

**THE CREDIBILITY OF NEWSPAPERS,
TELEVISION NEWS, AND ONLINE NEWS**

Rasha A. Abdulla, Bruce Garrison,
Michael Salwen, Paul Driscoll, and Denise Casey

School of Communication
University of Miami
P.O. Box 248127
Coral Gables, FL 33124-2105
bruce@miami.edu

A paper presented to the Mass Communication and Society Division, Association for Education in Journalism and Mass Communication, annual convention, Miami Beach, Fla., August 9, 2002.

THE CREDIBILITY OF NEWSPAPERS, TELEVISION NEWS, AND ONLINE NEWS

Abstract

This exploratory study analyzes the components of credibility of news from newspapers, television, and online sites. A national telephone survey of 536 adults was conducted in February 2002. Respondents evaluated the credibility of newspapers, television news, and online news using a variation of Gaziano and McGrath's 12-item Likert-type news credibility scale. While there were similarities in how each medium was perceived, the study also revealed some fundamental differences. Respondents evaluated newspaper and television news credibility more similarly than they did online news credibility. Respondents judged all three news media most positively in terms of current, up-to-date, and timely and most negatively in terms of bias and completeness. However, online users were less negative than newspaper readers and television viewers. Factor analyses yielded somewhat different dimensions. Newspaper credibility was found to have balance, honesty, and currency dimensions. Television news credibility was found to have two main components based on fairness and currency. Online news credibility, however, was built upon trustworthiness, timeliness, and bias factors.

The authors would like to thank Dean Edward Pfister of the School of Communication at the University of Miami for providing much of the funding for this study. Additional University of Miami research funding from the Office of the Provost also provided support for this project.

THE CREDIBILITY OF NEWSPAPERS, TELEVISION NEWS, AND ONLINE NEWS

The number of adults using the Internet to find and read news online is consistently on the rise. One national study by the Pew Research Center reported that weekly use of online news tripled from 11 million to 36 million people in the United States between 1996 and 1998, which the center called “astonishing” (Pew Research Center, 1998). Other studies have shown similar growth in use of the Internet, the World Wide Web, and other online information resources (for example, see Jupiter Media Metrix, 2001; Nielsen Media Research, 1999).

One issue that has emerged because of this growth is the credibility of new information technologies and new media news delivery systems. Widespread access to personal information, including tracking online purchases, property ownership records, and residential telephone numbers, have led to growing public distrust of online sources of information. One analysis reported that barely one in three media Web sites posted their privacy policies for information provided both voluntarily (e.g., personal electronic mail addresses or other information taken from user registration forms) and involuntarily (e.g., Web browser “cookies” or tracking specific page visits and clicks within a Web site) by users (Pryor & Grabowicz, 2001). Even when they are posted, online statements of privacy policy are often lengthy and nearly incomprehensible. They tend to serve more as a legal alibi for the Web site owner than an actual information source for site users.

The purpose of this study was to investigate the similarities and differences of user perceptions of the credibility of traditional news media delivery systems—

newspapers and television news— and the credibility of Web-based online news.

Specifically, this paper investigates news credibility in an attempt to determine the components of news credibility across traditional and the new online news media.

Because of privacy issues, content accuracy, reliability, and other related concerns, some observers have predicted a troubled future for online news. Johnson and Kaye (1998) reminded us that one of the basic characteristics of the Internet, its potential free access to everybody to upload information without much scrutiny, might affect the credibility of the medium as a source of information. Flanagin and Metzger (2000) noted that while newspapers, books, and television undergo a process of information verification before they reach the public, Internet sites do not always use such measures. The lack of editorial and gatekeeping rules similar to those in the traditional print and broadcast news media is central to the problem. This, of course, is likely to increase the importance of branded online news sites such as CNN.com and perhaps emphasize the value of the so-called “halo effect” of an existing print or television news organization to its online equivalent (such as *Time* magazine and its Web counterpart, Time Online).

Schweiger (1998) pointed out that credibility becomes an important heuristic for content selection at a time of information overload. Credibility may also influence the journalistic and commercial success of a medium (Schweiger, 2000). Online news industry observers and newspaper editors have expressed similar concerns over credibility, believability, ethical lapses, newsgathering techniques, and news presentation (Lasica, 2001; Arant & Anderson, 2000). These and numerous other professional issues are frequent topics of discussion and debate on the pages of the *Online Journalism Review* (<http://ojr.usc.edu>).

CREDIBILITY OF ONLINE NEWS

Studies conducted in recent years have analyzed the dimensions of computing technology, the Internet, the Web, and online news credibility. The early public views of the precision and accuracy of computers led to a common perception of their infallibility and believability, even the basic credibility of computer-based technologies has been studied (Tseng & Fogg, 1999). A number of scholars have emphasized the importance or “crucial” nature of such research (Johnson & Kaye, 1997; Johnson & Kaye, 1998).

