

**The Impact of Hyperlinks and Writer Information on the Perceived Credibility of
Stories on a Participatory Journalism Web Site**

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Abstract

The Impact of Hyperlinks and Writer Information on the Perceived Credibility of Stories on a Participatory Journalism Web Site

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Susan Wiedenbeck, Ph.D.

Credibility in mainstream media continues to wane, giving rise to new forms of journalism supported by the Internet. One of these new forms of journalism is participatory journalism. This is a form of journalism in which content is produced by ordinary citizens, usually on web sites. One of the most popular participatory journalism web sites at this time is OhmyNews.com. Like mainstream media, this site, as well as ones like it, have credibility obstacles to overcome. This study examined whether the presence of information about a writer and hyperlinks on a participatory journalism web site affected the perceived credibility of stories.

One hundred and twenty participants read three stories from OhmyNews.com and then rated those stories in terms of their perceived credibility. Some of the participants were given information about the writer's background and a picture of the writer, some were able to follow hyperlinks embedded in the story to verify information contained in it, others were given information about the writer's background, a picture of the writer, and hyperlinks, and some were given just the story to serve as a control group. The results from the groups were compared to see if the additional information given to participants had an impact on the perceived credibility of the story. Results show that including this information does enhance the perceived credibility of the stories. Perceived credibility is enhanced most greatly when both hyperlink and writer information is included, and to a lesser extent when just hyperlink or writer information

is included. Also, these markers of credibility have the most positive impact on perceived credibility when included in hard news, as opposed to feature type stories.

This research will help online journalists understand how to increase the credibility of the stories they write, and will add to the small, but growing body of literature on participatory journalism. It will also add to the understanding of credibility formation and the factors that influence perceptions of information credibility.

CHAPTER 1: INTRODUCTION

This study seeks to expand the understanding of the relationship between information and credibility. Credibility is one of the key components upon which journalism is built. Once credibility is compromised it can be detrimental to a news organization. One of the ways traditional media try to lend a measure of credibility to their information is by adhering to a filter-then-publish model. This means that the information that comes into a newsroom is edited prior to being released to a mass audience. Conversely, participatory journalism web sites tend to operate under a publish-then-filter model, where information is released to the mass audience and then it is edited (Bowman & Willis, 2003). In some cases people with journalism experience are employed as editors, whereas in other cases, visitors to the site can act as editors. The missing layer of editorial oversight may cause credibility problems for these sites (Gilster, 1997; Scheuermann & Langford, 1997). However, James Surowiecki (2005) argues that experts, such as editors, may not be needed. He argues that the “wisdom of crowds,” as he calls it, is often better than the wisdom of experts and can be trusted to solve problems and make wise decisions. It is this “wisdom of crowds” that new forms of journalism, like participatory journalism, thrive on.

A study (Fogg, et. al., 2001) on which elements help and hurt the perceived credibility of web sites shows that including markers of expertise can help boost the perceived credibility of the site. The authors of the study suggest web sites can convey expertise through listing information about the author, as well as citations of,

and references to, the author's work. The authors also point out that they believe many sites miss the chance to convey this expertise to those who visit their sites.

Building upon this study, perhaps participatory journalism sites can improve perceived credibility by providing information about those who write on the sites, as well as allowing visitors to their sites to verify information easily through the use of hyperlinks embedded in the story.

While there have been many studies done on traditional media and credibility perceptions, there have not yet been any credibility studies done that pertain exclusively to participatory journalism. In fact, scholarly literature on participatory journalism is scant, so this study seeks to add to this body of literature, as well as build on previous studies in the areas of web credibility and trust.

Research Questions

The lack of research on markers that lead to higher levels of perceived credibility of participatory journalism sites has led to this study's three main research questions. The focus of this study is how writer information and hyperlinks can best be used to increase the credibility of stories on participatory journalism sites.

RQ 1: To what extent does providing information about a writer's background and providing a picture of the writer on a participatory journalism site affect the perceived credibility of the story?

Previous studies (Fogg, 2002a; Fogg, et al., 2001; Fogg & Marshall, 2001; Fogg & Tseng, 1999) show that providing information about the author of online information as well as a picture may enhance the credibility of the site. The researcher believes that this finding can be extended to individual stories on a participatory journalism web site. The researcher hypothesizes that providing both information about the writer's background and providing a picture of the writer will enhance the credibility of stories found on the participatory journalism site OhmyNews.com. In this study, "information about a writer's background" is defined as information about the life and previous activities of the author of a news article on the OhmyNews.com web site. "Participatory journalism" is defined as news content produced by ordinary citizens with no formal journalism training (Bowman & Willis, 2003). "Perceived credibility" in this study will be assessed as it has been in a number of previous studies, by measuring the following: believability, accuracy, trustworthiness, bias, and completeness (Abdulla et al., 2005; Bucy, 2003; Flanagin & Metzger, 2000; Flanagin & Metzger, 2003; Gaziano & McGrath, 1986; Johnson & Kaye, 1998; Johnson & Kaye, 2004; Meyer, 1988; Newhagen & Nass, 1989).

RQ 2: To what extent do hyperlinks that allow users to verify information contained in a story on a participatory journalism site affect the perceived credibility of the story?

Hyperlinks can be important in helping users form judgments about online credibility (Fogg, 2002a; Stewart & Zhang, 2003). The researcher hypothesizes that

stories on the participatory journalism web site OhmyNews.com that contain hyperlinks will be rated by participants as more credible than stories that do not contain hyperlinks. In this study “hyperlinks” are defined as the blue underlined words in the text of the stories presented to the participants via a computer connected to the Internet. When clicked on, they allow participants to go to different Internet pages.

RQ 3: To what extent does providing information about a writer’s background, a picture of the writer, and hyperlinks that allow users to verify information contained in a story on a participatory journalism site affect the perceived credibility of the story?

As stated above, previous research indicates that providing information about the writer’s background, a picture of the writer, and hyperlinks that allow users to verify information enhance the credibility of web sites. Providing all of this information to a user may further enhance the credibility of not only the site, but also of the story on the site. Research Question 3 seeks to examine the interaction of all the factors. The researcher hypothesizes that the stories on the participatory journalism site OhmyNews.com that contain all of these pieces of information (writer information, a picture, and hyperlinks) will be rated by participants as more credible than stories that do not contain all of the above information.

CHAPTER 2: LITERATURE REVIEW

Antecedents to Participatory Journalism

The idea of allowing ordinary citizens to have a voice in news coverage is not a new one. The civic, or public journalism movement, allows the concerns of citizens to help shape the news agenda (Eksterowicz, Roberts, & Clark, 1998; Grimes, 1997; Rosen, 1999). The presidential election in 1988 is often cited as the time civic journalism emerged. During this time journalists raised concerns that the election news being covered was not news that was of interest to citizens, and that journalists hadn't remembered the public in their coverage (Rosen, 1999). The rise of civic journalism was spurred by declining newspaper readership and increased competition in the delivery of news, particularly 24-hour news stations like CNN (Eksterowicz, Roberts, and Clark, 1998).

Jay Rosen, a faculty member at New York University and the author of *Pressthink*, a journalism weblog; and Davis "Buzz" Merritt, Jr., former editor of the *Wichita Eagle*, are both considered founding fathers of the civic journalism movement. Rosen (2006) writes that the media landscape is ripe for change:

I have been an observer and critic of the American press for 19 years. In that stretch there has never been a time so unsettled. More is up for grabs than has ever been up for grabs since I started my watch. (p. 5)

Tom Curley, President and CEO of the Associated Press (2004), notes that the Internet has played a large role in altering the news landscape and giving a boost to the civic journalism movement.

Consumers will want to use the two-way nature of the Internet to become active participants themselves in the exchange of news and ideas. The news, as 'lecture,' is giving way to the news as a "conversation." (para. 40)

Gill (2004) argues that this idea of news as "conversation" has helped give rise to participatory journalism web sites, because participatory journalism expands two-way communication between readers and media. Interaction often is encouraged between journalists and readers. Blogging is another way to encourage interaction between writers and readers because it provides different viewpoints on shared experiences (Gill, 2004). It can also be used as a tool for journalists to help "serve as a collective databank used to jog the faulty memories of those who write or report for major media" (Gill, 2004, p. 2).

Weblogs, also known as blogs, pre-date the creation of participatory journalism sites. Some argue that blogs can be considered a form of participatory journalism if they include journalistic news content (Blood, 2003; Gill, 2004).

Jorn Barger first coined the term "weblog" in 1997 (Blood, 2004). At first weblogs were about links. A weblog was simply a place where a person could "log" all of the other web pages he or she found interesting. Today weblogs are web sites where citizens voluntarily write and post their own ongoing thoughts for others to read. The entries may or may not contain links to other sites. Entries are usually updated frequently and posted in reverse chronological order. In 1999 companies

started making blogging software available to the public. Most notable among those companies was Blogger.com. Blogger.com quickly became the most widely used blogging program because it is free and easy to use (Blood, 2004).

In 2001 a feature called the permalink was introduced to bloggers. Permalinks allowed bloggers to give each blog entry a permanent location on the web. The creation of trackback, also in 2001, helped make blogs more useful. Trackback allows bloggers to place a link to their site in an entry they have just referenced. The availability of free, easy to use tools on the web continues to bring people to blogging (Blood, 2004).

The number of weblogs doubles every five months, and about 70,000 new blogs are created daily (Technorati.com). Seven percent of those who use the Internet report creating a blog (Rainie, 2005). Twenty-seven percent of Internet users report reading blogs. Even though millions are creating and posting to blogs, only 38% of Internet users know what a blog is (Rainie, 2005).

Those who create blogs are primarily men, under 30 years of age, who have broadband access at home, have been online for at least six years, live in households that earn over \$50,000 a year, and have a college or graduate degree (Rainie, 2005).

Those who read blogs tend to mirror those who create them, however the number of women, minorities, people with home dialup connections, and people between the ages of 30 and 49 who read blogs are on the rise (Rainie, 2005).

Who's Using the Web and What Are They Doing?

According to a 2006 study by the Pew Research Center For the People and the Press 74% of men and 71% of women report using the Internet. Eighty-eight percent of those who are 18-29 years old report going online. This compares to 84% of 30-49 year-olds, 71% of those between the ages of 50-64, and 32% of those who are 65 or over. In terms of race/ethnicity, 73% of whites, 61% of blacks, and 76% of English-speaking Hispanics report going online. In terms of the types of communities, 75% of those who live in urban and suburban communities, and 63% of those in rural communities, report using the Internet. When looking at household income, 91% of those who make more than \$75,000 a year report logging on. The number drops to 53% when looking at those who make less than \$30,000. According to the survey, 91% of those who had attended college and then gone on to further education had used the Internet, followed by 84% who had completed some college, 64% who completed high school, and 40% who had not completed high school. So from this picture we can conclude that most of those online are white men and women between the ages of 18 and 49 who live in rural and suburban areas, make more than \$50,000 a year, and have completed at least some college.

People use the Internet to do a variety of things. According to the same 2006 Pew study, 91% of those surveyed report going online to send e-mail and using a search engine to find information. Sixty-eight percent of those surveyed report going online to get news. Twenty-seven percent report reading someone else's blog.

Also according to Pew, 66% of American adult Internet users, about 97 million people, use the Internet on an average day. Of those approximately 97

million people, 53% report sending e-mail (the most popular activity) “yesterday”, 31% report getting news “yesterday”, and 2% report creating a web log or blog “yesterday”.

Participatory Journalism

Participatory journalism, also referred to as “grassroots journalism” and “citizen journalism,” is the idea that news content is produced by ordinary citizens with no formal journalism training (Bowman & Willis, 2003). In their paper titled *We Media: How Audiences are Shaping the Future of News and Information*, Shayne Bowman and Chris Willis (2003) use the following working definition of participatory journalism:

The act of a citizen, or group of citizens, playing an active role in the process of collecting, reporting, analyzing and disseminating news and information. The intent of this participation is to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires. (p. 9)

Media futurists predict that by the year 2021 citizens will produce 50% of the news peer to peer, in other words from one person to another via a computer (Bowman & Willis, 2003). The Internet is one of the primary reasons for this change in the media landscape. The Internet provides an environment where there is little cost to create or distribute content, easy-to-use publishing tools are available, a new generation of computer users exist who are more comfortable instant messaging someone than picking up the phone, and more and more advertising money is being

shifted to online media (Bowman & Willis, 2005). Gillmor (2004) writes about the power of the Internet:

The Internet is the most important medium since the printing press. It subsumes all that has come before and is, in the most fundamental way, transformative. When anyone can be a writer, in the largest sense and for a global audience, many of us will be. The Net is overturning so many of the things we've assumed about the media and business models that we can scarcely keep up with the changes...But we have to try, and nowhere is that more essential than in the oldest form of information: the news. (p. 236)

Nicholas Negroponte (1995), co-founder of MIT's MediaLab, agrees and adds that the Internet will weaken the power of existing media gatekeepers, thereby creating a more democratic and decentralized media environment. However, the Federal Communications Commission (FCC) is again examining media ownership rules. A change to the ownership rules could pave the way for companies to own multiple media outlets in the same market, thereby creating a monopoly on news and information. Some warn this could lead to biased news coverage and dampen the number of alternative voices and viewpoints available to news consumers (Turner, 2006). Gillmor (2004) adds that information from citizen journalists that is not reliable could serve to make traditional media stronger.

The flood of unreliable information on the net could have the ironic effect of reinforcing the influence of Big Media, at least in the short term. This assumes, of course, that users of online journalism trust Big Media in the first place. Many do not. (p. 188)

However, if the citizen journalism movement does take root, and a shift in control occurs from large media companies to people with home computers, traditional news media outlets may now feel threatened by the audience they once served.

Citizens everywhere are getting together via the Internet in unprecedented ways to set the agenda for news, to inform each other about hyper-local and global issues, and to create new services in a connected always-on society. The audience is now an active, important participant in the creation and dissemination of news and information, with or without the help of mainstream news media. (Bowman & Willis, 2005, p. 6)

Some question if the citizen journalism movement is a positive one. Samuel Freedman, a Professor of Journalism at Columbia University, writes that he, "...is in despair over the movement's current cachet" (Freedman, 2006, para. 6). He writes the movement is degrading journalism as practiced by professional journalists.

To treat an amateur as equally credible as a professional, to congratulate the wannabee with the title "journalist," is only to further erode the line between raw material and finished product. For those people who believe editorial gate-keeping is a form of censorship, if not mind control, then I suppose the absence of any mediating intelligence is considered a good thing. (Freedman, 2006, para. 11)

Bertrand Pecquerie, Director of the World Editors Forum (an online news forum for news editors around the world), writes that the citizen journalism movement can be positive when it is used to create a conversation, however that

conversation must be based on facts and good reporting, something he says, is best left in the hands of professionals.

News becoming a conversation is a positive step if it means commencing a dialogue with readers, a dialogue incredibly simplified thanks to the Internet. But in the context of the present crisis, this also acts as a way of minimizing the role of journalists. It seems to have been forgotten that breaking news and investigation into scandals and corruption performed by professionals is necessary before this conversation can start. (Pecquerie, 2006, para. 13)

However, Gillmor (2004) argues more voices in news coverage can lead to a more accurate story: “When there are lots of citizen reporters scrutinizing what other people say, they have a way of getting to the truth, or at least shining light on inconsistencies” (p. 187).

Despite worries about citizen journalism weakening traditional journalism, some traditional media outlets have embraced reports by citizen journalists. Coverage of large-scale disasters by citizens, beginning in 2004, when a tsunami hit South Asia, helped fuel the participatory journalism movement. Shortly after the event, tourists took more than 20,000 tsunami pictures and posted them to Flickr.com. The London bombings on July 7, 2005 allowed citizens to become involved in media coverage. Video shot from citizens’ camera phones was used in the BBC’s coverage of the bombings that evening. The BBC reports citizens sent more than 20,000 e-mails, 1,000 pictures, and 20 videos within the first 24 hours following the bombing. The earthquake in Pakistan and India in October of 2005 also allowed citizens to be

involved in the coverage. The event led to pages and pages of descriptions of the devastation on the BBC's web site (Sambrook, 2005).

Hurricane Katrina in 2005 spurred major traditional media sources to solicit pictures, stories, and video from their audience. Although major news organizations like CNN, MSNBC, and *The New York Times* received a lot of material from citizens, little of it was used, and it was clearly separated from the main news content on the sites (Bowman & Willis, 2005).

