible. For instance, Rimmer and Weaver ("Different Questions, Different Answers?") found that only 22% of those who said television was their top choice for local news gave television a high credibility rating. Similarly, Westley and Severin ("Some Correlates") discovered that 38% of heavy radio listeners judged radio as credible and scores for other media tended to be below 50%.

31. Burns W. Roper, *Changing Public Attitudes Toward Television and Other Mass Media, 1959-1976* (New York: Television Information Office, 1977); Harvey K. Jacobson, "Mass Media Believability: A Study of Receiver Judgments," *Journalism Quarterly* 46 (spring 1969): 20-28; Carter and Greenberg, "Which Do You Believe?"; Greenberg, "Media Use and Believability"; Westley and Severin, "Some Correlates of Media Credibility." However, studies suggest that those who actively seek out information are more likely to see newspapers as credible (Ronald Mulder, "Media Credibility: A Uses-Gratifications Approach," *Journalism Quarterly* 57 [autumn 1980]: 474-77). Also, studies indicate that those who are highly educated, older and male tend to be more likely to judge newspapers as credible than younger, less educated



females (Mulder, "Log-Linear Analysis"; Carter and Greenberg "Newspapers or Television"; Westley and Severin, "Some Correlates"; Pew Charitable Trusts, "TV News Viewership Declines").

32. CommerceNet and Nielsen Research, "The CommerceNet/Nielsen Internet Demographics Survey"; Hoffman, Kalsbeek, and Novak, "Internet Use on the United States"; McGavey, "Latest Net Study"; MIDS, "Third MIDS Internet Demographic Survey."

33. Pew Research Center for the People and the Press, "Campaign '96 Gets Lower Grades from Voters," available at <http://www.people-press.org/postrpt.htm>, November 1996.

34. The Internet poses a unique set of problems in guaranteeing a random sample of respondents. The Web has no central registry of users and e-mail addresses to create a sampling frame. Response rates cannot be calculated because there is no way to know how many individuals may have seen the survey or its links, but refused to participate. Because participation is voluntary, those who choose to complete a cybersurvey may differ from those who choose not to participate. Voluntary participants may be more interested, informed, and concerned about the survey topic and typically hold viewpoints which are stronger and more extreme than other individuals. Thus, results may not be able to be generalized to the population (Barbara K. Kaye and Thomas J. Johnson, "Taming the Cyber Frontier: Techniques for Improving Online Surveys" [paper presented to the annual meeting of the Midwest Association for Public Opinion Research, Chicago, IL 1997]; Wei Wu and David Weaver, "Online Democracy or Online Demagoguery - Public Opinion 'Polls' on the Internet," *Harvard International Journal of Press/Politics* 2 [fall 1997]: 71-86).

35. Like other surveys, this one suggests the Internet is dominated by young white males of high education and high socioeconomic status. The average age in the survey is 31.2 while the gender ratio is 75.5% male and 24.5% female. Six out of ten have a college degree or higher and slightly less than half (45.1%) report an annual income between \$25,001-\$65,000. Finally, almost nine out of ten (88.3%) are white. Both the online GVU 7th WWW User Survey and the FIND/SVP American Internet User study, which was conducted by telephone, found that the average Internet user is in his 30s (35.2 and 36.5 years old respectively) and is male (68.7% in the GVU survey and 64.1% in the FIND/SVP study). More than half (54.2%) of respondents in the GVU study had a college education or higher and the average income was \$58,000. Finally, the clear majority of respondents in both polls identified themselves as white. Finally, our finding that the typical Internet user spends an average of 13.2 hours on the Net compares favorably with recent studies that put the number at 13.6 ("What's Your Daily Dose?," *PC Magazine*, 18 November 1997, 9).

36. Mark Douglas West, "Validating a Scale for the Measurement of Credibility: A Covariance Structure Modeling Approach," *Journalism Quarterly* 71 (spring 1994): 159-68.

37. Cecilie Gaziano and Kristin McGrath, "Measuring the Concept of Credibility," *Journalism Quarterly* 63 (autumn 1986): 451-62.

38. Philip Meyer, "Defining and Measuring Credibility of Newspapers: Developing an Index," *Journalism Quarterly* 65 (fall 1988): 567-74, 588; John Newhagen and Clifford Nass, "Differential Criteria for Evaluating Credibility of Newspapers and TV News," *Journalism Quarterly* 66 (summer 1989): 277-284; Gaziano and McGrath, "Measuring the Concept of Credibility;" West, "Validating a Scale for the Measurement of Credibility."



While this study employed measures that have been used in past studies (i.e., believability, fairness, accuracy, and depth), question wordings were not always identical to previous research.

39. Wanta and Hu, "The Effects of Credibility"; Rimmer and Weaver, "Different Questions, Different Answers?"; Westley and Severin, "Some Correlates of Media Credibility"; Carter and Greenberg, "Newspapers or Television"; Greenberg, "Media Use and Believability"; American Society of Newspaper Editors, *Building Reader Trust*.

40. Wanta and Hu, "Effects of Credibility"; Rimmer and Weaver, "Different Questions."

41. Mulder, "A Log-Linear Analysis"; American Society of Newspaper Editors, *Newspaper Credibility*; Times Mirror, *The People & the Press*; Whitney, *The Media and the People*; Carter and Greenberg, "Which Do You Believe?"; Greenberg, "Media Use and Believability"; Westley and Severin, "Some Correlates of Media Credibility."

42. Respondents were asked to record their age on their last birthday. They were also asked what is the highest grade or year in school they have completed (less than high school, high school grad, some college, four year college degree, master's degree, Ph.D. degree, other) and to estimate their annual income for 1996 (less than 10,000, 10,001-25,000, 25,001-40,000, 40,001-65,000, 65,001-80,000, 80,001-95,000, more than 95,000).

43. Eliminating the "don't knows" as well as the missing values, however, significantly reduced the sample size for several variables, particularly online media. For instance, 168 people rated the credibility of online magazines and just more than 200 judged credibility for online candidate literature and online issue sources and 232 people rated the credibility of online newspapers. Among traditionally-delivered sources, eliminating don't knows and missing values reduced the sample size from 235 for issue-oriented sources to 297 for newspaper ones.

44. John Perry Barlow, "The Netizen: The Powers That Were," *Wired*, September 1996, 53-56, 196-199.

45. Thomas J. Johnson and Barbara K. Kaye, "A Vehicle for Engagement or a Haven for the Disaffected?: Internet Use, Political Alienation and Voter Participation," in *Engaging the Public: How the Government and Media Can Reinitalize American Democracy*, ed. Thomas J. Johnson, Carol E. Hays, and Scott P. Hays (Lanham, MD: Rowman & Littlefield, 1998); Kevin A. Hill and John E. Hughes, *Cyberpolitics: Citizen Activism in the Age of the Internet* (Lanham, MD: Rowman & Littlefield, 1998); Jon Katz, "The Digital Citizen," *Wired*, December 1997, 68-82, 274-75.

46. Wanta and Hu, "The Effects of Credibility."

47. Rimmer and Weaver, "Different Questions, Different Answers?"