Newhagen (1997) studied the perception of interactivity in mass media and computer networks. He found that respondents who had e-mailed comments to a network news program rated traditional mass media to be less interactive, less important and of lower quality than a national sample. While interactivity ratings did not predict mass media credibility, respondents who had e-mailed NBC and those who defined interactivity as “cybernetic feedback” (the feedback necessary to the maintenance as a self-regulating system) found computer communication to be more credible than those who did not.

In their study of computer technology credibility, Tseng and Fogg (1999) found that computer users desire to trust their systems, but that the trust is often undermined when the system delivers erroneous information. They described four types of computer-based credibility: presumed (based on assumptions), reputed (based on third-party reports), surface (based on primitive inspection), and experienced (based on first-hand experience). They further explained that user expertise, user understanding, user need for information, and evaluation errors influenced this credibility.

Flanagin and Metzger (2001) observed that much media credibility research has ignored online news and that the bulk of research was conducted prior to online news development. There are differences, these scholars have argued, between online news and other more-established news media such as television, radio, and newspapers. Online news can be reported at any time. The newspaper, by contrast, is limited to when people obtain the hard copy. Thus, the dimension of timeliness must be considered in studying credibility of the Internet as a medium.

Flanagin and Metzger (2001) concluded that the Internet is a “multidimensional technology used in a similar manner to other more traditional media” (p. 153). News communication technologies extend users’ capabilities but eventually are folded into traditional media. They found online conversational uses (such as chat rooms, electronic mail, and the telephone) that paralleled traditional media. They also found information-retrieval and information-giving similarities (such as online news and the news media). They concluded that “needs fulfilled by these channels cluster in ways consistent with past research, regardless of the technologies employed to meet them” (p. 153).

In an earlier study, Flanagin and Metzger (2000) investigated perceptions of Internet information credibility in comparison to other media. They concluded that the Internet was as credible as television, radio, and magazines, but not newspapers. They found that credibility varied by medium among different types of information sought by audiences, such as news and entertainment. Respondents reported that they did not verify information found on the Internet, but this finding also varied by the type of information needed. The amount of experience using the Internet and how an individual perceived the information were associated with efforts to verify online information.

Schweiger (2000) found newspapers in Germany were rated ahead of the Web and television on nine of eleven credibility items. He also found that Web users and non-users alike rate the credibility of the Web as remarkably similar to television and newspapers. Nadarajan and Ang (1999) found few online newspapers with corrections policies, but that errors were corrected as needed. They concluded that the capabilities of the Web, such as hyperlinks and archiving, were not well used to enhance online news and information accuracy. In fact, they said current practices “add to the clutter of viewpoints that is symptomatic of this age of information overload” (p. 21). While they do not directly connect this to online news credibility, the implications are clear.

Sundar (1999) determined four basic factors in the perception of online news stories: credibility, liking, quality, and representativeness. He explained that credibility in this context was a “global evaluation of the objectivity of the story” (p. 380). Johnson and Kaye (1997, 2000) found online media to be more believable, fair, accurate, and in-depth than traditional news media. Both online news media and traditional news media were judged to be somewhat credible. In an earlier study, Sundar (1996) determined that subjects rated stories with direct quotations from sources to be significantly higher in credibility and quality than those without quotations. The use of direct quotations did not appear to affect subject ratings of liking for online news or perceptions of representativeness-newsworthiness of the online news.

Kiousis (1999) found news credibility perceptions to be influenced by media use and interpersonal discussion of news. He found general skepticism about news, but people rated newspapers as more credible than online news or television. Online news, however, was rated more credible than television. Like other studies of print and

broadcast news media, Kiouisis found credibility rating of a medium associated with its use. He also found links between discussion of news and perceptions of television news, but not for online news or newspapers. He offered evidence of links between media use and public perceptions of credibility for newspapers and television news, but not in the assessment of online news.

Using credibility as their focus, Johnson and Kaye (1998) concluded that online news media and online candidate literature were perceived to be more credible than traditional print and broadcast news media, even though both online news and traditional news media were perceived to be somewhat credible. No differences were found for news magazines and issue-oriented sources.

Finberg, Stone, and Lynch (2002; see also Online News Association, 2001) found one main concern about online news credibility was the perceptions of other journalists, who do not hold it in high regard. The national study determined that online news was a supplementary news source for most users. They also observed that the public has accepted online news as a credible news option, that many readers did not feel online news credibility was an issue.