Others feel traditional media outlets will not disappear in this new media landscape, but rather, control it. Some argue that the Internet will serve to give even greater control over news content to already established media companies, for example Time Warner, News Corporation, and MSNBC (Naylor, Driver & Cornford, 2000).

OhmyNews.com

Arguably the most well-known and popular participatory journalism web site in the world is OhmyNews.com, founded by Oh Yeon Ho of South Korea in February 2000. "The main concept is that every citizen can be a reporter. A reporter is the one who has the news and who is trying to inform others," Ho says (Bowman & Willis, 2003, p. 12).

Ho started the site because he was unhappy with the mainstream media. He felt the Korean media was skewed, in his estimation, 80% conservative-- 20% liberal. He wanted to bring balance to the media. Many young Koreans who were blogging, turned to OhmyNews.com to write for a larger audience (Min, 2005). Jean K. Min,

director of OhmyNews International, writes that it is important to keep in mind that the audience *is* the content on the site:

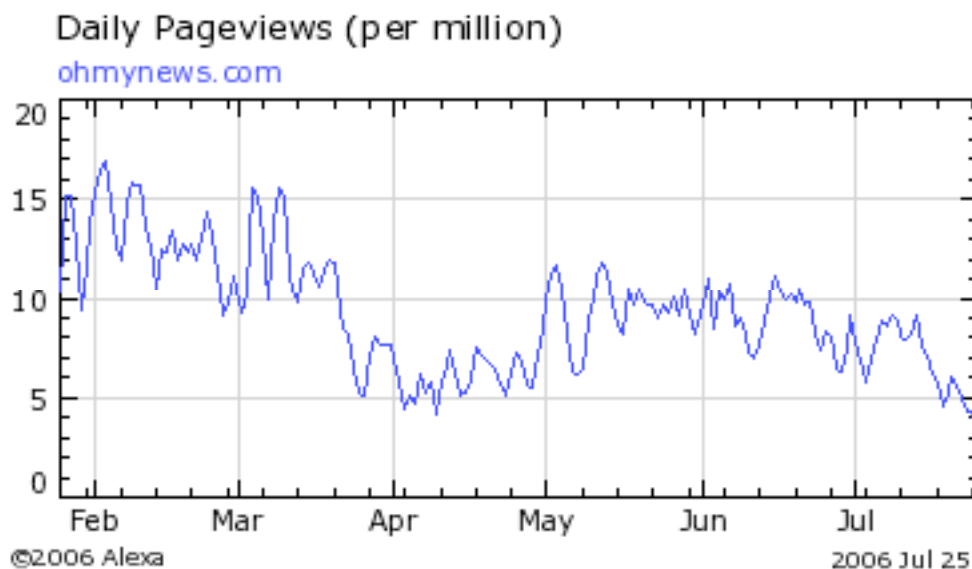
The readers, or news audience, are no longer passive consumers at the end of the day. Participation in this great news sphere is realized for them either by joining OhmyNews as a citizen reporter or by participating in the online forum offered at the very bottom of every story we publish. (Min, 2005, p. 18)

OhmyNews.com received a lot of attention from the popular press following the 2003 Presidential elections in South Korea. Traditional media sources such as CNN, *Newsweek*, *The New York Times*, and *TIME* magazine wrote articles about the site. The site was credited with influencing the election of President Roh Moo-Hyun by bringing attention to the candidate (OhmyNews.com).

OhmyNews.com has more than 42,000 registered citizen journalists and 95 full-time staff (Ihlwan & Hall, 2006). Editors review and post hundreds of articles each day written by the citizen journalists. The most carefully edited articles are located prominently on the page. The articles that have not been edited yet are featured less prominently on the page. The reports filed by citizen reporters make up more than 70% of the news content on the site. The citizen journalists are paid a few dollars for each story they write. If the story is listed as a “Top News” story the citizen journalist is paid around \$15 (Schroeder, 2004).

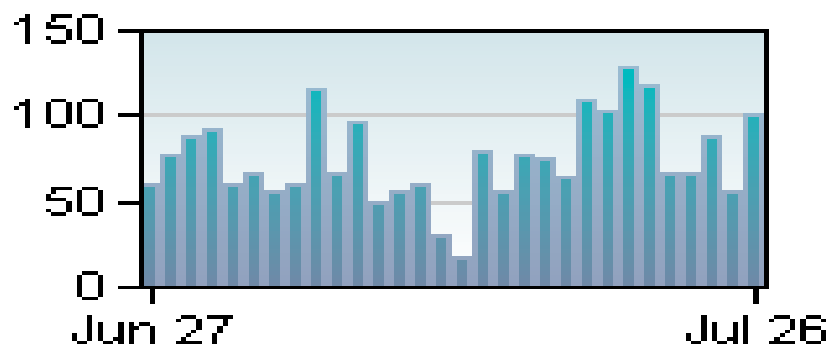
From February 2005 through July 2005 OhmyNews.com had anywhere from about 3 million to about 18 million page views per day (Alexa.com). Figure 1 shows the daily pageviews for the site during this period.

Figure 1. Daily Pageviews for OhmyNews.com



The site has a reach of 193 million users (Alexa.com) and is ranked 3,196 (1,634 links from 542 blogs) out of the 49.7 million blogs being tracked as of this writing by Technorati.com. Figure 2 shows the daily number of posts to the site from June 27, 2006 through July 26, 2006 ranged anywhere from around 25 to about 125 posts per day (Technorati.com).

Figure 2. Daily Number of Posts to OhmyNews.com



Source: Technorati.com

English.OhmyNews.com

In 2004 Ho launched OhmyNews international to begin the globalization of his product. OhmyNews international is an English version of the original site and allows people who speak English to participate (Schroeder, 2004). The news is written by 850 citizen reporters from 85 countries. Eight professional editors oversee the citizen reporters (Ihlwan & Hall, 2006). From 2000 to 2004 the site printed four retractions and has never had any significant lawsuits brought against it (Schroeder, 2004).

According to Technorati.com the site is ranked 517 (2,471 links from 1,476 blogs) out of the 49.7 million blogs being tracked by Technorati.com as of this writing. In August of 2006 OhmyNews plans to launch a Japanese-language version of the site that will be operated in cooperation with Softbank Corp (Ihlwan & Hall, 2006). The number of posts daily to English.OhmyNews.com average around 10 (Technorati.com).

Implementing Participatory Journalism

“Citizen journalism isn’t one simple concept that can be applied universally by all news organizations. It’s much more complex, with many potential variations,” says Outing (2006). Participatory or citizen journalism can take many different forms on already established news sites. For example, readers can be invited to comment on already published articles. Citizen journalism sites that have encouraged their readers to do this include: Northwest Voice, The Bakersfield Californian, InsideVC.com, Poynter online, and ZDNet.com (Outing, 2006).

Another way news organizations can include readers in the news conversation is to have a professional journalist post a small story and then allow citizens to post their experiences that pertain to the story (Outing, 2006).

Open-source journalism could be another way of including readers in the journalism process. A professional journalist may collaborate with a reader who knows a lot about the subject. The journalist may ask the reader questions to help in the writing of the story or the reader may do actual reporting that will be included in the finished story (Outing, 2006).

A citizen bloghouse might be created on a news web site where citizens are invited to create blogs and post entries on these blogs. This can take the form of a list of blogs created by citizens and listed by category on a table of contents page.

Editors might choose the best blogs to highlight on a main page (Outing, 2006).

Outing (2006) offers a word of warning about this: most news web sites that have used citizen bloggers say the blogs start out strong but the activity dwindles to complete inactivity in many cases. Examples of citizen bloghouses include: bluffton (S.C) today community blogs, Lawrence.com blogs, the Denver Post bloghouse, and NJ.com weblogs (Outing, 2006).

A news organization may also consider a stand-alone citizen journalism site made up of contributions from citizens that is edited and is separate from the core news brand. Most of these sites tend to focus on local news. Editors of the sites monitor submissions and may do some minor editing. One advantage of these sites is that events that are not covered by mainstream media can be covered by the citizens. Examples of these types of sites are: mymissourian, Westportnow, ibrattleboro.com,

Greensboro (N.C.) news, and record your news (Outing, 2006).

A news organization may also choose to create a stand-alone citizen journalism site that is not edited. This is just like the above model, but the entries are not edited before they are posted on the site. Because the entries are not edited, safeguards must be put in place. These safeguards may include having an editor read the stories after they have been posted and/or including a “report misconduct” button that allows users to send a message to editors if they spot something they consider to be inappropriate in the story. This will then alert an editor to the need to review the submission. Outing (2006) also suggests building in a feature that automatically removes a story from the site after the “misconduct button” has been clicked three times. This allows a potentially libelous story to be removed from the site quickly and gives the editor a chance to review it. Examples of stand-alone citizen journalism sites that are not edited can be found at: backfence.com, getlocalnews.com, Dailyheights.com (Outing, 2006).

Some news organizations put out a print edition of the stories published online by citizen journalists. Outing (2006) points out that a print edition can serve as a motivational factor, helping compel “trusted” contributors to continue to contribute content. However, some consider the print editions to be a step backward, adding costs to the publishing process and limiting interactivity. Examples of blogs with a print component include: mytown, neighbors, [northwest voice](http://northwestvoice), yourhub, and [bluffton today](http://blufftontoday) (Outing, 2006).

The work of citizen journalists can also be combined with the work of professionals. OhmyNews.com is an example of this approach. Citizen reporters

account for about 70% of the site's content; professional reporters create the rest. Not everything submitted by the citizens is accepted for publication. Blufftontoday.com, a South Carolina web site, is another example of this kind of journalism. Jan Schaffer (2005), executive director of J-lab.org, a web site devoted to citizen journalism, writes that it is possible for citizen and journalist created content to co-exist:

Citizen content does not create an either/or paradigm. It's an "and." Citizen-contributed content can do much to enrich traditional journalism: It will complement as well as compete with mainstream offerings. Citizens can serve as guide dogs as well as watchdogs. (p. 28)

The term citizen journalist can be intimidating to citizens who want to contribute news content. Jonathan Weber, founder and editor of NewWest.net, a participatory journalism site, now labels content that comes from citizen journalists as "unfiltered" as opposed to "citizen journalist" (Schaffer, 2005).

Notable Participatory Journalism Projects

New media initiatives are springing up because people feel, "...shortchanged, bereft, or angered by their available media choices" (Schaffer, 2005, p. 24). The Knight Foundation has been a supporter of the participatory journalism movement through their "new voices" grants. These are grants designed to help fund start-up community news ventures (Schaffer, 2005).

One of the funded projects is "Louden Forward," a citizen journalism venture in one of Northern Virginia's fastest growing counties (LoudenForward.org). The project's managing partners felt the media was only reacting to local events, not

exploring issues of substance or presenting ideas or solutions to long-term problems (Schaffer, 2005).

Another project funded through the “new voices” grants was a joint project between The Hartsville Messenger (a small twice-weekly newspaper) and the University of South Carolina School of Journalism and Mass Communication. A study by Fisher and Osteen (2006) details what was learned during the first year at the joint venture, Hartsville Today (Hvtd.com). According to the study, when creating a site like this, it is important to think like users and readers, not like publishers and journalists. They also recommend avoiding the terms “citizen journalism” and “participatory journalism” because several people who were asked to contribute to the site felt they couldn’t because they weren’t trained journalists. Instead Fisher and Osteen recommend using the terms “community storytelling” and “community conversation.” They also say that recruiting is an important part of the process, and they learned that “Once you’ve built it, they may not come” (p. 2).

Once citizens are recruited and begin writing for the site they are going to need some training, so that needs to be built into the budget. Fisher and Osteen (2006) suggest that an events calendar should be placed on the site, and that the ability to post readers’ photos should be very easy. They also recommend having a “report inappropriate content” button. Overall, Fisher and Osteen (2006) conclude that the site is successful, as it has helped them engage their readers in a “community conversation,” and that content on Hartsville Today has been used to complement coverage in the Hartsville Messenger. They also admit they have had their share of problems. For example, The Messenger staff newsroom has not truly integrated

Hartsville Today into its day to day operations, and the sales staff has been reluctant to sell advertisements on the site because they are afraid of hurting newspaper advertisement sales.

Backfence.com has community web sites that serve McLean and Reston, Virginia. It has now secured \$3 million in funding to go national.

MyMissourian.com is a participatory journalism site launched in 2004 by the University of Missouri-Columbia. In this participatory journalism model, citizens, both on and off campus, serve as writers for the site. Journalism students act as editors.

Editors work closely with authors who ‘share’ information rather than ‘cover’ stories. We edit for readability and civility, not A.P. style and newspaper tradition. We know how to keep our reporters out of libel court, so this responsibility doesn’t change because our authors are not on the payroll. We let writers get trivial and let them talk about what interests them. (Bentley, 2005, p. 27)

MyMissourian.com will not accept anything that contains profanity, nudity, personal attacks, or attacks on race, religion, national origin, gender, or sexual orientation (Bentley, 2005).

Cognitive Authority in Journalism Communities

“Journalists’ ability to decide what is news has constituted the expertise that distinguishes them from non-reporters,” writes Zelizer (1993). By the 1920’s journalists had adopted the attitude that they were the best ones to determine what the

audiences' interests and needs were (Tuchman, 1978). Established media used this as a way to make sure it kept control, and guarded against change and rebellion (Soloski, 1989). As a result, the journalists adopted certain attitudes toward how to go about their work. Namely, they felt they needed to be objective, neutral, and balanced (Schiller, 1979, 1981). The authority of journalists often comes from their attendance at events and from being an eyewitness as news unfolds (Zelizer, 1993).

A cognitive authority is not just “one to whom we turn for information but also one to whom we turn for advice...” (Wilson, 1983, p. 18). Wilson says authority is limited to spheres, or areas in which a person can speak with authority. He argues that certain professions impart cognitive authority based on the education and/or training necessary to become a member of the profession. In the case of journalism, the public often looks to journalists to speak within their sphere of authority about a breaking news story-- but might also a citizen who is a witness to that same breaking news event also be able to speak with authority? According to Wilson (1983) it is up to the person evaluating the information to decide whether or not the person providing the information has authority and is credible. This is often determined by looking at the credentials or occupational specialization of the person providing the information.

In this regard journalism is not like other professions like medicine or law. Professionals in these fields are asked to prove themselves through training, education, and licensing. Instead, journalists often reject the very things that other professions use to prove their legitimacy (Zelizer, 1993). Since there is no licensing or formal training process for journalists, there is a very low boundary of entry into

the field of journalism, which may be helping to fuel the participatory journalism movement.

Media Credibility

Almost since the founding of the free press in America, newspapers have been in a constant battle with readers over issues of sensationalism, truthfulness, believability, and bias. Media credibility soared following President Nixon's resignation in 1974; public opinion polls showed that 68% of people had trust and confidence in the news media (Notoro-Morgan, 1998). However, following this time of soaring public confidence, trust in the media fell and continues to fall. A survey by the Pew Research Center For the People and the Press (2005) shows credibility in all major news media have fallen in recent years due mainly to increased distrust of the media by Republicans and conservatives.

According to the survey, among the major networks, 24% of people find NBC News to be highly credible, down from a high of 30% in 1998; 24% find ABC news highly credible, down from 31% in 1996; and 24% of people find CBS News highly credible, down from 32% in 1996. The same downward trend can be seen in newspapers, although the decline is not as dramatic. The percentage of people who say they can believe most of what they read in their daily newspaper has dropped from 84% in 1985 to 54% in 2004 (Online Newspaper Readership Countering Print Losses, 2005). A similar pattern holds true for local and network television news. During the same period, TV news believability has fallen from 85% to 62% and network TV believability has fallen from 87% to 64%.

As trust in traditional media continues to wane, more people are going online to get their news. About 50 million Americans get their news from the Internet in a typical day (Horrigan, 2006). Those who are broadband Internet users are more likely than those who have a dial up connection to get their news online. For broadband Internet users, getting news online is as much of an everyday occurrence as getting news from national TV newscasts and radio, and getting online news is more a part of their daily activities than getting news from newspapers (Horrigan, 2006). When people do go online to get their news, they typically seek out familiar names: 46% say they go to the web site of a national TV news organization (CNN or MSNBC); 39% go to Yahoo or Google; 32% go to local daily paper web sites; 31% report getting news from the web site of a local TV news station; and 20% say they visit the web site of a national daily newspaper. Twenty-two percent of all Internet users report going to a foreign or non-traditional news site at least one time. In terms of the number of people turning to blogs for news, about 9% of all Internet users report visiting a news blog (Horrigan, 2006).