MEDIA CREDIBILITY MEASURES

Researchers have utilized a variety of measurements and statistical procedures in their quest to understand media credibility. Bivariate and multivariate approaches have been used, including regression analysis (Mulder, 1980; Mulder, 1981) and factor analysis. While many have used traditional data-collection methods such as telephone surveys and laboratory and field experiments, new technologies such as online surveys

and other experiments are beginning to be used as well (Johnson & Kaye, 1998; Sundar, 1998). Online surveys using electronic mail and the Web, however, have unresolved methodological issues such as low response rates, self-selection bias, and access (Couper, Traugott & Lamias, 2001; Schaeffer & Dillman, 1998).

Infante (1980) used three dimensions to measure source credibility. These were trustworthiness, expertise, and dynamism. Trustworthiness was operationalized as honest-dishonest, trustworthy-untrustworthy, and sincere-insincere. For expertise, he used skilled-unskilled, qualified-unqualified, and informed-uninformed. For dynamism, he used bold-timid, active-passive, and aggressive-meek.

Johnson and Kaye (1998, 2000) employed believability, fairness, accuracy, and depth of information in their study. Sensationalism was one of six dimensions used by Sundar (1996). He also used accuracy, believability, bias, fairness, and objectivity. Kiouisis (1999) measured online news credibility by asking respondents to assess whether online news is factual, concerned with making profits, invades people's privacy, is concerned about the community's well being, and cannot be trusted on a five-point Likert-type scale ranging from strongly agree to strongly disagree.

Numerous researchers have developed media credibility scales. Despite the diversity of scales, the various scale items are highly similar and measure the same underlying dimensions. Rather than searching for a single scale, researchers often create *ad hoc* scales to tap into hypothesized "dimensions" of credibility. Sundar (1999) developed a credibility scale applicable to both newspapers and online newspapers. He found "striking similarity between the factor structures underlying receivers' perceptions of print and online news" (p. 382). He claimed this similarity made it possible to use the

same scales for different media, which he described as a “boon” to researchers (p. 382). Flanagin and Metzger (2000) used single-item measures in studying the credibility of Internet information. They operationalized credibility as a multidimensional concept built from five traditional components found in the literature: believability, accuracy, trustworthiness, bias, and completeness.

Trustworthiness, fairness, bias, completeness, respect for privacy, representation of individual interests, accuracy, concern for community well-being, separation of fact and opinion, concern for public interest, factual foundations of information published, and qualifications of reporters were used among the credibility measures by Rimmer and Weaver (1987). The study’s second set of measures was derived from traditional Roper-style media use and preference questions.

Meyer’s (1988) index for newspaper believability was comprised of five dimensions. These included fairness, bias, completeness, accuracy, and trustworthiness. He also identified evidence that a newspaper’s credibility and “lovability” may be the same dimensions. Ognianova (1998) utilized nine semantic differential items to measure online news story credibility. They were factual/opinionated, unfair/fair, accurate/inaccurate, untrustworthy/trustworthy, balanced/unbalanced, biased/unbiased, reliable/unreliable, thorough/not thorough, and informative/not informative.

Wanta and Hu (1994) used believability and affiliation indices to evaluate media credibility. The believability index was built around media manipulation of public opinion, getting facts straight, dealing fairly with all sides of an issue, and separation of fact from opinion. Affiliation was measured with concern for community well being, watching out for reader interests, and concern for public welfare.

Gaziano and McGrath (1986) identified twelve dimensions of newspaper and television news credibility. They included fairness, bias, completeness, accuracy, respect for privacy, watch for people's interests, concern for community, separation of fact and opinion, trust, concern for public interest, factual, and level of training. Furthermore, Gaziano's (1987) analysis of four major credibility studies found twelve operationalizations of credibility. These included believability; accuracy, completeness, and covering up facts; trustworthiness and reliability; being unbiased, balance of coverage, fairness, objectivity; other characteristics of press performance, such as invasion of privacy, covering up stories; overall evaluations of how well media perform; confidence in media institutions, comparisons of media with other institutions; independence of media from special interests, other organizations, institutions; power/influence of media in community or society; relationship of news media to government; honesty and ethical standards; and professionalism, training of people in the media. Gaziano noted that these measures had also been used in studies by Hovland and Weiss (1951), Meyer (1988), and others. Gaziano and McGrath observed that media credibility is comprised of "fairness, (un)bias, telling the whole story, accuracy, respect for privacy, watching out after people's interest, concern for community well-being, separation of fact and opinion, trustworthiness, concern for public interest, factuality, and reporter training level" (Rubin, Palmgreen, & Sypher, 1994, p. 234). Rimmer and Weaver (1987) reported a Cronbach alpha of 0.90 for the Gaziano and McGrath scale for both newspapers and television. Meyer (1988), however, criticized the Gaziano and McGrath scale as lacking face validity and theoretical grounding. He replicated Gaziano and McGrath and developed a five-item news credibility scale. The items – fair, unbiased,

tells the whole story, accurate, and can be trusted – yielded a Cronbach alpha of 0.83.

Meyer argued that his scale had face validity as the concept of believability was reflected in each of the five items (Rubin, Palmgreen, & Sypher, 1994, pp. 234-36).

RESEARCH QUESTIONS

This study investigates the credibility of news across traditional and online media. It examines the dimensions of news credibility as a threshold to what predicts news credibility. Online news credibility is investigated against use patterns and user demographics using the orientation of the Gaziano and McGrath credibility scale (1986).

Credibility research comparing the Internet to traditional news sources has not been conclusive or consistent (Flanagin & Metzger, 2000). Research about print newspapers and online newspapers suggests additional, perhaps new, dimensions may exist. For example, print newspapers are regarded as a serious news medium. Newspapers, after all, by their very name are committed to “news.” Television news, by contrast, is regarded as less serious because the medium of television is not primarily associated with news and credibility studies have shown television credibility to be more based on individual on-air personalities such as news anchors than the news organization or station (Newhagen & Nass, 1987). Television news is often viewed as an addendum to the entertainment medium. Similarly, the Internet and the Web are not solely devoted to news. Thus, the “entertainment” dimension must be considered when print and online newspapers are compared.

The following research questions guided this study:

1. What are the primary components of newspaper, television news, and online news credibility?

2. What similarities and differences are found in the credibility dimensions of newspapers, television news, and online news?

METHODS

This study is based upon a national probability sample from the 50 states and District of Columbia. Data were collected using a telephone survey of adults age 18 or older, conducted during February 4-7, 2002. A total of 536 interviews were completed. The response rate, excluding businesses, fax machines, numbers not in service, and other ineligibles, was 41%. Interviewers were communication students trained and supervised by the authors. At least two callback attempts were made to complete interviews.

The sample was drawn using a stratified design, proportionate to the population of the United States. Population figures were obtained from the 2000 U.S. Census (<http://blue.census.gov/population/www/cen2000/respop.html>). Using proportions equal to each state's population, interviewers were assigned to complete calls to residents utilizing a modified random digit dialing model. Residential telephone numbers were drawn from the fall 2001 edition of the national Select Phone telephone software on compact disc and database published by InfoUSA (Select Phone Pro CD database, Ver. 2.1, winter edition, InfoUSA, Omaha, Neb., 2002). Random residential telephone numbers were generated on a state-by-state basis from the database of over 100 million telephone numbers using a table of random numbers and the random number function built into the Select Phone software. Each state roster of chosen numbers was adjusted

using the one-up and one-down last digit method to include unlisted and other numbers not included in the published CD database.

Prior to asking respondents to evaluate a particular news medium using the scale, interviewers “qualified” responses by establishing use of the medium. Media use was defined as at least one day per week of newspaper readership, at least one day per week of television news viewing, and, for online news users, at least one day per week of either (a) use of online news on the Web, (b) use of online news through an Internet Service Provider (ISP), or (c) use of online news through an Internet search engine portal.

The survey instrument included a news credibility scale adapted from Gaziano and McGrath (1986; see also Rubin, Palmgreen, and Sypher, 1994). The Likert-type scale had a total of twelve items, focusing on traditional credibility components (trustworthiness, currency, bias, fairness, completeness, objectivity, honesty, up-to-date, believability, balance, accuracy, and timeliness). Respondents rated items on a five-point strongly agree to strongly disagree scale, with neutral as the midpoint. Respondents were asked, “I’d like to know what you think about [newspapers, television news, or online news] as a source of news and information. I’m going to mention some descriptive words ... and, after I read each word, please tell me whether the word describes your feelings. Give me your answer in terms of whether you strongly agree, agree, disagree, strongly disagree, or whether you are neutral. Do you think [newspapers, television news, or online news] is ...”.

For each of the three credibility scales, a summated mean was computed and the scales were analyzed for similarities and differences. Scales were factor analyzed to

determine underlying dimensions of each scale utilizing a 1.0 eigenvalue factoring criterion, the Varimax rotation, and the principal component analysis extraction method.

FINDINGS

Females were over-represented and minorities were under-represented, but not so severely as to indicate serious problems in sample representativeness. The sample was 54% female (n = 291), 9% Hispanic (n = 46), and 11% African-American (n = 56). The median age was 45.0. About four-fifths of the respondents had either a high school degree (n = 170), some college education (n = 131), or a college degree (n = 119). The median annual family income category was \$50,001 to \$75,000.