Defining Credibility in Human-Computer Interaction

Credibility and believability are often thought of as synonymous in the field of Human Computer Interaction, where credibility is considered a perceived quality (Fogg & Tseng, 1999). Fogg and Tseng (1999) argue that credibility is made up of multiple dimensions, of which the two key dimensions are trustworthiness and expertise. Others say the perception of credibility is composed of four dimensions: honesty, expertise, predictability, and reputation (Corritore, Marble, Wiedenbeck, &

Chandran, 2005). Issues of computer credibility come into play in many situations, including when computers act as knowledge sources and as decision aids (Fogg & Tseng, 1999). Some terms that can be used to assess computer credibility are: credible, believable, reputable, trust in the information, accept the advice, and believe the output (Fogg & Tseng, 1999).

It is important to remember that credibility and trust are two different concepts. “If an object has credibility (e.g. the author is a recognized expert), that credibility is a positive signal of the trustworthiness of the object. Hence, credibility provides a reason to trust but is not trust itself” (Corritore, Kracher, & Wiedenbeck, 2003, p. 748).

Models for Evaluating Computer Credibility

Fogg and Tseng (1999) propose three models for evaluating computer credibility: binary, threshold, and spectral evaluation. In binary evaluation users perceive the product as either credible or not credible--there's no middle ground. In threshold evaluation, if the user perceives that a product falls below a certain threshold it is not credible, if it falls above a certain threshold it is credible, if it falls in between it is perceived as somewhat credible. In spectral evaluation there are no black or white categories, only shades of grey. This usually happens when the user has a high interest in the information he/she is pursuing and is also very familiar with the subject. The users' use of the above models depends upon the type of information seeking situation users find themselves in. The threshold model is the most common.

In order for people to evaluate information, they must first process it.

According to the Elaboration Likelihood Model (ELM), there are two routes for processing information, central and peripheral. Central is used when people have high interest and devote much of their cognitive resources to processing the information. Peripheral is used when people have little interest in the issue or little capacity for processing the information (Petty & Cacioppo, 1981; Petty, Cacioppo, & Goldman, 1981). This may mean that the less motivated people are to seek information on a site, the more they will rely on peripheral cues (things like appearance). According to a study by Gunther (1992) of newspaper and television news coverage, the more a participant is involved with the information the more likely they are to reject it and the more “cognitive elaboration of the message” there will be.

The way people think about and approach credibility also needs to be considered, argue Fogg and Tseng (1999). These different ways of thinking include: presumed, reputed, surface, and experienced. Presumed credibility is how a person perceives someone/something based on assumptions he or she makes about that person or thing. Reputed credibility is how much the person believes something based on reports from others. Surface credibility is how a person perceives something based upon looks alone. Experienced credibility is based on first-hand experience (Fogg & Tseng, 1999).

Wathen and Burkell (2002) propose a model of how users assess the credibility of online information. This untested model has three stages. In the first stage the user makes some quick decisions about the web site, asking questions like, “Does this site look professional?” and “Can I get what I want quickly and easily?”

The appearance of the site, as well as how quickly it loads, are of primary importance. If the user decides to pursue the site they move to stage 2: judging the credibility of the message on the site. During this stage users are assessing the believability of the message and whether or not the information seems reasonable. If the information is credible they progress to stage 3: evaluation of the information itself. Here, users might ask questions like, “How does the information match my previous knowledge?” and “How badly do I need the information?”

Web Structures that Impact Computer Credibility

Many factors impact the perceived credibility of information found while using a computer. Following three years of research that included over 4,500 people, the Stanford Persuasive Technology Lab formulated guidelines for improving web credibility (Fogg, 2002a):

- *Verifiability of Information:* Provide citations, references, and sources for the information on the site, and then link to this information.
- *Prove Legitimacy:* Make sure users know the site is a legitimate organization. Provide a physical address, post a photo of the office, list a membership with the chamber of commerce.
- *Highlight Expertise:* Give credentials and make sure users know about any experts. Make any association with a respected organization known. Do not link to sites that are not credible.
- *Honesty and Trustworthiness:* Make sure users know there are real people behind the site. This can be done by posting bios.

- *Contact Easily*: Make contact information clear, including a phone number, address, and e-mail address.
- *Professional Design*: Pay attention to the layout of the site and the images used. The visual design of the site should match the purpose of the site.
- *Ease of Use and Usefulness*: Make sure the site is easy to use and useful to users. Do not try to dazzle.
- *Update Content*: Sites that have been recently updated or reviewed are found to be more credible than those that are not.
- *Be Careful with Ads*: It is best to avoid having ads. If ads are included make sure ads are clearly labeled as such. Avoid pop-up ads.
- *Avoid All Errors*: Typos and broken links hurt credibility. Even small errors have a big impact on credibility.

As mentioned above, markers of expertise can improve a web site's credibility. Fogg et al. (2001, p. 64) used the following items as markers of expertise (they are listed in order of importance):

- The site is by a news organization that is well respected outside of the Internet.
- The site lists authors' credentials for each article.
- The site has articles that list citations and references.
- The site has few news stories, but gives detailed information for each.
- The site says it is the official site for a specific topic.
- The site has ratings or reviews of its content.
- The site displays an award it has won.

Although markers of expertise are important, in a 2003 study on web site credibility, Fogg et al. found the design/look of the web site was noticed most often by participants, followed by the structure of the information (how easy/hard the site was to navigate) and the information focus (how narrowly or broadly the information was focused).

It is not just the design of the web site that is important. The way information is presented is also important. The title, for example Reporter or Staff Writer, given to the writer of an online article can play a role as to whether or not information is judged to be credible, however studies in this area have shown different results. Fogg & Tseng (1999) found that the title of Doctor or Professor may mean something is judged as more credible. However, Fogg & Marshall (2001) found that an article with a more casual byline was perceived as more believable than the same article with a more formal title. They weren't able to explain why this was the case. However, when it came to pictures in this same study, they found that a formal picture of an author on a web site led people to believe the article more than an article with a more casual picture of the author beside it.

Prominence-Interpretation Theory

Fogg (2003), as a preliminary attempt, developed the Prominence-Interpretation Theory to explain how people assess credibility in an online environment. According to the theory, people do two things when they assess credibility online: the user notices something (prominence) and the user makes a judgment about it (interpretation). Fogg argues that both of these things have to

happen in order for a credibility assessment to be made. Five things that affect prominence are: user involvement, web site topic, user task, user experience (e.g. novice, expert), and individual differences. Fogg says there are three things that affect interpretation: assumptions, skill/knowledge, and context.

Defining Credibility in the News Media

In the 1950's the Roper Center for Public Opinion Research began measuring media credibility in its polls sparking debate in the media community about the definition of credibility. Some of the earliest work in this area defined the credibility of a news story as being synonymous with the believability of the story (Hovland & Weiss, 1951). This definition is still widely used today in media research (Gunther, 1987; McGuire, 1985; Wilson & Sherrel, 1993).

Media credibility can also be defined as something that offers reason or evidence as to why it is believable or at least possible. In order for something to be considered true or honest it must be believed (Abdulla et al., 2005).

Receiver and Source Credibility

Some researchers make a distinction between receiver and source credibility. Newhagen and Nass (1989) offer the following definition of mass media credibility defined from a receiver-oriented perspective: "The degree to which an individual judges his or her perceptions to be a valid reflection of reality" (p. 278). But they point out that measuring media credibility is complicated by the fact that another dimension is added to the mix when technology, in the form of a television monitor or

printing press, is used in the transmission of the message. They go on to say that because of this, mass media credibility is really, "...the perception of news messages as a plausible reflection of the events they depict" (p. 278).

In terms of the source, there is usually not a clear distinction made in many studies (Newhagen & Nass, 1989). A person, an organization, or even the channel being used to transmit the message can be considered the source. A distinction can also be made between an "internal" and "external" source, where the "internal" source is the person who originated the message, and the "external" source is the mass medium used to transmit the signal. When source credibility was taken into account, Newhagen and Nass (1989) found that people judge television according to the on-air people presenting the news (individuals), whereas newspapers are judged more as an organization (institution).

Newhagen and Nass (1989) also found that the different types of messages transmitted through a channel also impacts source credibility. For example, television news may suffer because television, unlike the newspaper, is not primarily viewed as a news source, but rather as an entertainment source. Television credibility judgments are based more upon the physical appearances of individual on-air personalities than the perceived news credibility of the news organization or the station. However, they also point out that the distance between newspaper writers/editors and their readers can hurt credibility because the newspaper takes on an anonymous quality. The immediacy of television to the viewer can enhance television credibility.

Other studies have also examined the impact of source credibility on how information is perceived. Hovland and Weiss (1951) found that when a statement is made by someone perceived as a “high prestige” source there is a higher level of agreement with the statement. Berlo, Lemert, & Mertz (1970) also investigated source credibility. They came up with three dimensions for evaluating sources of messages: safety, qualification, and dynamism. In a study by Bucy (2003) a distinction is made between media credibility and source credibility, where source credibility focuses on those presenting the message and qualities like expertise and trustworthiness.

Studies show people use several markers to judge a source’s believability. These include the source’s expertise and bias, as well as audience members’ prior knowledge and impressions of the source. When a person does not know a lot about the source’s credibility, people tend to look at the message to see how well it is presented, whether or not it is believable, and whether or not it is supported by data (Slater & Rouner, 1996; Austin & Dong, 1994).

Structural and Message Features

It is important to make a distinction between the message the web site is trying to convey and how it is being conveyed through the site. In several studies, authors (Fogg, 1999; Hong, 2006; Olaisen, 1990; Petty & Cacioppo, 1986) have attempted to make this distinction, although sometimes using different terms. “Technical” qualities can be thought of as the things on a site related to design features, while “cognitive” qualities are those things related to the message on the site

(Fogg, 1999; Olaisen, 1990; Petty & Cacioppo, 1986). Olaisen (1990) says “cognitive” factors include influence, trustworthiness, competence, reliability, and relevance. The “technical” factors include form, novelty, accessibility, and flexibility.

In a study of health care web sites Hong (2006) makes a distinction between “structural” features and “message” features on web sites. Hong argues that “structural” elements of a web site (domain name, advertisements, seals of endorsement, etc.) have an impact on credibility, and these things need to be taken into account in conjunction with “message” features (the text content, author credentials, statistics) to produce an overall picture of perceived credibility on the web. Hong says most web sites contain both “structural” and “message” features, yet many studies do not distinguish between the two. At this point, it is not known what the relative contributions of “message” and “structural” features are to the overall assessment of online credibility, yet it is something that Hong argues is important to take into consideration in order to fully understand online credibility.

When making the distinction between “structural” and “message” features in her 2006 study it was found that the more “message” features a site has the more credible the site is perceived to be. According to the study “structural” features didn’t seem to predict the perceived credibility of a web site. Web sites that had a .org, .gov., or .edu domain name were only perceived as being more credible than .com sites on the specific search task in the study, not the general search task. Whether there were ads on the site didn’t predict the perceived credibility of the site. The author suggests there may be a hierarchy in place when people visit web sites. People

may look at the message first followed by the structural features; however, Hong admits this may vary by the type of information being examined.

According to studies of scholars and their online information seeking behaviors these users tend to assess the quality of information on a site based on source credibility and authority (Rieh, 2002; Rieh & Belkin, 1998). Participants in the study paid a great deal of attention to academic and governmental institutions. Authority was ascribed to professional experts like doctors and professors. Rieh (2002) found participants' judgments of quality and authority are swayed by the source at the institutional level (URL, type of source, etc.) more than at the individual level (author name/credentials, etc.) When people do not know who the source of information is, they will turn to the message in order to determine the credibility of the source (Rosenthal, 1971).

Dimensions of News Credibility

In mass media research, credibility is often studied as a multi-dimensional concept. Two of the earliest media researchers to look at the dimensions of media credibility were Hovland and Weiss (1951) who found credibility to comprise two dimensions: trustworthiness and expertise.

In their study of the dimensions of credibility and how they are related to each other, Gaziano and McGrath (1986), found 12 dimensions of credibility. They are fairness, lack of bias, telling the whole story, respect for people's privacy, watching out for people's interests, concern about the community's well being, separating fact from opinion, concern about the public interest, well trained reporters,

trustworthiness, accuracy, and factually based stories. Many studies have used some or all of these dimensions to assess credibility (e.g., Abdulla et al., 2005; Bucy, 2003; Flanagin & Metzger, 2000; Johnson & Kaye, 1998; Johnson & Kaye, 2004).

Building on the work of Gaziano and McGrath (1986), Meyer (1988), in his study of newspaper credibility, suggested that credibility is composed of two dimensions, namely believability and community affiliation. When assessing online credibility, some of the dimensions used to assess traditional media credibility are also used. For example, in their study of Internet and traditional sources, Johnson and Kaye (1998) used the dimensions of believability, accuracy, fairness, and depth of information. They used those same dimensions in their 2002 study of Internet users interested in politics.

In another study of online and traditional media credibility Abdulla et al. (2005) found the dimensions of online credibility to be: trustworthiness, currency, and bias. They found trustworthiness to be made up of believability, accuracy, completeness, balance and fairness, and honesty.

When studying online news stories Sundar (1996) used six dimensions of credibility: accuracy, believability, bias, fairness, objectivity, and sensationalism. He also used five measures to assess news story quality: clarity, coherence, comprehensiveness, conciseness, and good writing. Bucy (2003) used believability, fairness, accuracy, informativeness, and in-depth to measure the credibility of network newscasts and web sites.

News Credibility Scales

Many different news credibility scales have been used to assess media credibility. Many of the scales are based on the dimensions of credibility discussed above.

Rimmer and Weaver (1987), in their study of TV and newspaper use and credibility, used a 12-item scale to assess credibility based on data from the American Society of Newspaper Editors (ASNE). The scale has questions about whether the stories are fair or unfair, biased, tell the whole story, are accurate, invade people's privacy, watch out for people's interests, show concern about the community's well-being, can separate facts from opinions, can be trusted, are concerned about making profits, are factual or contain opinions, and have well-trained reporters. They also used a second set of credibility measures, chosen from a 1985 Meyer study, in the study that contained only four of the above items: bias, telling the whole story, accuracy, and whether or not the source can be trusted.

Newhagen and Nass (1989) came up with a scale for assessing newspaper and television credibility. The factors used to assess newspaper credibility were: factual, trustworthiness, fair, accurate, tell the whole story, reporters are well trained, separates facts from opinions, concerned about the community's well being, concerned mainly about the public interest, and lack of bias. The factors used to assess television credibility were the same with the exception of "reporters are well trained."

Sundar (1999) studied the criteria used by receivers when they were processing both print newspaper and online newspaper content. Sundar began with 21 criteria and found that four factors emerged after conducting a factor analysis: credibility, liking, quality, and representativeness. According to the study the measures can be used to evaluate both print news and online news without any bias.

Credibility of Traditional vs. Online News Sources

Research on the credibility of traditional vs. online news sources to this point has neither been consistent nor conclusive (Flanagin & Metzger, 2000). A study by Johnson and Kaye (1998) compared traditional and Internet sources in terms of credibility. In their study of how individuals use political information they found that online media were judged by study participants as more credible than traditional news vehicles. They also found that online media publications were judged to be “somewhat” credible. In their study of online news credibility, Abdulla et al. (2005), also found that online news was rated the highest in credibility. This study attempted to assess credibility across the different forms, namely newspapers, television, and online, as well as across the different dimensions of credibility. The authors found that newspapers were rated high on being current, up-to-date, and timely. Newspapers were rated low in terms of bias and on reporting the whole story. Television was rated high on being current, up-to-date, and timely, and low in terms of bias and reporting the whole story. Online news was rated high on being current, up-to-date, and timely and lowest on bias and reporting the whole story.

Flanagin and Metzger (2000), in their study of Internet information and credibility found that newspapers, not the Internet, received the highest credibility ratings. In this study, it appeared that participants were judging online and on-air sources separately. For example, participants separately judged CNN on TV and CNN online.

Impacts on Internet News Credibility

Although online news tends to be rated higher than its traditional counterparts in some cases, Abdulla et al. (2005) says online credibility may be hurt, as compared to newspaper and television credibility, because online news users may perceive a lack of editorial oversight online:

Readers understand that editing and other forms of editorial screening occur in newspaper and television newsrooms. Whereas it is easy to find out who publishes or edits a newspaper or holds the license and edits a television newscast, it is sometimes much harder to determine who publishes a web site. (p. 161)

One suggestion for combating this perception is to more effectively brand online news. For example a web site that is associated with an established traditional news source, such as CNN, should make sure visitors to the CNN online site understand that the online news is produced by CNN. Sites that only offer online news do not have this advantage. A lack of editorial control on Internet news web sites, makes it even more important for online news sites to make sure ties to traditional news media are apparent to users (Abdulla et al., 2005).