Use habits varied across news media, but television is the primary source of information among respondents in this study. Respondents read newspapers a mean of 3.76 days per week (n = 535, median = 3.0) and watched television news a mean of 5.11 days per week (n = 532, median = 7.0). Online news use was measured three ways: (a) in terms of days of access of news sites on the Web (n = 312; Mean = 1.65; Median = 0.00); (b) days of access of Internet Service Provider (n = 281; Mean = 1.03; Median = 0.00); and (c) days of access to a Web portal site (n = 275; Mean = 0.98; Median = 0.00). The Cronbach alpha reliability coefficient of newspaper credibility scale was 0.81 (n = 399). The Cronbach alpha for the television credibility scale was 0.84 (n = 447). The alpha for the online news credibility scale was 0.82 (n = 145). As shown in Table 1, the type of news preferred varied by news medium used. Newspaper readers and television viewers prefer local and national news, while online news users preferred national and international news and very few used online news sources for local information.

Internet users were, by far, most interested in international news. Among online news users, 25 percent chose international news as the type of news they “read most often,” as opposed to 8.5 percent of television viewers and 6.1 of newspaper readers. This finding seems to relate to the nature of the Internet as a medium that transcends borders and time zones. It also has the potential to be explained by an acculturation process of Internet users (who are usually more educated), which makes them more aware of, more interested in, and/or more receptive to, international news. In this regard, the Internet could be serving as an eye-opener to its users, at least in the sense of making them aware of a wider range and a more diverse news menu available to them.

Overall, respondents rated online news highest in credibility. Data in Table 2 indicate that online users rated online news more positively. The online users scale grand mean was 7.01 (SD = 5.14, n = 145), while television users rated television credibility at 4.85 (SD = 5.85, n = 447), and newspaper users rated newspaper credibility at 4.26 (SD = 5.44, n = 399). The scores should be understood as reflecting only individuals who were self-described users of the media evaluated. This means that television news users who did not use online news did not evaluate online news. Thus, some respondents offered perceptions of only one news medium, some offered perceptions of two news media, and the smallest number evaluated all three news media.

Newspaper readers rated newspapers highest on three variables directly associated with their timeliness (current 1.03, up-to-date 0.97, and timely 0.86) while they rated newspapers lowest in terms of bias (-0.60) and completeness (-0.15). Television viewers responded similarly, rating television news highest for timeliness (current 1.08, up-to-date 1.01, and timely 1.00). They also perceived television to be weakest in terms of bias

(-0.44) and reporting the whole story (-.019). Online news users see their news source similarly, but with a more positive perspective. Online news users feel the same about the strengths of online news and its timeliness (current 1.11, up-to-date 1.07, and timely 1.09), and about the weakness of bias (0.01) and completeness (0.18).

Factor analysis of the newspaper credibility scale resulted in a three-factor solution emphasizing balance, honesty, and currency of information that accounted for 56.0% of variance. Factor analysis of the television credibility scale resulted in a two-factor solution emphasizing fairness and currency, which accounted for 53.1% of variance. Factor analysis of the online news credibility scale resulted in a three-factor solution focused upon trustworthiness, currency, and bias that accounted for 60.0% of variance.

Table 3 displays the newspaper credibility factor analysis. The three factor solution reveals distinct dimensions to credibility focusing on balance, honesty, and currency. The balance factor is anchored by balance (.767) and report the whole story (.732). Objectivity, fairness, accuracy, and bias also load on the factor. Honesty is the second component, made up of dishonest (.812), believable, and trustworthy. Currency, the third factor, is built around up-to-date (.781), current (.765), and timely (.749).

As shown in Table 4, the television news credibility factor analysis emphasizes fairness and currency. The dominant factor centers on fairness (.819). Other strong-loading scale items are balance (.738), trustworthy (.719), accurate (.701), and objective (.701). The remaining items in the factor were report the whole story, believable, biased, and dishonest. The second factor is similar to the currency factor in newspapers, but the strongest-loaded item was current (.808), but also had up-to-date (.798) and timely (.769)

also strongly loaded. This certainly relates to literature about television news credibility that suggests credibility is more individually than institutionally oriented Newhagen and Nass (1987).

The online news credibility factor analysis in Table 5 has three primary dimensions: trustworthiness, timeliness, and bias. Trustworthy is the highest loaded item for the seven-item factor one (.783), but believable (.750) and accurate (.727) were also strong. Other items for this factor included report the whole story, balanced, fair, and dishonest. Factor two, currency, is similar to the factors found for newspapers and television news. For each of the three factor solutions, currency was composed of the same items. Timely (.898) is the dominant item, but current (.867) and up-to-date (.772) also load well. The bias factor in this scale, not apparent in the newspaper or television news factor solutions, points to an interesting difference in this solution when compared to the other two. Biased (.846) and objective (.592) form this two-item factor, but suggest important perceived differences by users of online news compared to newspapers and television news.