Gilster (1997) raises similar issues that can harm online news credibility. He points out that anyone can be an author. Further, there is increased potential for error or exploitation, since the consumer is also the editor. Finally, no web sites include explicit statements concerning editorial processes.

Does this lack of editorial oversight prompt people to verify online information? Flanagin and Metzger (2000) reported that participants in their study verified online information only “rarely” to “occasionally.” They found that people were more likely to verify information if verification was easy to perform and required their opinion, for example stating if something was current or complete. When information is more difficult to verify or requires people to take additional steps, like finding the qualifications or credentials of an author, they are less likely to do it. Information perceived by users to be more important to them is verified more thoroughly. They suggest that authors who wish to increase credibility may want to implement tools that make it easy for the user to verify information.

Participatory journalism sites can also suffer from a crisis of confidence for the same reasons mentioned above. According to Steve Outing (2006) at the Poynter Institute, if participatory journalism sites are going to work, the creators of the content on the site need to make sure the content is labeled appropriately:

“By Joe Jones, Chronicle staff reporter” and “By Sam Smith, Citizen contributor” makes the difference between the two authors obvious. The former should offer some level of trust that what appears under Jones’ byline is professionally reported and credible. Smith’s content may indeed be just as good and credible, but the reader must understand that the news organization

does not accredit his content in the same way—and should take care in trusting what’s been written.

According to a 2006 LexisNexis study, when people need information about major events that impact their lives significantly they turn to traditional, as opposed to emerging, media sources. In this study traditional news sources were defined as mainstream newspapers, magazines, television, and radio stations. Emerging media were defined as Internet-only publications, blogs, and podcasts. Fifty percent of those surveyed said they would turn to network news if they needed immediate information. Forty-two percent said they would turn to radio, 37% would turn to daily local newspapers, 33% would turn to cable news or business networks, 25% would go to Internet sites of print and broadcast media, and 6% would turn to Internet user groups, blogs, and chat rooms. According to the study 52% of people surveyed said they will continue to trust and rely on traditional news sources. Thirty-five percent said they anticipate that in the future they will rely on traditional and emerging media sources. Thirteen percent expect that they will come to trust emerging media more in the future.

Assessing Online Credibility

When it comes to assessing online credibility, studies show people have trouble figuring out when and how it needs to be done (Amsbary & Powell, 2003; Meola, 2004; Metzger et al., 2003; Scholz-Crane, 1998). The issue of assessment is important because there are currently no universal standards for posting online information, and information on a web site can easily be changed (Fritch &

Cromwell, 2001; Johnson & Kaye, 2000; Metzger, Flanagin, Eyal, Lemus, & McCann, 2003; Rieh, 2002). In addition, because information on the Internet is transmitted in a similar way (via web sites) this creates a leveling of the playing field in terms of author credibility, since all information can be accessed equally (Burbules, 1998).

Meola (2004) argues for a contextual method for assessing online credibility. This model focuses on information outside the site being looked at (external information) to help make the credibility assessment. Meola says this allows the user to understand the larger context in which the information is located. He advocates making peer and editorially reviewed resources available online. Users can also compare information found on one web site to others. Another way is corroboration, or seeking out several sources to verify information.

Metzger (2005) recommends using credibility seal programs, credibility ratings systems, directories, databases, or search engines, PICS (Platform for Internet Content Selection) labels, digital signatures, and peer review to help users assess credibility.

Media Use and Credibility

Many studies show that people tend to judge the source of news they use most often as the most credible source for news (Bucy, 2003; Carter & Greenberg, 1965; Flanagin & Metzger, 2000; Johnson & Kaye, 1998). A study by Johnson and Kaye (2004) supports this finding. They looked at whether weblog users perceived weblogs as credible when compared to traditional media. They found that weblog

users found blogs to be highly credible, even more credible than traditional media outlets (traditional media outlets were rated as moderately credible). In fact, reliance on weblogs was the only strong predictor of weblog credibility.

The total amount of media consumed by people also appears to impact online credibility ratings. People who use the media heavily tend to judge the Internet as highly credible (Flanagin & Metzger, 2000). In a study of politically interested Internet users Johnson and Kaye (2002) found that traditional media use was the best predictor of online credibility. They also found that the more a person uses the web the less credible they found online newspapers to be.

However, Rimmer and Weaver (1987) found that the way questions about media use are asked impacts a person's credibility ratings of the particular medium in question. In their study of newspapers and television they did not find a strong correlation between frequency of use of a particular medium and whether or not it is considered credible. In this study the authors used a three pronged approach to look at media use: a general level question about where people usually get their news; a less general question about frequency of media use in terms of hours per day and days per week; and the specific approach, where they asked which news media people used yesterday. The researchers say the specific approach tends to be the most reliable measure of media use. They found that the question about general use seemed to measure how much a person likes a particular medium as opposed to how much he or she uses it. The authors warn that general preference measures should not be used to support frequency of use claims about various media.

Disposition to Trust and Credibility

Disposition to trust can also impact a person's perception of credibility.

Disposition to trust is developed over time and is most often defined as the tendency of a person to depend on or become vulnerable to other people (Rotter, 1971).

Disposition to trust has been studied in the context of e-commerce and has been found to be especially important in the early stages of a relationship between a consumer and an online vendor. It is important in these early stages because consumers have little information to draw upon to make judgments about the vendor (Mayer, Davis, & Schoorman, 1995, McKnight, Cummings, & Chervany, 1998; McKnight, Kacmar, & Choudhury, 2004). Studies show that disposition to trust plays an essential role in creating interpersonal trust in an online vendor (Gefen, 2000; McKnight, Choudhury, & Kacmar, 2002).

Collins (2006) compared two web pages to see which would be perceived as more credible. One of the web pages listed a corporation as the source, the other listed a highly qualified expert as the source. While Collins didn't find any difference based on the source of the page, a difference was found when a person's disposition to trust was taken into account. According to the study people who consider themselves more trusting are more likely to find information credible than those who consider themselves less trusting.

Demographics and Credibility

There appears to be a difference in the way men and women perceive credibility in the online world. In a study of online credibility Flanagin and Metzger (2003) found that men tend to rate sites as being more credible than women do. However, in studying computer credibility, Fogg et al. (2001) found that men tended to answer credibility questions more negatively than women. They found no difference between those who were more experienced on the web as compared to those who were less experienced.

There appear to be differences when the age of the person is taken into consideration and his or her perception of credibility is measured. Bucy (2003) found younger people thought TV news and Internet news to be more credible than older people did. In considering the design of the site, Fogg et al. (2003) found younger people were more critical if a site's content was amateurish. They also found that older people reacted more positively to a web site that had markers of expertise and trustworthiness, and sites that showed some sort of tailoring.

Quotes and Credibility

Sundar (1996) studied the impact of quotes on perceptions of credibility of online news stories. Participants read a national, international, local, business, sports, and entertainment story. Sundar found the stories that contained quotes were perceived as more credible than those without quotes. He also found that the fact that the stories were written without quotes didn't affect how the participants liked online news, or their perception of the newsworthiness of online news.

Local vs. National vs. International News and Credibility

There is a difference in how people perceive local, national, and international news. People tend to trust newspapers more than TV when the news being covered is local (Gaziano & McGrath, 1986). Another study found that newspaper readers and television news watchers preferred local/national news, whereas Internet news users preferred national/international news (Abdulla et al., 2005).

Weblogs, Wikis, and Credibility

To date there have been very few studies done on the perceived credibility of blogs. Johnson and Kaye (2004) looked at whether or not weblog users perceived weblogs as more or less credible than traditional media. They found that weblog users found blogs to be highly credible, even more credible than traditional media outlets (which they rated as “moderately” credible). Weblog users rated blogs higher on depth of information than they did on fairness. Reliance on weblogs was the only strong predictor of weblog credibility.

There has also been little work in the area of wikis and credibility. In a study by Lih (2004) the researcher attempted to establish a set of metrics for evaluating the quality of articles on Wikipedia’s web site. The researcher found that the more edits that are made to a page, the more credible it is.

Hyperlinks and Trust Transfer

Stewart and Zhang (2003) looked at how hypertext links impact the transfer of trust from one organization to another on the web. They found that for unknown organizations, links from that organization to a known organization, or links to the unknown organization from a known organization, had a positive impact on trust. For known organizations, links to or from unknown organizations hurt the known organizations' trust.

Recommendation and Reputation Tools

Recommendation and reputation systems have gained popularity online particularly on e-commerce sites. Reputation systems can help people online decide who to trust and who not to trust by collecting, distributing, and aggregating feedback about how people have acted online in the past. A reputation system that works well must have the following qualities: entries that encourage future interaction, gathering and distributing feedback concerning interactions that are taking place, and trust decisions guided by feedback. There are some issues surrounding both recommendation and reputation systems. One is how to provide incentives to keep people posting feedback, and another is the issue of privacy. While it may be nice to have a lot of detailed information about a person, this may raise privacy concerns (Resnick et al., 2000).

According to Gillmor (2004) useful recommendation and reputation tools are needed:

We need better recommendation and reputation tools, software that lets us traverse the Web using recommendations from trusted friends and friends of friends. We'll be figuring this out in the next few years, and I'm confident we'll get better and better at it.

Evaluating the Models

For this study the model that was most relevant was the Elaboration Likelihood Model (ELM). Since participants did not choose the material they read in this study, it appears they processed the information via the peripheral route, relying more heavily on peripheral cues, like the pictures of the writers, and the presence of the hyperlinks, than the actual content of the articles. This helps to explain why the pictures of the writers, which were visual cues, were so important in participants' decisions as to whether they found the stories to be credible. This also helps to explain why it was the mere presence of hyperlinks, not the actual clicking on of the hyperlinks, that improved the perceived credibility of the stories. It is important to note just how important these visual cues are to users.

Several studies make a distinction between message and structural features on web sites (Fogg, 1999; Hong, 2006; Olaisen, 1990; Petty & Cacioppo, 1986). In this study both the structural and message features came into play, however only the message features were tested. According to the study these message features do have an impact on story credibility. The hyperlinks in the articles and the information about the writer caused an increase in credibility. However, it could be that the structural features, like the domain name and design of the site, played a role in the

overall credibility rating given to the web site. One question this raises is the distinction between message and structural features, in other words are there times when a structural feature, in essence, becomes a message feature? One could argue that a hyperlink is both a structure feature (because the text looks different in the story), and a message feature (because if the user clicks on it he or she gets additional information). If this distinction continues to be made between structural and message features, a clearer definition of each needs to emerge.

Newhagen and Nass (1989) point out that the channel through which a message is transmitted impacts credibility. In this study the stories were viewed on the Internet. Whereas, Newhagen and Nass point out that television is primarily viewed as an entertainment source (and this hurts credibility), it is unclear at this point whether or not the Internet is viewed as an information or an entertainment source. It was unclear from this study whether the Internet was viewed as an entertainment source, this would be an interesting area for future research.

According to Wilson (1983) it is up to the person evaluating the information to decide whether or not the person providing the information has authority and is credible. He argues that this is often determined by looking at the credentials or occupational specialization of the person providing the information. In this study, participants were able to look at additional information about the writer, which resulted in an increase in cognitive authority, which in turn led to higher ratings of perceived credibility for the stories. It should be noted, that unlike other professions, no official credentials or licensing is needed to be a journalist, which in turn creates a low boundary for entry (Zelizer, 1993). This means that providing any information

about the writer can create, in essence, “instant credibility.” This may also mean that reader expectations, in terms of what is needed to be considered “credible” on a participatory journalism web site, are lower than they might be for other types of web sites trying to establish credibility, such as medical or law web sites. It is this low boundary of entry that makes journalism, and in this specific case participatory journalism, special.

Previous studies (Fogg, 2002a; Fogg, et al., 2001; Fogg & Marshall, 2001; Fogg & Tseng, 1999) show that providing information about the author of online information, as well as a picture, can enhance the perceived credibility of the site. Studies (Fogg, 2002a; Stewart & Zhang, 2003) also show that providing hyperlinks to the reader of online information can enhance perceived site credibility. This study examined whether the previously mentioned markers of credibility, enhance the perceived credibility of stories on the participatory journalism web site OhmyNews.com. What follows in the next section is a description of the methods used to conduct this experiment.

CHAPTER 3: METHODOLOGY

Participants

The participants in the study included 120 undergraduate students enrolled at Elizabethtown College. Eighty-two females (68%) and 38 males (32%) took part in the study. There are more females (1295) than males (696) on the Elizabethtown College campus, and this ratio of males to females reflects that distribution. The students were between the ages of 18 and 23, with a mean age of 20. In terms of year in school, 38% were Seniors, 21% were Juniors, 22% were Sophomores, and 18% were Freshmen.

The participants were highly experienced in using the web. Web experience was calculated by adding together participants' scores on three questions (See Appendix A). All responses were measured using a 7-point Likert-type scale. The participants' total mean score on the questions was 18.21, $SD=1.85$, out of a possible 21 points. Although the participants reported being highly experienced in using the web, participants reported very rarely participating in online content creation (See Table 1).

Table 1

Questions About Online Content Creation

Question	<i>M</i>	<i>SD</i>	<i>N</i>
Create or Work on Online Journal/Weblog	2.0	1.56	120
Work on Own Web Page	2.38	1.52	120
Sharing Something Online Created Themselves	3.83	1.84	120

When it came to awareness about citizen journalism, prior to this study 28% of participants reported hearing about citizen journalism, 72% said they had not. However, even though some subjects expressed awareness of the sites, as a group, participants reported never visiting a citizen journalism site ($M=1.44$, $SD=.924$) and never contributing content to a citizen journalism site ($M = 1.08$, $SD = .392$).

All participants were paid \$15.00 for completing the study.

Materials

This study was conducted in a computer lab, and each participant was assigned to an individual computer. Three news stories from the participatory journalism site OhmyNews.com, and questionnaires were used. The questionnaires were presented to participants electronically.

Questionnaires

All participants answered questions about the perceived credibility of the stories they read. Perceived story credibility was assessed using a validated 5-item

Perceived Credibility scale that measured the constructs of believability, accuracy, trustworthiness, bias, and completeness. These are the same constructs that have been used in a number of previous studies (Abdulla et al., 2005; Bucy, 2003; Flanagin & Metzger, 2000; Flanagin & Metzger, 2003; Gaziano & McGrath, 1986; Johnson & Kaye, 1998; Johnson & Kaye, 2004; Meyer, 1988; Newhagen & Nass, 1989) to measure credibility. Responses to the questions were measured using a 7-point Likert scale. See Appendix A for the exact questions used. Flanagin and Metzger (2003) report a Cronbach's Alpha of .84 for this scale. The standardized Chronbach's Item Alpha for this study was .806.

The participants' engagement in the story was assessed using a validated *Issue Saliency* scale that consisted of four items (Flanagin & Metzger, 2003). The constructs of relevance, interest, enjoyment, and importance were measured using a 7-point Likert scale. See Appendix A for the questions used. Issue saliency is important to measure, since it has been shown in previous studies to impact credibility ratings (Flanagin & Metzger, 2003; Gunther, 1992; Petty & Cacioppo, 1981; Petty, Cacioppo, & Goldman, 1981). Flanagin and Metzger (2003) report a Chronbach's Alpha of .76 for this scale. In this study a Chronbach's alpha of .845 was attained.

Perceived site credibility was measured using a validated *Site Credibility* scale that included six questions about the trustworthiness, believability, reliability, authoritativeness, honesty, and bias of the web site as a whole (Flanagin & Metzger, 2003). See Appendix A for the questions used in the scale. Flanagin and Metzger

(2003) report a Chronbach's Alpha of .82. In this study a Chronbach's alpha of .856 was attained.

Perceived sponsor credibility was assessed using a validated 5-item *Sponsor Credibility* scale that included questions about credibility, integrity, reputation, successfulness, and trustworthiness (Flanagin & Metzger, 2003). See Appendix A for the questions used in the scale. Sponsor credibility is defined as the perceived credibility of the person responsible for the site (Flanagin & Metzger, 2003). Flanagin and Metzger (2003) used this scale to assess the credibility of a single sponsor. The researcher changed the questions slightly for this study because there was more than one sponsor of the OhmyNews.com web site. A Chronbach's alpha of .81 was attained for their study. In this study Chronbach's alpha = .870.

Internet experience was assessed using a validated 3-item *Internet Experience* scale that assessed participants web use (Flanagin & Metzger, 2003). See Appendix A for the questions used. Flanagin and Metzter (2003) report a Chronbach's Alpha of .89. For this study a Chronbach's alpha of .713 was found. It should be noted that if the first question about how often a participant reported using the Internet/Web is removed from the analysis, the Chronbach's Alpha increases to .790.

A 3-item validated *Propensity to Trust* scale was used to assess a participant's trusting nature, just as it has been in previous studies (McKnight, Choudhury, & Kacmar, 2002; McKnight, Kacmar, & Choudhury, 2004). See Appendix A for the questions. These items were measured on a 7-point Likert scale. McKnight, Kacmar, and Choudhury (2004) found a Chronbach's Alpha of .88 for these measures. Disposition to trust develops over a lifetime and is most often defined as the tendency

of a person to depend on or become vulnerable to other people (Rotter, 1971). Disposition to trust has been studied in the context of e-commerce and has been found to be especially important in the early stages of a relationship between a consumer and an online vendor because consumers have little information to draw upon to make judgments about the vendor (Mayer, Davis, & Schoorman, 1995; McKnight, Cummings, and Chervany, 1998; McKnight, Kacmar, & Choudhury, 2004). Studies show that disposition to trust plays an essential part in creating interpersonal trust in an online vendor (Gefen, 2000; McKnight, Choudhury, & Kacmar, 2002). Another study found a correlation between disposition to trust and how credible participants found a web page to be (Collins, 2006). Since participatory journalism is still relatively new, and many people have not been exposed to these sites, a person's disposition to trust could play a role in his or her credibility ratings of the news articles. For this study the Chronbach's alpha was .867.

After reading each story the participants answered three comprehension questions about the stories they read. Multiple choice comprehension questions are often used in media research to gauge the recall of information from news stories (Josephson & Holmes, 2006; Lai, Cheng, Green, & Tsimhoni, 2001; Lai, Wood, & Considine, 2000). The first comprehension question aimed to assess whether the participant understood the overall theme of the story. They were presented with five choices, including an "I don't know what this story was about" option. The other two questions were more specific in nature, asking participants to recall details from the stories. All of the questions were based on responses given on pilot studies where participants were asked to summarize the stories in their own words and jot down the

things they remembered from the stories. Based on those responses, the researcher formulated the comprehension questions. For a look at the questions used for each story see Appendix B.

In order to assess some of the activities participants do online they were asked if they have ever created or worked on their own online journal or weblog, created a webpage, and shared something online (artwork, photos, stories, videos). These questions were taken from a Pew (2006) study of online news. Participants were also asked about their exposure to participatory journalism. For the specific questions used see Appendix C.

In addition to collecting information from participants using questionnaires, information was also collected using a commercially available software program called *statcounter.com*. Using this program, the researcher was able to collect information concerning how long participants took to read each story, and which hyperlinks participants clicked on in each story. Information collected on the participants' movements during the study is being kept on a secure, password protected, server. Only the researcher has access to this information. While participants were told that their computers might be monitored during the study, they were unaware that this information was being collected.

Articles

The articles were chosen by the researcher from the participatory journalism site OhmyNews.com. See Appendix D for the stories used. Permission to use stories was obtained from Hong Eun-taek, Editor-in-Chief, of OhmyNews.com International.

Each of the three stories fell into one of the following categories: hard news, feature, and sports. These three types of stories are representative of the different categories commonly reflected in news coverage on participatory journalism web sites. These categories were intentionally broad and large in scope as to get credibility ratings for different types of stories. Failure to select a broad range of stories could have resulted in problems. For example, if only sports stories were used, participants who do not care about sports may not have read the stories carefully, thereby affecting their credibility ratings. Conversely, if participants familiar with sports took part in the study, they may have felt they knew everything about the subject and may have made credibility judgments based upon prior knowledge. The use of different types of stories in this study sought to minimize these effects.

All of the articles used in the study were by “Featured Writers” on the OhmyNews.com web site. According to the site, “Featured Writers” write at least three stories a month for the site and are deemed to be “solidly consistent” in their writing by the editors (OhmyNews.com). Each “Featured Writer” has a picture of him or herself on the site along with a short biography. See Appendix E for a look at the writer information used in the study. The researcher chose stories by these “Featured Writers” because the information needed for the study was readily available (stories, pictures of the writers, biographies of the writers, and hyperlinks). While it may be argued that the stories written by these “Featured Writers” are stronger than other stories on the site, they are, none-the-less, examples of participatory journalism. All of the articles used in the study were written by white males. The gender and race were kept consistent as to not introduce additional

variables into the study. None of the writers, in their biographies, listed that they were professional journalists. This is important because most of the writers on participatory journalism sites are not professional journalists. All of the articles contained hyperlinks. None of the stories in the study had any glaring grammatical errors and were understandable. They were deemed by the researcher to neither be outstanding nor terrible examples of journalism.

The hard news story used in the study was called, “Police Charge 14 in WTO Protests, 944 Released” by David Kootnikoff. It is a story about police arresting farmers who protested at the World Trade Organization (WTO) conference in Hong Kong in December of 2005. The story was chosen because it met all of the qualifications listed above. In addition, the story was about an issue people may have heard about (WTO conference) but may not know a lot about.

The feature story used in the study was called, “The Best Films of All Time” by Todd Kipp. This story was about lists of the best movies ever made, who makes the decisions to put the movies on the list, and how the decisions are made. The story was chosen because it met all of the qualifications listed above. Also, the story was neutral in nature, in other words it did not provoke any immediate reactions, either positive or negative, from participants based on the topic. It was chosen as the feature story because it did not have timeliness as one of its qualities. Timeliness is one of the main qualities that distinguishes hard news from feature stories.

The sports story that was used was called, “Brazil Spikes U.S. in Beach Volleyball Action” by Rick Capone. This story was about a beach volleyball match between the United States and Brazil that took place in May of 2006. Brazil came out

on top to win the event. This story was also chosen because it met the criteria listed above. It was also a story that the researcher thought people may not know much about, and that participants probably would not have an immediate reaction to, positive or negative.

Each of the three stories were captured electronically using *Paparazzi!*, a program that essentially takes a picture of each page of a web site. Electronic copies were made of each of the stories, the writer information and picture, as well as each of the pages the stories linked to through hyperlinks. Using *Photoshop*, the writer information and picture were inserted at the bottom of the story pages for the groups who saw that information. Also using *Photoshop* the hyperlinks were made inactive and changed to match the text of the rest of the document for the groups that did not see the hyperlinks. Once all of the pages were copied, and the changes listed above were made, *Adobe Go Live CS* was used to create a web site for the study. Only the hyperlinks in the stories were made active. All other hyperlinks on the page were deactivated. If a participant clicked on an inactive hyperlink during the study nothing happened.

Procedures

As participants entered the study area they were asked which medium they use as their primary source for news (Internet, newspaper, radio, or television). If they answered "Internet" they were asked from which site they typically get their news. Based on their answers to these questions participants were handed an index card with a color and number on it. The color and number indicated their group

designation. Participants assigned to the Green group saw the story only. Those in the Red group saw the story and the writer information. Those in the Yellow group saw the story with active hyperlinks, and those in the Blue group saw the story and the writer information, as well as active hyperlinks. See Table 2.

Table 2

Group Designations

<i>Group</i>	<i>What Participants Saw</i>
Green	Story Only
Red	Story + Writer Information
Yellow	Story + Hyperlinks
Blue	Story + Writer Information + Hyperlinks

Stories were presented in counterbalanced order to all groups. Participants were not told why they were put into a particular group. The researcher took care to make sure people with similar news preferences were equally distributed into the groups (this was done because studies indicate that people tend to find the media they use most often are the most credible).

Once seated at their computers, participants were directed to turn their attention to the computer screen where they were greeted by a short explanation of the study. The researcher then asked the participants to look at the index card they were handed and click on the link on the welcome page that corresponded to what was written on their index card. For example, if a participant was given an index card

that read “Blue 1” they clicked on the corresponding link. See Appendix F for a look at the welcome page used in the study.

Participants assigned to the groups each read the three stories chosen by the researcher prior to the experiment. After they read each story they followed a hyperlink at the bottom of the page to fill out an online questionnaire designed to measure attitudes about perceived credibility of the story, and their comprehension of the story. See Appendix G for the questionnaires. This was repeated for all three stories. Participants were allowed to take as long as they wanted to read each story. After the questionnaires for all three stories were filled out, participants answered some questions concerning demographic information, news habits, use of technology, propensity to trust, and overall impressions of the web site. For a look at the questions on this final survey, see Appendix H.

CHAPTER 4: RESULTS

The questionnaires in the study were analyzed to determine if providing additional information in the form of hyperlinks, and/or information about the writer, impacts perceived credibility. Including this information does indeed increase the perceived credibility of the stories, in particular for hard news stories. Study results also point to the importance of the picture of the writer. The more positively participants rated the picture of the writer, the more credible they rated the story he had written. A number of variables were measured in the study using a number of different scales. Many relationships were found in the data, not just in terms of perceived credibility, but also other factors, like story engagement, Internet experience, and propensity to trust.

Throughout this section non-parametric statistics, such as the Mann-Whitney U, and the Spearman rank correlation coefficient were used to analyze the data. These tests were chosen because of the ordered nature of the data in this study. Also, after performing a histogram on the data, it was found that the data were not normally distributed, which also pointed to the use of non-parametric statistics. There were also a number of tests for correlations performed, and much of the time, the data used for these correlations was ordinal (Likert 7-point scale), not interval in nature. Studies show that using correlation, as well as regression techniques on ordinal data, especially when the data is measured on a scale that contains five or more points, does not appear to greatly impact Type I and Type II errors (Jaccard & Wan, 1996; Kim, 1975; Labovitz, 1970). All scales used in this study had seven points, therefore

correlation and regression tests were performed. It should also be noted that a significance level of .05 is used for all analysis.

For the sake of clarity, throughout this section, as well as throughout the “Discussion Section”, certain group designations will be used to distinguish the groups from one another. The group that saw just the story will be referred to as the “story only” group. The group that saw the story and the writer information will be referred to as the “story+writer information” group. The group that saw the story and the hyperlinks will be referred to as the “story+hyperlinks” group. The group that saw the story, plus both the writer information and the hyperlinks will be referred to as the “story+both” group.

What follows are the results of the study, beginning with a look at the validity of the scales used, followed by an examination of the participant’s self-reported propensity to trust, and a look at how the presence or absence of writer information and/or hyperlinks impacts perceived credibility. This section ends with a look at demographic factors such as the age and gender of the participants, as well as their media usage.

Validity and Reliability

Six different validated scales were used in the study to assess a number of constructs that included; perceived credibility, story engagement, site credibility, sponsor credibility, web experience, and propensity to trust. For a complete explanation of the scales used refer to the “Methodology” section. High Chronbach’s alphas suggest the scales were reliable (See Table 3). A detailed list of questions that

comprised each of the scales can be found in Appendix A. All but one of the scales had a reliability of .8 or higher, which falls within accepted bounds (Cohen & Cohen, 1983; Nunnally, 1978). The web experience scale was lower with a Chronbach's alpha of .713.

Table 3

Scales Used and Chronbach's Alphas

Scale	α
Perceived Credibility	.806
Engagement	.845
Site Credibility	.856
Sponsor Credibility	.870
Web Experience	.713
Propensity to Trust	.867

Propensity to Trust

The participants' propensity to trust was measured using the propensity to trust scale (see Appendix A for questions). A person's disposition to trust develops over many years, and, when studied in the context of e-commerce has been shown to be a determining factor as to whether or not people choose to place their trust in on-line vendors (Mayer, Davis, & Schoorman, 1995; McKnight, Cummings, and Chervany, 1998; McKnight, Kachmar, & Choudhury, 2004). The means and standard

deviations for the groups are shown in Table 4. The results of the Mann-Whitney U test are shown are shown in Table 5.

Table 4

Means and Standard Deviations for Propensity to Trust for Each Group

Group	<i>M</i>	<i>SD</i>	<i>n</i>
Story Only	14.43	3.44	60
Story + Writer Info.	15.43	3.27	60
Story + Links	15.20	2.68	60
Story + Both	15.38	3.41	60

Table 5

Mann-Whitney U for Propensity to Trust As Compared to the “Story Only” Group

Group	<i>U</i>	<i>p</i>
Story + Writer Info.	380.500	.300
Story + Links	362.000	.186
Story + Both	327.000	.097

Note. The table represents pair-wise comparisons between the group that saw the story only and the other groups listed in the table.

A positive relationship was found between participants’ propensity to trust and how credible they rated each of the stories using the Spearman rank correlation coefficient test ($r_s = .197, p < .032$). Propensity to trust was found to be a significant,

although weak, predictor of story credibility scores, $F(1, 119) = 10.19$, $\beta = .283$, $R^2 = .080$, $p < .002$.

Perceived Credibility

Perceived Story Credibility

The results from the questionnaires filled out by all of the groups were analyzed to determine whether the perceived credibility of the story changed depending on the information provided to the participants. That information included the presence of information about the writer, hyperlinks, and both the information about the writer and the hyperlinks.

The change in perceived story credibility was calculated using the Mann-Whitney U test. Each group was compared to the group that saw the story only (control group). In each case the group that saw the additional information, whether it was in the form of hyperlinks or the writer information, rated the story higher in perceived credibility than those who saw the story only. The results were significant for the story+writer information group, and the story+both group. See Table 6 for the means and standard deviations for each group. See Table 7 for the results of the Mann-Whitney U test.

Table 6

Perceived Story Credibility Means and Standard Deviations for Each Group

Group	<i>M</i>	<i>SD</i>	<i>n</i>
Story Only	71.33	13.02	60
Story + Writer Info.	78.37	11.02	60
Story + Links	76.90	9.18	60
Story + Both	79.80	10.96	60

Table 7

Mann-Whitney U for Perceived Story Credibility

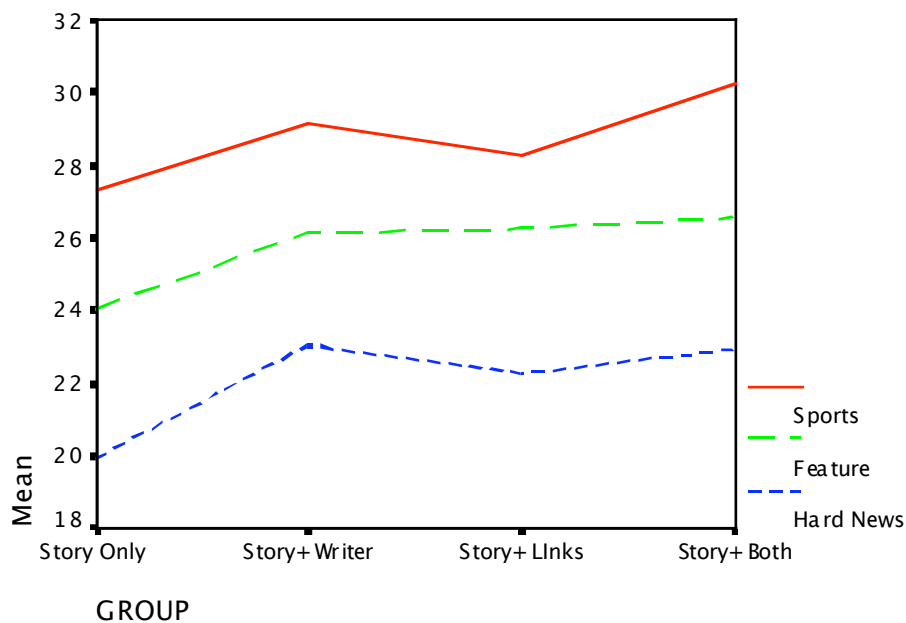
Group	<i>U</i>	<i>p</i>
Story + Writer Info.	302.500	.029*
Story + Links	320.00	.054
Story + Both	254.500	.004*

Note. The table represents pair-wise comparisons between the group that saw the story only and the other groups listed in the table. An asterisk indicates a significant difference at the .05 level.

Story Type and Perceived Credibility

The mean perceived credibility for the stories, when analyzed according to story type (hard news, feature, and sports), was lowest for the story only group regardless of story type. Perceived story credibility increased across all story types as additional information, in the form of hyperlinks and writer information, was introduced. See Figure 3.