DISCUSSION

Media credibility is a complex concept. Researchers have used a wide range of approaches to evaluate it and to understand its components. The addition of online news to the list of sources of information available to the public has led to concerns about its credibility as well as its perception by the public as a news source in relation to established and more traditional news sources. As access and availability of online news grows, the concern for quality of information found online will also increase. News

consumers concerned about sources of information and its trustworthiness, believability, currency, and other characteristics will demand and seek sources of news that are reliable and credible.

Even when individual credibility dimensions by news medium are standardized, it is apparent that researchers who wish to compare across media will still need some form of compromise in selecting their dimensions for analysis.

This study has revealed differences in how Americans perceived the credibility of newspapers, television news, and online news in early 2002. In the post-September 11 world, it is highly likely that news consumers are quite interested in news that is not just up to standards prior to the September 11 terrorist attacks, but perhaps seek news that exceeds them. While this study does not assess this, it may be a factor in respondents' assessments of the credibility of newspapers, television news, and online news.

The dimension of currency, timeliness, and up-to-date remain important in the credibility of all three news media studied. For newspapers, the dominant aspect of currency is that it is perceived to be up-to-date. Television news is thought to be current, but also up-to-date and timely. Online news is seen to be timely, but also current and up-to-date. These subtle differences suggest further research to determine their importance.

Newspaper credibility is seen to be based in balance, honesty, and currency. But newspapers, to offer credibility, must be perceived to be balanced in story telling, complete in providing information, objective and fair, accurate, and unbiased. They must also be honest in their presentation of news, be believable, and trustworthy. Television news credibility is anchored in fairness, respondents have shown. Viewers want news that is fair and balanced, but also see trustworthiness, accuracy, objectivity, completeness,

believability, unbiased, and honesty as elements of fairness. Online news credibility is built upon trustworthiness, these respondents feel. For online news to be credible, it must be trustworthy and believable. It must also be accurate, complete, balanced and fair, and honest.

Perhaps the most interesting element of online news credibility, however, is the apparent concern for bias expressed by online news users. The existence of a separate factor for bias and objectivity suggests a strong concern for this component of credibility of online news and reflects, perhaps, experiences by online users that have led to biased and less-than-objective reports at online news sites.

This could be due to the relative difficulty of assessing the objectivity, or biases, of Web-based news when compared to a newspaper's content or that of a television newscast. Internet users are aware of the ease of uploading a page on the Web, and with a little design experience, making it look like output of a well-established or professional organization. This seems to underline the importance of branding in online news. Readily identifiable news organizations that have moved to a Web presence or Web sites that use existing and know news brands (such as the Associated Press or other news services) have this advantage over news sites that are only on the Web and do not offer branded news.

Readers understand that editing and other forms of editorial screening occur in newspaper and television newsrooms. While it is easy to find out who publishes or edits a newspaper or holds the license and edits a television newscast, it is much harder sometimes to determine who publishes a Website. This might be a factor that leads to

more concern among online news users regarding the objectivity, or lack thereof, of an online news site, and consequently, its overall credibility.

There is clearly need for additional analysis of these three credibility scales and public perceptions of the performance of newspapers, television news, and online news. Furthermore, it would have been valuable, for example, to have asked respondents about the credibility of newspapers, television, and online news simultaneously. It is clear from the data that asking only regular users about a particular medium gives only one perspective upon this complex issue. A side-by-side-by-side comparison of newspapers, television, and online news may yield insights into non-users and their views of each of the three news media relative to each other.

This exploratory analysis has set the ground work for additional investigation. Further analysis based on demographic characteristics of respondents is needed. These should include news consumption preferences, gender, high and low level users, computer literacy levels, online access, education, race and ethnicity, and income. It would also be valuable to analyze only individuals who responded to each of the three scales to determine their comparative ratings of newspapers, television news, and online news. There is additional need to determine reasons why fewer people use online news. Is it solely an access-to-the-Internet issue or is it access combined with perceptions of lower online news credibility? In-depth analysis of non-users may provide insight needed to better understand the findings presented in this study.

TABLE 1

TYPE OF NEWS MOST READ AND NEWS MEDIA USED

Type of news	Newspaper Users	Television Users	Online Users
Local	53.3%	43.4%	13.8%
National	26.4	31.8	49.3
International	6.1	8.5	25.0
Local-National	5.0	6.8	2.0
Local-International	0.7	1.0	0.7
National-International	1.9	2.3	7.9
All	6.6	6.2	1.3
n	424	484	152