Figure 3. Perceived Credibility for Groups By Types of Stories



Note. Perceived credibility for the story only group is lowest regardless of story type. Perceived credibility increases when additional information is introduced.

The increase in perceived credibility from the story only group as compared to the other groups, while higher, was not always significant for all story types. What follows is a detailed look at each group and each story type.

The Mann-Whitney U test was used to examine the differences between the groups. When the group that saw the story only was compared to the story+both group, the results were significant for the hard news story, and the sports story. See Table 8 for the means and standard deviations for each group. See Table 9 for the results of the Mann-Whitney U.

Table 8

Means and Standard Deviations for the Story Only and the Story +Both Groups

Groups	Story Only <i>M</i>	Story Only <i>SD</i>	Story + Both <i>M</i>	Story + Both <i>SD</i>	n
Hard News	19.93	5.24	22.97	5.86	60
Sports	27.37	5.60	30.27	4.58	60
Feature	24.03	5.47	26.57	4.98	60

Table 9

Mann-Whitney U for Story Type and the Story+Both Group

Story Type	<i>U</i>	<i>p</i>
Hard News	292.50	.020*
Sports	288.00	.016*
Feature	338.50	.098

Note. The table represents a pair-wise comparison between the group that saw the story only and the story+both group. An asterisk indicates a significant difference at the .05 level.

When the story only group was compared to the story+writer information group using the Mann-Whitney U test, participants who read the hard news story and were presented with information about the writer ranked the story significantly higher in perceived credibility than those who saw the story only. Table 10 shows the means and standard deviations for the story only and story+writer information groups. See Table 11 for the results of the Mann-Whitney U test.

Table 10

Means and Standard Deviations for Story Type for the Story Only and the Story+Writer Information Groups

Groups	Story Only <i>M</i>	Story Only <i>SD</i>	Story + Writer Info. <i>M</i>	Story + Writer Info <i>SD</i>	n
Hard News	19.93	5.24	23.07	3.87	60
Sports	27.37	5.60	29.17	3.86	60
Feature	24.03	5.47	26.13	4.28	60

Table 11

Mann-Whitney U for Story Type and Story+Writer Information Group

Story Type	<i>U</i>	<i>p</i>
Hard News	305.00	.03*
Sports	372.00	.247
Feature	371.00	.241

Note. The table represents a pair-wise comparison between the group that saw the story only and the story+writer information group. An asterisk indicates a significant difference at the .05 level.

When the group that saw the story only was compared to the group that saw the story+links using the Mann-Whitney U test, again there was a significant difference for those who read the hard news story. Those in the story+links group rated the hard news story higher in perceived credibility than those in the story only

group. See Table 12 for the means and standard deviations, and Table 13 for the results of the Mann-Whitney U.

Table 12

Means and Standard Deviations for the Story Only and the Story+Links Groups

Groups	Story Only <i>M</i>	Story Only <i>SD</i>	Story + Links <i>M</i>	Story + Links <i>SD</i>	n
Hard News	19.93	5.24	22.30	4.35	60
Sports	27.37	5.60	28.33	4.10	60
Feature	24.03	5.47	26.27	5.44	60

Table 13

Mann-Whitney U for Story Type and Story+Links Group

Story Type	<i>U</i>	<i>p</i>
Hard News	315.50	.046*
Sports	419.00	.645
Feature	340.50	.104

Note. The table represents a pair-wise comparison between the group that saw the story only and the story+links group. An asterisk indicates a significant difference at the .05 level.

Writer Information

The following sections examine the importance of the writer information on perceived credibility, beginning with a look at some descriptive statistics about the

questions participants answered, followed by the role the picture of the writer, and the written information about the writer played in participants' credibility perceptions.

Participants in the story+writer information, and story+both groups answered three questions about the writer's information presented in the study. These questions included whether participants found the written information about the writer helpful, whether they found the picture helpful, and whether the writer looked credible (see Appendix I for the questions). All responses were measured using a 7-point Likert scale. See Table 14 for a list of means and standard deviations for the writer information questions for participants in the story+writer information and the story+both groups.

Table 14

Means and Standard Deviations for Questions About the Writer Information for the Story+Writer Information and the Story+Both Groups

Question	<i>M</i>	<i>SD</i>	<i>n</i>
Written Writer Info. Helpful	13.43	3.62	60
Picture Helpful	9.10	4.14	60
Writer Look Credible	12.48	3.22	60

Writer's Picture

A positive relationship was found as to whether participants thought the writer in the picture looked credible and several other variables (for a summary of the significant correlations found see Table 15).

Table 15

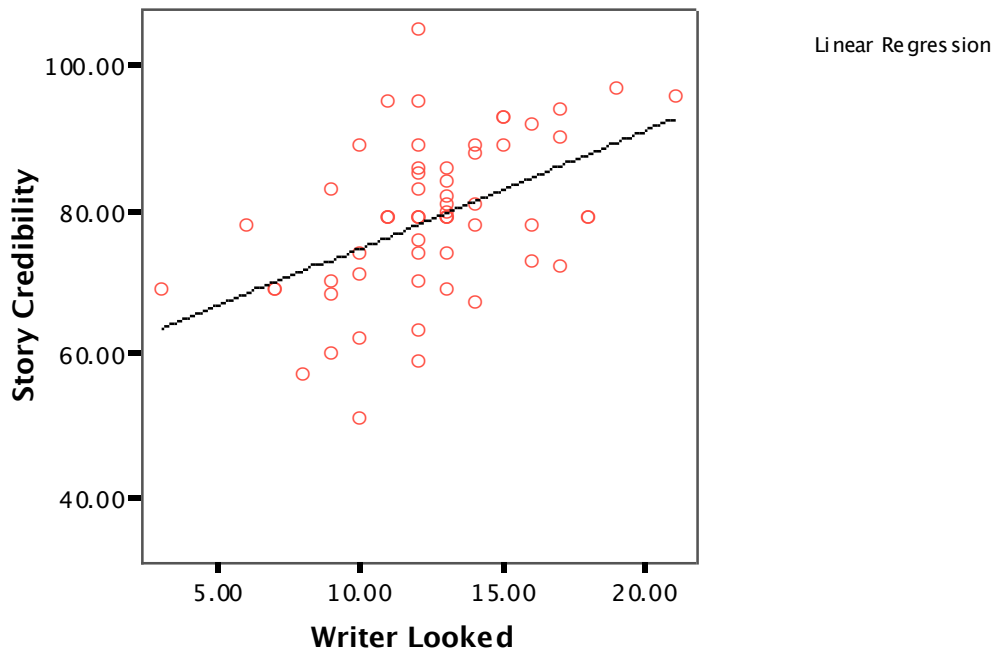
Significant Positive Correlations for Whether or Not the Writer in the Picture Looked Credible for the Story+Writer Information and the Story+Both Groups

Variable	r_s	R^2	p	n
Story Credibility	.474	.232	.000*	60
Sponsor Credibility	.263	--	.042*	60
Story Engagement	.333	.112	.009*	60

Note. There is no R^2 value listed for sponsor credibility because the linear regression was not significant. An asterisk indicates a significant correlation at the .05 level.

There was a significant positive relationship found between whether or not participants thought the writer in the picture looked credible and whether or not they perceived the story to be credible ($r_s = .474, p = .000$). Linear regression indicated that the independent variable (whether or not the writer looked credible) was a predictor of story credibility (dependent variable), $F(1, 58) = 17.48, \beta = .481, R^2 = .232, p = .000$. See Figure 4.

Figure 4. Linear Regression for How Credible the Writer Looked and Perceived Story Credibility.

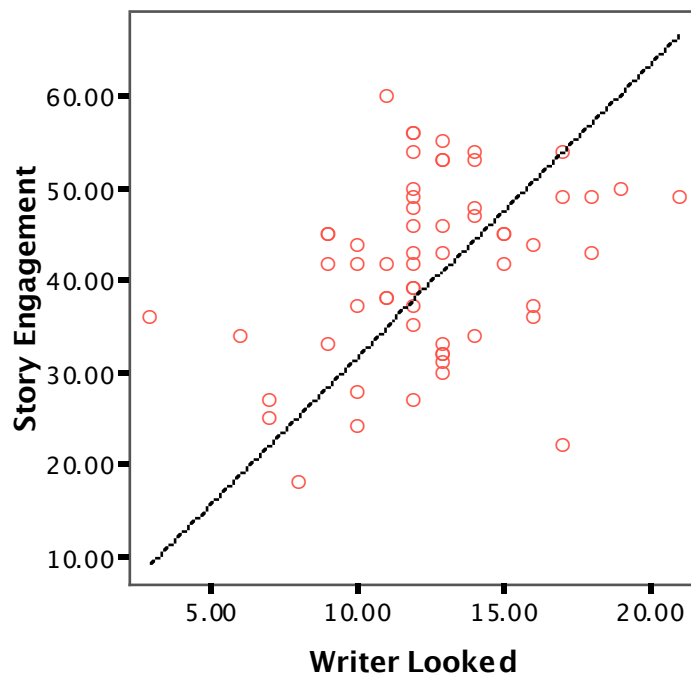


A significant positive relationship was also found between how credible the writer looked, and the perceived credibility of each of the different story types; hard news ($r_s = .419, p < .001$), sports ($r_s = .391, p < .002$), and feature ($r_s = .323, p < .012$).

A significant positive relationship was also found between how credible the writer looked and how positively participants rated the sponsor credibility of the site ($r_s = .263, p < .042$); and how engaged they reported being in the story.

There was also a significant positive relationship between how engaged participants reported being in the story and how credible they rated the writer's picture ($r_s = .333, p < .009$). Linear regression showed there is a predictive relationship between the independent variable (writer's picture) and the dependent variable (story engagement), $F(1, 58) = 7.34, \beta = .335, R^2 = .112, p < .009$ (See Figure 5).

Figure 5. Linear Regression for How Credible the Writer Looked and Story Engagement



A multiple regression analysis was performed to see which of the three questions about the writer accounted for the largest amount of variance. The three questions were the independent variables. It was found that the picture of the writer accounted for the most variance, $F(1, 58) = 6.61, \beta = .504, R^2 = .261, p = .000$.

Writer's Background Information

The question about whether the information on the writer's background was helpful in determining the credibility of the story was analyzed to determine if any significant relationships existed; several were found. First, there was a significant positive relationship found between the helpfulness of the writer's background (independent variable) and the perceived credibility of the story (dependent variable), $r_s = .281, p < .030$. Linear regression showed there was a predictive relationship, $F(1, 58) = 4.97, \beta = .281, R^2 = .079, p < .03$. Second, a significant positive relationship was found for the comprehension of the story (independent variable), $r_s = .289, p < .025$. Linear regression showed a positive relationship exists, $F(1, 58) = 7.16, \beta = .161, R^2 = .110, p < .01$. Third, a significant positive relationship was found for the participant's story engagement (independent variable), $r_s = .305, p < .018$. A linear regression was conducted, $F(1, 58) = 5.93, \beta = .804, R^2 = .093, p < .018$. See Table 16.

Table 16

Significant Correlations for Whether the Written Writer Information Was Helpful

Variable	r_s	R^2	p	n
Story Credibility	.281	.079	.03*	60
Story Comprehension	.289	.110	.01*	60
Story Engagement	.305	.093	.018*	60

Note. An asterisk indicates a significant correlation at the .05 level.

Hyperlink Questions

The previous sections explored the impact the writer information had on perceived credibility, the following sections address how the hyperlinks in the stories impacted perceived credibility.

Participants in the story+links, and the story+both groups answered three questions about the hyperlinks presented in the stories. These questions included whether or not the links made the story seem credible, whether or not the links were helpful, and whether or not the links enhanced the credibility of the story (see Appendix J for the specific questions used). Participants in the two groups answered the first question; only those who clicked on the hyperlinks answered the other two questions.

Participants who had hyperlinks in their stories reported that they somewhat enhanced the credibility of the story. Those who clicked on the hyperlinks found them to be somewhat helpful in determining the credibility of the story. Those who clicked on the hyperlinks found that the hyperlinks enhanced the credibility of the story somewhat. See Table 17 for the means and standard deviations of the hyperlink questions.

Table 17

Hyperlink Questions and Responses from the Story+Links and Story+Both Groups

Question	<i>M</i>	<i>SD</i>	<i>n</i>
Links Made Story Seem Credible	12.07	4.29	60
Links Helpful	14.00	3.16	19
Links Enhanced Credibility	13.00	2.65	19

Note. The mean score is out of 21 possible points.

Hyperlink Questions Relationships

There were several significant positive relationships between the question that asked participants about the mere presence of hyperlinks and whether or not the story seemed credible, and several other variables in the study (See Table 18). For example, there was a significant positive correlation between the question about the presence of hyperlinks and the perceived credibility of the stories ($r_s = .335, p < .009$). A linear regression was performed, where the presence of hyperlinks was the independent variable, and story credibility was the dependent variable, $F(1, 59) = 6.89, \beta = .326, R^2 = .106, p < .011$.

A significant positive relationship was found between the question about the presence of the hyperlinks and how engaged the participants reported being in the stories ($r_s = .383, p < .003$). A linear regression was performed with presence of hyperlinks as the independent variable, and participant engagement as the dependent variable, $F(1, 59) = 11.68, \beta = .409, R^2 = .168, p < .001$.

There were also significant positive correlations between the question about the mere presence of hyperlinks (independent variable), and the amount of time participants spent reading the stories ($r_s = .258, p < .047$), $F(1, 59) = 4.53, \beta = .269, R^2 = .072, p < .038$; how credible they thought the site was ($r_s = .381, p < .003$), $F(1, 59) = 9.86, \beta = .384, R^2 = .148, p < .003$; and how credible they thought the people responsible for the site were ($r_s = .484, p = .000$), $F(1, 59) = 19.76, \beta = .504, R^2 = .254, p = .000$.

Table 18

Significant Positive Correlations for Presence of Hyperlinks Summary Table

Variable	r_s	R^2	p	n
Sponsor Credibility	.484	.254	.000*	60
Engagement	.383	.168	.001*	60
Site Credibility	.381	.148	.003*	60
Story Credibility	.335	.106	.011*	60
Time Spent Reading	.258	.072	.038*	60

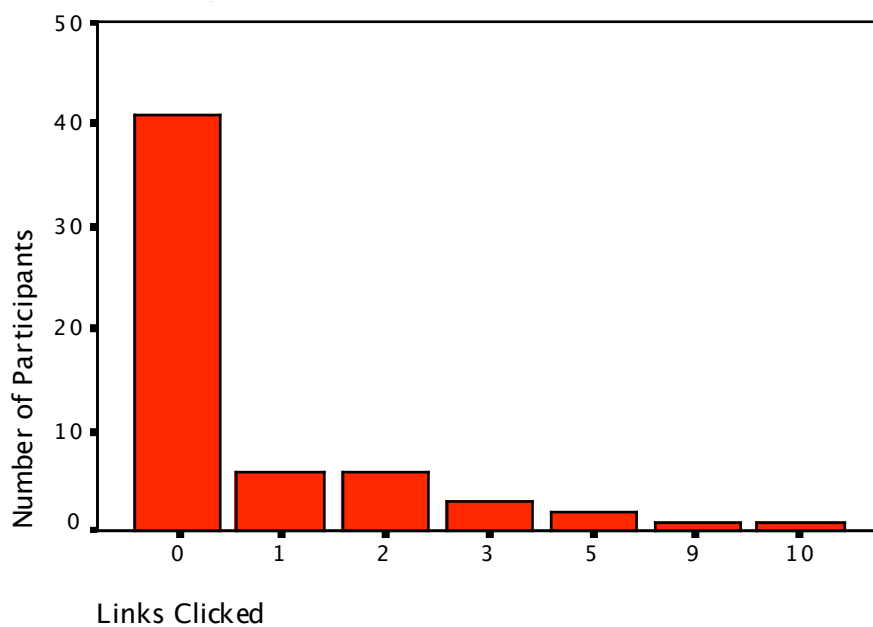
Note. An asterisk indicates a significant correlation at the .05 level.

The other two questions (whether or not the links were helpful in determining the story credibility, and whether or not the links enhanced the story credibility) that were answered just by those who clicked on the hyperlinks yielded no significant relationships with the other variables in the study.

Hyperlinks Clicked

Participants in the story+links and the story+both groups were presented with 17 total possible links to click on in the stories during the study. The mean total number of links they chose to click on was .93. The fewest number of links clicked on in the study by the participants was zero; the greatest number clicked on by the participants was 10 out of a possible 17 total. Nineteen participants (31% out of 60 total), who had the option of clicking on hyperlinks in the stories, chose to click on them. However, most participants (68%) chose not to click on any hyperlinks in any of the stories at all. Figure 6 shows the distribution of hyperlinks clicked on by participants.

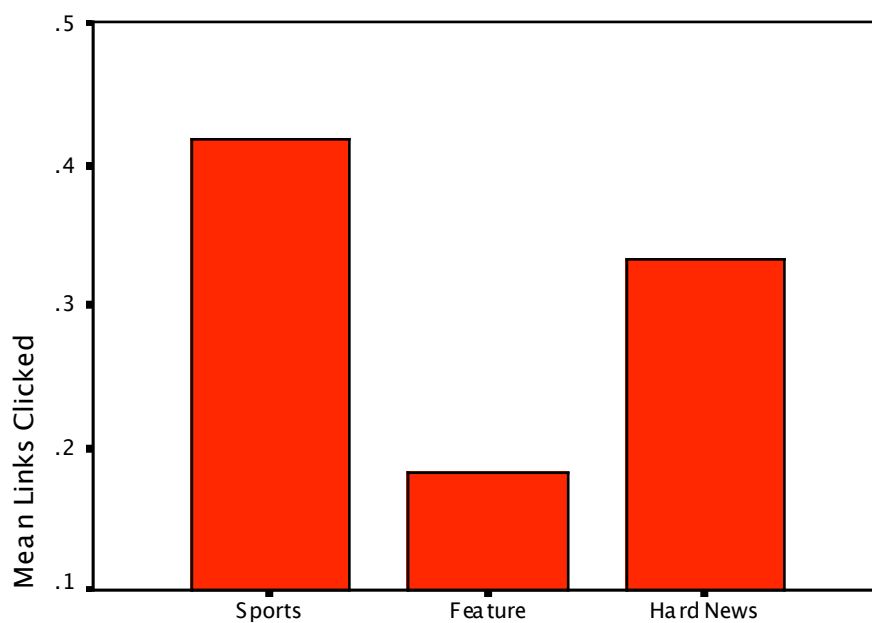
Figure 6. Hyperlinks Clicked and Number of Participants



Hyperlinks Clicked and Story Type

In terms of story type and hyperlinks clicked, the mean number of links clicked on was greatest for the sports story. There were six links, and the mean number clicked was .42; 82% of participants did not click on any hyperlinks in the sports story. There were seven links in the feature story participants could click on, the mean number clicked was .18; 93% of participants did not click on any hyperlinks in the feature story, and the mean number of links clicked on in the hard news story was .33 out of four total links presented to the participant; 83% of participants did not click on any hyperlinks in the hard news story. See Figure 7.

Figure 7. Mean Links Clicked and Story Type



Overall Story Engagement

The following sections examine results from questions participants answered about how engaged they were in the stories they were reading. Story engagement between the different groups in the study will be examined first, followed by a look at story engagement by type of story presented.

The participants' level of engagement in the stories was measured to see whether there were differences among the groups. In other words, were participants who were presented with writer information and/or hyperlinks more engaged in the stories than those who were presented with the story only? The level of engagement was calculated by adding together participants' scores on four questions that asked about how relevant, interesting, enjoyable, and important participants found the stories to be (see Appendix A for the exact questions used). The means and standard deviations for all groups can be found in Table 19.

Table 19

Means and Standard Deviations for Story Engagement for All Groups

Group	<i>M</i>	<i>SD</i>	<i>n</i>
Story Only	38.10	9.48	60
Story + Writer Info.	40.23	9.45	60
Story + Links	44.00	11.15	60
Story + Both	42.70	9.68	60

The Mann-Whitney U test was used to determine if significant differences existed between the story only group and the other groups. There was a significant difference found for the story+hyperlinks group, as well as the story+both group. No significant difference was found for the story+writer information group. (See Table 20).

Table 20

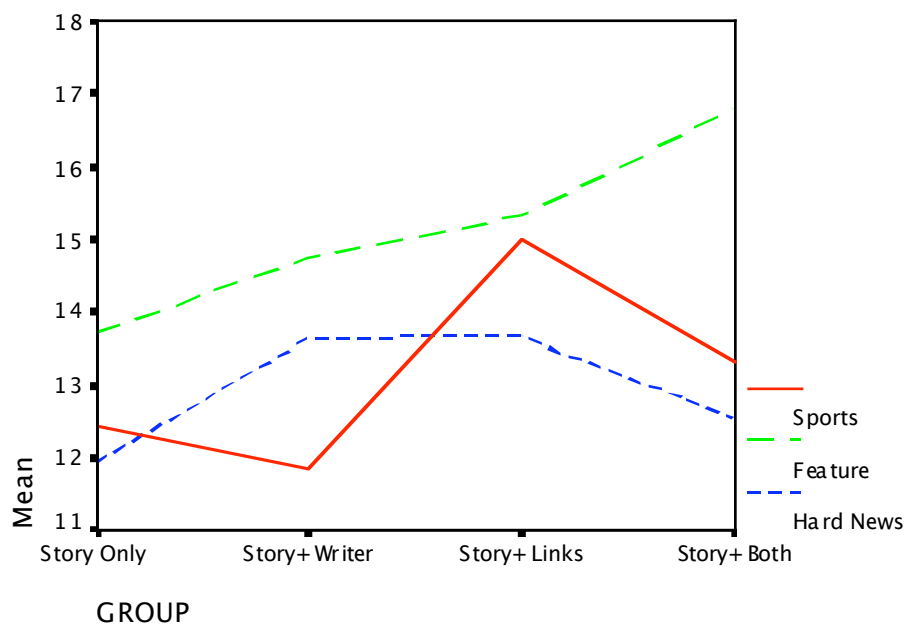
Mann-Whitney U for Story Engagement

Group	<i>U</i>	<i>p</i>
Story + Writer Info.	392.500	.394
Story + Links	298.00	.024*
Story + Both	317.00	.049*

Note. The table represents pair-wise comparisons between the group that saw the story only and the other groups listed in the table. An asterisk indicates a significant difference at the .05 level.

In terms of story type, participants reported being most engaged in the feature story ($M = 15$, $SD = 5.17$), followed by the sports story ($M = 13.18$, $SD = 4.95$), followed by the hard news story ($M = 12.95$, $SD = 4.68$). There were 28 story engagement points possible. See Figure 8.

Figure 8. Story Engagement and Story Type



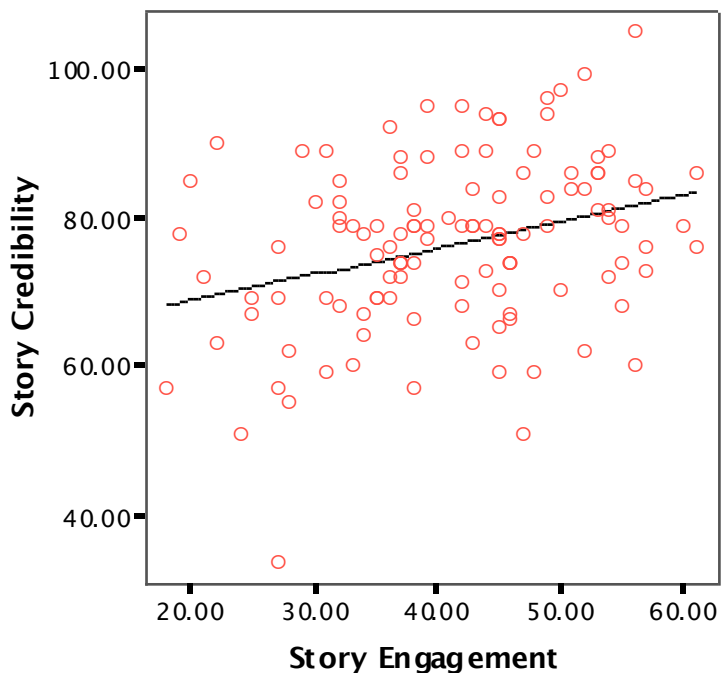
When story engagement and story type were examined, there was only one significant difference found. This difference was found between the group that saw the story only and the story+both group for the feature story ($U = 297.00$, $M = 15.13$, $SD = 5.17$, $p < .023$).

Story Engagement and Credibility

A significant positive relationship was found between how credible participants in all groups found the story to be and how engaged they reported being in the story ($r_s = .288$, $p < .001$). A linear regression was then performed, and it was found that participants' engagement in the story (independent variable) significantly

predicted credibility scores (dependent variable), $F(1, 119) = 13.34$, $\beta = .319$, $R^2 = .102$, $p = .000$. See Figure 9.

Figure 9. Linear Regression for Story Credibility and Story Engagement



When taking into consideration the story types, the relationship between story engagement (independent variable) and story credibility (dependent variable) was strongest for the hard news story ($r_s = .448$, $p = .000$), $F(1, 119) = 30.94$, $\beta = .396$, $R^2 = .208$, $p = .000$; followed by the feature story ($r_s = .424$, $p = .000$), $F(1, 119) = 24.51$, $\beta = .415$, $R^2 = .172$, $p = .000$. There was no significant correlation for the sports story ($r_s = .136$, $p = .139$).

There was also a significant positive correlation between the level of engagement reported by participants while reading the stories and their comprehension scores ($r_s = .198$, $p < .03$). A linear regression was then performed,

and it was found that participants' engagement in the story (independent variable) significantly predicted comprehension scores (dependent variable). $F(1, 119) = 6.09$, $\beta = .221$, $R^2 = .049$, $p < .015$).

Overall Story Comprehension

Participants' comprehension of the stories was also tested. Participants' responses to the three multiple-choice questions were coded "1" if they answered the question correctly and "0" if their answer was not correct. Overall the groups did well on the comprehension questions, see Table 21.

Table 21

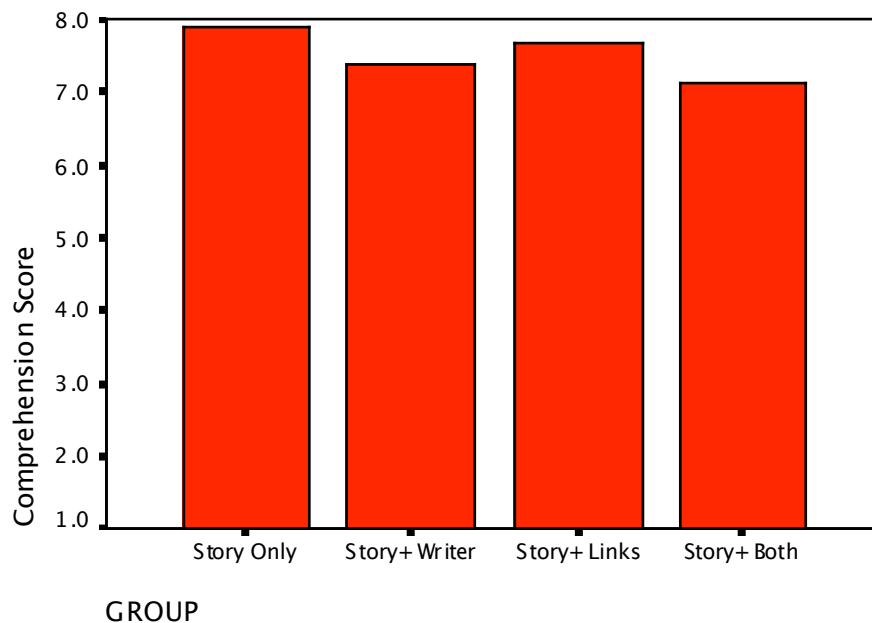
Comprehension Scores for Each Story Type

Type	<i>M</i>	<i>SD</i>	<i>N</i>
Feature	2.61	.677	120
Sports	2.57	.719	120
Hard News	2.36	.765	120

The participants' scores on the three comprehension questions (See Appendix B for the questions used) were added together and then the Mann-Whitney U test was conducted to determine whether the presence or absence of writer information and/or hyperlinks had an impact on participants' comprehension. There were no significant differences found for any of the groups using the Mann-Whitney U test. It is interesting to note that the mean comprehension scores for the groups that saw the

additional information were lower, although not significantly, than the mean comprehension score for the group that saw the story only. See Figure 10.

Figure 10. Mean Story Comprehension Score for Each Group



Comprehension Correlations

There was no significant correlation between comprehension of the story and perceived credibility; however, when the comprehension scores were separated into the top half (approximately 67% of participants and those who scored an 8 or 9) and the bottom half (the remaining participants who scored below 8), there were significant correlations found. There was a significant positive correlation between the high comprehension group and perceived credibility scores ($r_s = .180, p < .049$). There was a significant negative correlation between the low comprehension score group and perceived credibility ($r_s = -.180, p < .049$).

Media Habits

Participants reported getting their news most often from the Internet (53%), followed by television (38%), newspaper (7%), radio (3%) and magazines (.8%).

When asked from which media participants preferred to get their news they responded; television (51%), Internet (33%), newspaper (13%), and radio (3%).

Care was taken to distribute participants evenly into the different groups in terms of the media they reported using most often to get news. Table 22 below reflects this distribution.

Table 22

Media Used Most Often To Get News In Terms of Numbers of Participants

Type	Story Only	Story+Writer	Story+Links	Story+Both
Internet	16	15	15	17
Newspaper	2	3	2	1
Radio	1	1	1	0
Television	11	11	12	11
Other	0	0	0	1

Participants reported getting news on-line often, using the Internet in general all the time, watching TV often, occasionally reading the newspaper, and occasionally listening to the radio (See Table 23).

Table 23

Participants Self-Reported Media Habits

Question	<i>M</i>	<i>SD</i>	<i>N</i>
Get News Online	4.70	1.19	120
Use the Internet	6.53	.662	120
Watch TV	4.75	1.25	120
Read the Newspaper	3.57	1.25	120
Listen to the Radio	4.16	1.33	120

Note. All responses were measured on a 7-point Likert scale.

Media Use and Credibility Ratings

A crosstabulation and chi-square analysis were performed to see if there was a difference between which medium participants reported getting their news from most often and their overall credibility ratings given to the stories. There was no significant difference found, $\chi^2(120, N = 119) = 111.792, p < .691$. It should be noted that the one participant who answered “other” to the question was excluded from the analysis.

A crosstabulation and chi-square analysis were performed to see if there was a correlation between the type of media participants reported using to obtain news, and whether they reported getting their news most often from the Internet. As would be expected those who reported getting their news most often from the Internet also reported using the Internet to get news online $\chi^2(20, N = 120) = 62.108, p = .000$.

Also, the media that participants reported getting their news from most often was also the media they preferred to get their news from $\chi^2(16, N = 120) = 114.061, p = .000$.

There was no significant relationship between web experience and the perceived credibility of the stories ($r_s = .109, p < .238$). There were no significant relationships between perceived credibility of the stories and how often participants report using the Internet, watching television, reading the newspaper, or listening to the radio.

Citizen Journalism and Online Content Creation

According to the study results the more time people spend getting news online the more likely they are to have created or worked on their own online journal or weblog ($r_s = .193, p < .035$). Also, the more time people spend getting news online the more likely they are to have shared something online that they created themselves ($r_s = .290, p < .001$). A multiple regression was conducted, and whether participants report sharing something online (independent variable) and whether they created and worked on an online journal or weblog (independent variable) can significantly predict time spent online getting news (dependent variable); however, sharing something online was a better predictor of whether or not someone gets news online, $F(1, 119) = 8.59, \beta = .264, R^2 = .128, p = .000$.

No significant differences were found among those who reported hearing about citizen journalism prior to the study, and the participants' perceived credibility of the story, $\chi^2(41, N = 120) = 47.281, p < .232$. There was a significant difference

between those who reported hearing about citizen journalism prior to the study and getting news online, $\chi^2(5, N = 120) = 15.652, p < .008$.