TABLE 2

PERCEIVED NEWS CREDIBILITY BY MEDIUM

Title	Newspapers		Television		Online	
	Mean	SD	Mean	SD	Mean	SD
Trustworthy	0.51	0.88	0.51	0.94	0.70	0.74
Current	1.03	0.68	1.08	0.57	1.11	0.68
Biased	-0.60	0.95	-0.44	1.02	0.01	0.89
Fair	0.22	0.91	0.34	0.90	0.52	0.76
Report the whole story	-0.15	1.03	-0.19	1.04	0.18	0.98
Objective	0.25	0.95	0.19	0.97	0.43	0.81
Dishonest	0.44	0.88	0.43	0.87	0.57	0.79
Up-to-date	0.97	0.57	1.03	0.57	1.07	0.62
Believable	0.62	0.72	0.67	0.75	0.75	0.66
Balanced	0.17	0.95	0.20	0.98	0.41	0.89
Accurate	0.34	0.89	0.43	0.85	0.65	0.72
Timely	0.86	0.64	1.00	0.56	1.09	0.61
Summated mean	4.27	5.45	4.85	5.85	7.01	5.14

TABLE 3

NEWSPAPER CREDIBILITY FACTOR ANALYSIS

Factor	Balance	Honesty	Currency
BALANCE			
Balanced	.767	.103	.035
Report the whole story	.732	.090	.231
Objective	.669	.110	.122
Fair	.598	.430	.019
Accurate	.575	.410	.139
Biased	.403	.365	-.264
HONESTY			
Dishonest	.031	.812	.039
Believable	.224	.665	.224
Trustworthy	.413	.632	.175
CURRENCY			
Up-to-date	.115	.128	.781
Current	.060	.069	.765
Timely	.129	.084	.749

TABLE 4**TELEVISION CREDIBILITY FACTOR ANALYSIS**

Factor	Fairness	Currency
FAIRNESS		
Fair	.819	.074
Balanced	.738	.037
Trustworthy	.719	.238
Accurate	.701	.285
Objective	.701	.033
Report the whole story	.676	.150
Believable	.621	.300
Biased	.563	-.208
Dishonest	.456	.277
CURRENCY		
Current	.073	.808
Up-to-date	.121	.798
Timely	.111	.769

TABLE 5

ONLINE CREDIBILITY FACTOR ANALYSIS

Factor	Trustworthiness	Timeliness	Bias
TRUSTWORTHINESS			
Trustworthy	.783	.255	-.019
Believable	.750	.185	.015
Accurate	.727	.164	.125
Report the Whole Story	.684	.106	.032
Balanced	.623	-.068	.486
Fair	.595	-.051	.373
Dishonest	.337	.180	.046
CURRENCY			
Timely	.148	.898	.024
Current	.221	.867	-.065
Up-to-Date	.121	.772	.125
BIAS			
Biased	-.062	.062	.846
Objective	.482	.191	.592

REFERENCES

- Arant, M. D., & Anderson, J. Q. (2000, August). *Online media ethics: A survey of U.S. daily newspaper editors*. Paper presented to the Newspaper Division, Association for Education in Journalism and Mass Communication, Phoenix.
- Couper, M. P., Traugott, M. & Lamias, M.J. (2002, Summer). Web survey design and administration. *Public Opinion Quarterly*, 65(2), 230-253.
- Finberg, H. I., Stone, M. L. & Lynch, D. (2002, January 31). *Digital journalism credibility study*, Online News Association, <http://www.onlinenewsassociation.org>, accessed February 1, 2002.
- Flanagin, A. J., & Metzger, M. J. (2000, Autumn). Perceptions of Internet information credibility. *Journalism & Mass Communication Quarterly*, 77(3), 515-540.
- Flanagin, A. J., & Metzger, M. J. (2001, January). Internet use in the contemporary media environment. *Human Communication Research*, 27(1), 153-181.
- Gaziano, C. (1987, Fall). News peoples' ideology and the credibility debate. *Newspaper Research Journal*, 9(1), 1-18.
- Gaziano, C., & McGrath, K. (1986, Autumn). Measuring the concept of credibility. *Journalism Quarterly*, 63(3), 451-462.
- Hovland, C. I. & Weiss, W. (1951-52, Winter). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15(4), 635-650.
- Infante, D. A. (1980, Spring). The construct validity of semantic differential scales for the measurement of source credibility. *Communication Quarterly*, 28(2), 19-26.

- Johnson, T. J., & Kaye, B. K. (1997, August). *Trusting the media and 'Joe from Dubuque' online: Comparing Internet and traditional sources on media credibility measures*. Paper presented to the Mass Communication and Society Division, Association for Education in Journalism and Mass Communication, Chicago.
- Johnson, T. J., & Kaye, B. K. (1998, Summer). Cruising is believing: Comparing Internet and traditional sources on media credibility measures. *Journalism & Mass Communication Quarterly*, 75(2), 325-340.
- Johnson, T. J., & Kaye, B. K. (2000, Winter). Using is believing: The influence of reliance on the credibility of online political information among politically interested Internet users. *Journalism & Mass Communication Quarterly*, 77(4), 865-879.
- Jupiter Media Metrix (2001, October). *U.S. Online Users, 2000-2006, Industry Projections*, <http://www.jmm.com/xp/jmm/press/industryProjections.xml>, accessed March 27, 2002.
- Kiousis, S. (1999, August). *Public trust or mistrust? Perceptions of media credibility in the information age*. Paper presented to the Mass Communication and Society Division, Association for Education in Journalism and Mass Communication, New Orleans.
- Lasica, J. D. (2001, July). *How the Net is shaping journalism ethics*. Retrieved August 14, 2001, from <http://www.well.com/~jd/newsethics.html>
- Meyer, P. (1988, Fall). Defining and measuring credibility of newspapers: Developing an index. *Journalism Quarterly*, 65(3), 567-574.

- Mulder, R. (1981, Winter). A log-linear analysis of media credibility. *Journalism Quarterly*, 58(4), 635-638.
- Mulder, R. (1980, Autumn). Media credibility: A use-gratifications approach. *Journalism Quarterly*, 57(3), 474-477.
- Nadarajan, B., & Ang, P. (1999, August). *Credibility and journalism on the Internet: How online newspapers handle errors and corrections*. Paper presented to the Communication Technology and Policy Division, Association for Education in Journalism and Mass Communication, New Orleans.
- Newhagen, J. (1997, September). The role of feedback in the assessment of news. *Information Processing & Management*, 33(5), 583-594.
- Newhagen, J., & Nass, C. (1989, Summer). Differential criteria for evaluating credibility of newspapers and TV news. *Journalism Quarterly*, 66(2), 277-284.
- Nielsen Media Research (1999, May). *TV viewing in Internet households*. Retrieved August 18, 2001 from <http://www.nielsenmedia.com>
- Ognianova, E. (1998, August). *The value of journalistic identity on the World Wide Web*. Paper presented to the Mass Communication and Society Division, Association for Education in Journalism and Mass Communication, Baltimore.
- Online News Association. (2001, July 21). *ONA's Digital Journalism Credibility Study overview*. Retrieved August 14, 2001 from <http://www.journalist.org/Programs/Research2Text.htm>
- Pew Research Center for People & The Press. (1998, June 8). *Internet use takes off: Event-driven news audiences: Pew Research Center biennial news consumption*

- survey*. Retrieved August 18, 2001 from <http://www.people-press.org/med98rpt.htm>
- Pryor, L., & Grabowicz, P. (2001, June 13). Privacy disclosure on news sites low: Detailed study suggests new media needs to work on public trust. *Online Journalism Review*. Retrieved August 14, 2001 from <http://ojr.usc.edu/content/story.cfm?id=595>
- Rimmer, T. & Weaver, D. (1987, Summer). Different questions, different answers? Media use and media credibility. *Journalism Quarterly*, 64(1), 28-36.
- Rubin, R., Palmgreen, P., & Sypher, H. (1994). *Communication Research Measures: A Sourcebook*. New York: Guilford Press.
- Schaeffer, D.R. & Dillman, D.A. (1998, Autumn). Development of a standard e-mail methodology: Results of an experiment. *Public Opinion Quarterly*, 62(3), 378-397.
- Schweiger, W. (1998). Wer glaubt dem World Wide Web? Ein experiment zur Glaubwürdigkeit von nachrichten in tageszeitungen und im World Wide Web,” in Rossler, P. (ed.) *Online-kommunikation beitrage zu nutzung und wirkung*, pp. 123-45, Opladen: Westdeutscher Verlag.
- Schweiger, W. (2000, March 1). Media credibility – experience or image?: A survey on the credibility of the World Wide Web in Germany in comparison to other media. *European Journal of Communication*, 15, 37-59.
- Select Phone Pro CD database (2002, winter edition), Ver. 2.1, Info USA, Omaha, Neb.

- Sundar, S. (1996, August). *Do quotes affect perception of online news stories?* Paper presented to the Communication Technology and Policy Division, Association for Education in Journalism and Mass Communication, Anaheim, Calif.
- Sundar, S. (1998, Spring). Effect of source attribution on perception of online news stories. *Journalism & Mass Communication Quarterly*, 75(1), 55-68.
- Sundar, S. (1999, Summer). Exploring receivers' criteria for perception of print and online news. *Journalism & Mass Communication Quarterly*, 76(2), 373-386.
- Tseng, S., & Fogg, B. (1999, May). Credibility and computing technology. *Communications of the ACM*, 42(5), 39-44.
- Wanta, W., & Hu, Y. (1994, Spring). The effects of credibility, reliance, and exposure on media agenda-setting: A path analysis model. *Journalism Quarterly*, 71(1), 90-98.