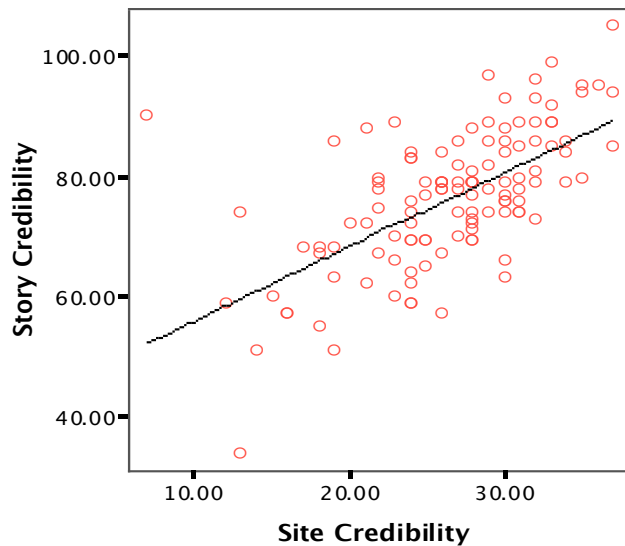
There was also a significant positive relationship between those who reported contributing content to citizen journalism web sites (independent variable) and creating or working on their own webpage (dependent variable), $r_s = .262, p < .004; F(1, 119), \beta = .262, R^2 = .069, p < .004$. A significant positive relationship was also found for those who report sharing something online that they created themselves (independent variable) and having created or worked on their own webpage (dependent variable), $r_s = .205, p < .025, F(1, 119), \beta = .263, R^2 = .069, p < .004$; and having created or worked on their own online journal or weblog (dependent variable), $r_s = .230, p < .011, F(1, 119), \beta = .299, R^2 = .090, p < .001$.

Web Site and People Credibility

All participants answered questions about the credibility of the web site as a whole. They answered questions about how trustworthy, believable, reliable, authoritative, honest, and biased they found the OhmyNews.com website to be. To see the questions, see Appendix A. Participants' answers to these questions were added together to come up with a site credibility score. Participants were also asked a series of questions to assess sponsor credibility, in other words how credible they felt the people were who created the site. They answered questions about the credibility of the people who created OhmyNews.com, whether they had high integrity, if they had a positive reputation, whether they were successful, and whether they were trustworthy (to see the questions used see Appendix A). Answers to these questions

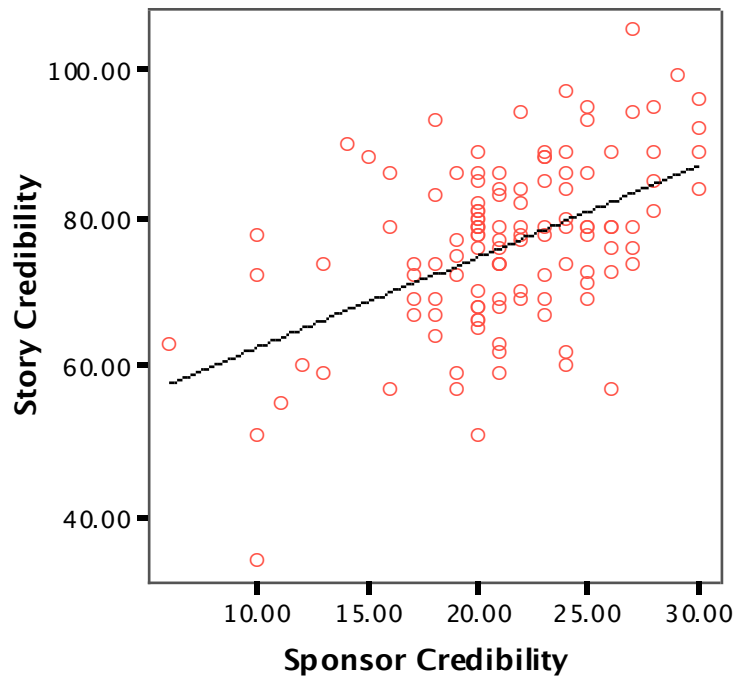
were summed together to come up with a sponsor credibility score. In both cases there was a significant positive correlation between the participants' credibility scores for each story, and their site ($r_s = .619, p = .000$) and their sponsor ($r_s = .420, p = .000$) credibility scores. A regression analysis found that site credibility (independent variable) can significantly predict story credibility (dependent variable), $F(1, 119) = 74.64, \beta = .624, R^2 = .389, p = .000$. See Figure 11.

Figure 11. Linear Regression for Site Credibility and Perceived Story Credibility



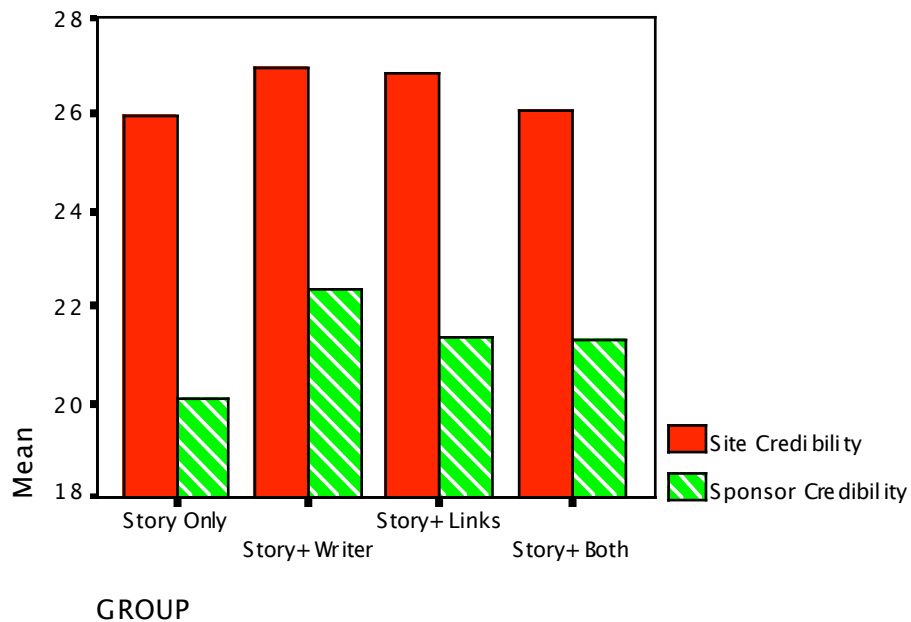
Similarly, it was found that sponsor credibility (independent variable) significantly predicts overall ratings of story credibility (dependent variable), $F(1, 119) = 37.99, \beta = .494, R^2 = .244, p = .000$. See Figure 12.

Figure 12. Linear Regression for Sponsor Credibility and Perceived Story Credibility



A Mann-Whitney U test revealed no significant differences among any of the groups in terms of sponsor and site credibility. However, in each case the sponsor and site credibility scores were higher for the groups that saw the writer information and/or the hyperlinks when compared to the group that saw just the story. See Figure 13.

Figure 13. Site and Sponsor Credibility By Group



Time Spent Reading

The participants' time spent reading each story was tracked using an online web tracker. The mean time participants spent reading the stories during the study was 17.93 minutes, ($SD = 3.25$). On average participants spent the most time reading the feature story, followed by the hard news story, and the sports story. See Table 24.

Table 24

Time Spent Reading Stories in Minutes

Type	Time Spent Reading (min)	SD	N
Feature	6.76	1.39	120
Hard News	6.15	2.37	120
Sports	5.02	1.19	120

Those in the story+both group spent the most time reading the stories. Those in the story+links group spent the least time reading the stories. See Table 25.

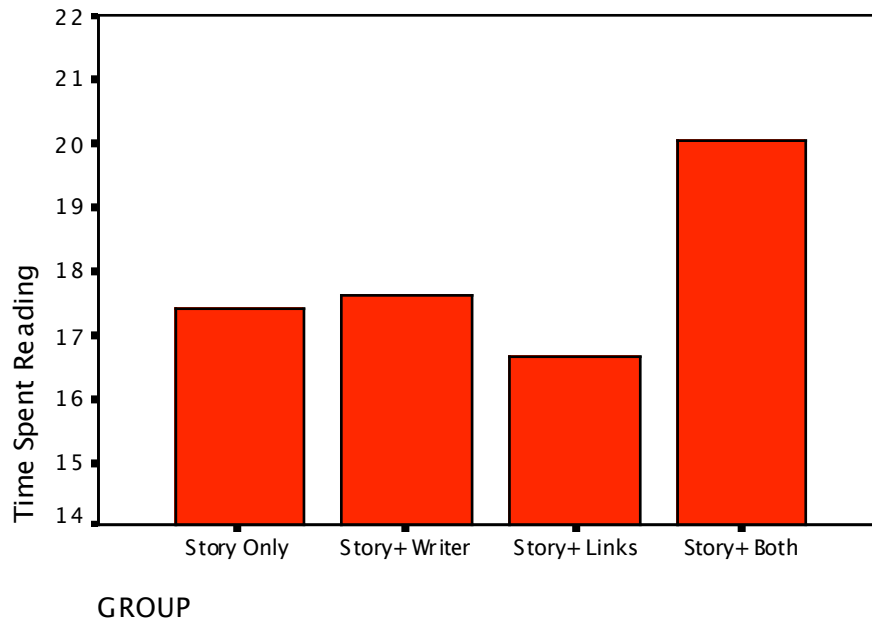
Table 25

Time Spent Reading Stories by Group in Minutes

Group	Time (min)	SD	n
Story Only	17.39	2.70	60
Story+Writer	17.63	2.22	60
Story+Links	16.68	2.51	60
Story+Both	20.04	4.29	60

Participants in the story+both group spent significantly more time reading the stories than participants in the story only group ($U = 307.00$, $M = 18.71$, $SD = 3.79$, $p < .034$), the story+writer information group, ($U = 315.50$, $M = 18.83$, $SD = 3.56$, $p < .047$), and the story+links group ($U = 245.50$, $M = 18.36$, $SD = 3.87$, $p < .002$). See Figure 14.

Figure 14. Time Spent Reading By Group

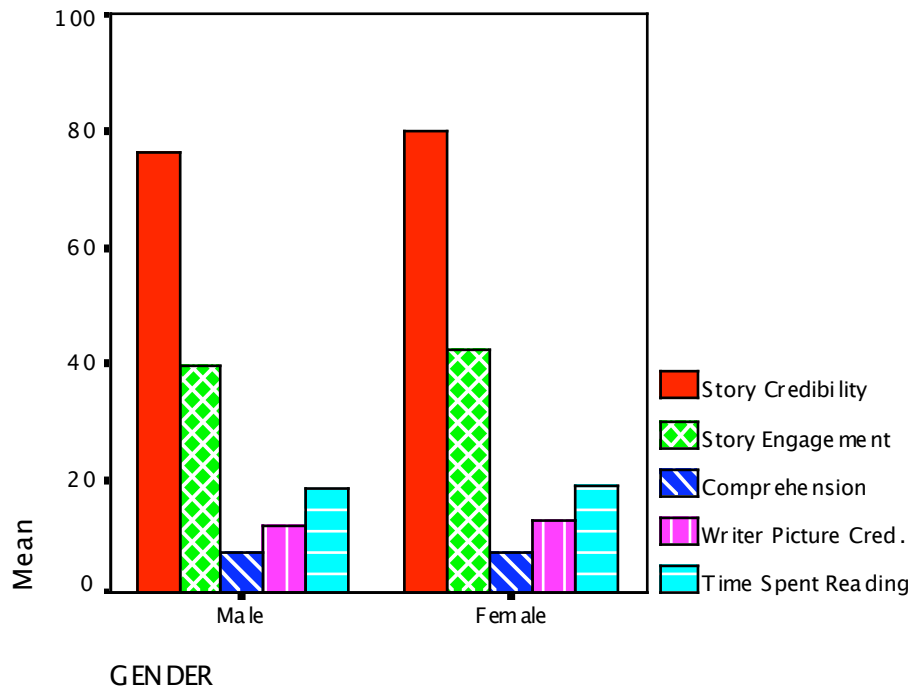


There was no significant relationship between the time spent reading each story and the credibility score for the story ($r_s = .172, p < .061$).

Gender of Participants

Crosstabulation and chi-square analysis revealed no significant differences were found for males or females in terms of perceived story credibility, story engagement, story comprehension, whether or not the writer in the picture looked credible, time spent reading the stories, and many other measures. See Figure 15.

Figure 15. Gender and Various Variables



Age of Participants

A significant positive association was found between the age of participants and whether they ever reported using the Internet to get news online ($r_s = .285, p < .002$). A linear regression was conducted using these two variables, where age of the participants was the independent variable, and whether or not they ever reported using the Internet to get news online was the dependent variable, $F(1, 119) = 11.58, \beta = .299, R^2 = .089, p < .001$, indicating that older participants get news online more often than younger participants, and that age can be used to predict whether someone is likely to use the Internet to get news online.

A crosstabulation and chi-square analysis was used to examine the participants' year in school as compared to other variables. A significant result was

found for year in school and story comprehension, $\chi^2(28, N = 120) = 54.955, p < .002$). As the students reported being further along in school, their scores on the comprehension questions increased. There was also a significant relationship found between year in school and web experience, $\chi^2(32, N = 120) = 47.400, p < .039$). Web experience is low for freshmen, but then increases significantly by the junior and senior years.

CHAPTER 5: DISCUSSION

Three main research questions were proposed at the outset of this study that dealt with perceived story credibility. This section will examine the results of this study in the context of previous studies. In many cases, the results of this study served to support what previous research indicated. However, there were a few cases where that was not the case.

This section begins with an examination of the three research questions, and interpretation of the results. Next, a number of relationships regarding the writer information and hyperlinks will be explored. Finally, issues of story engagement and media preference will be addressed.

RQ 1: To what extent does providing information about a writer's background and providing a picture of the writer on a participatory journalism site affect the perceived credibility of the story?

Prior studies (Fogg, 2002a; Fogg, et al., 2001; Fogg & Marshall, 2001; Fogg & Tseng, 1999) have shown that providing information about the author of online information, as well as a picture, could serve to enhance the credibility of the site. This study examined whether this finding could be extended to individual stories on a participatory journalism web site. After providing information about the writer, as well as the writer's picture, to the participants in this study, it was found that the information about the writer did significantly increase participants' perceived

credibility of the stories they read. Since the participants were given additional information about the writer of the story, in the form of both text, and a picture, they were able to see and read about the person who was writing the information. This additional information, in turn, led to higher credibility ratings for the stories.

When individual story types were examined, and perceived credibility was measured for the group that saw the story only and the group that saw the story+writer information, there was only a significant increase in credibility for the hard news story. No significant differences were found for the other story types, although in all cases the credibility scores were higher for the group that did have the writer information than for the group that did not have that information. There was only a significant difference for the hard news story, as opposed to the other stories, because participants may have felt that it was more important that the information in the hard news story was correct and could be trusted. The hard news story was not light or fun in nature, but rather had a serious tone. Since the other two stories were of a “lighter” nature, participants may not have cared as much about whether the information was credible.

RQ 2: To what extent do hyperlinks that allow users to verify information contained in a story on a participatory journalism site affect the perceived credibility of the story?

Previous studies (Fogg, 2002a; Stewart & Zhang, 2003) have shown that hyperlinks can help users form judgments about online credibility. Participants rated

the stories that contained hyperlinks as being more credible than the stories that did not contain hyperlinks; however, the significance level was only slightly significant. Hyperlinks add a level of verifiability to information, and it appears that the promise of this added information impacts credibility judgments in a positive manner, (see the “Hyperlinks” section for a fuller discussion of the presence of hyperlinks and credibility assessments).

When examining individual story types, again the hard news story was rated as being significantly more credible by the story+hyperlinks group, than by the story only group. This may be the case for the same reason stated above, namely that when participants are looking at a story that is hard news in nature, it may be more important to them that the information is credible, due to the serious nature of the subject matter.

RQ3: To what extent does providing information about a writer’s background, a picture of the writer, and hyperlinks that allow users to verify information contained in a story on a participatory journalism site affect the perceived credibility of the story?

This question examined the intersection of the two variables (writer information and hyperlinks). The stories that contained all of the pieces of information (writer information and hyperlinks) were rated by participants as being significantly more credible than stories that did not contain this information.

When individual story types were examined, again the hard news story was rated as being significantly more credible by the story+both group, when compared to the story only group. In this case the results were also significant for the sports story. Participants clicked on the greatest number of hyperlinks in the sports story, so this, combined with the information available about the writer, may have contributed to the story+hyperlinks group rating the story as being significantly more credible than the story only group.

Propensity to Trust

As has been found in previous studies (Gefen, 2000; McKnight, Choudhury, & Kacmar, 2002; Mayer, Davis, & Schoorman, 1995, McKnight, Cummings, and Chervany, 1998; McKnight, Kacmar, & Choudhury, 2004) disposition to trust can play a role as to whether someone judges a web site to be credible. The more trusting a person is, the higher he or she tends to rate sites in terms of perceived credibility (Collins, 2006). Because disposition to trust is a factor in the formation of credibility judgments, this was measured in the study. No significant differences were found between the groups in terms of their propensity to trust. This means that the differences measured between groups, in terms of their perceived credibility, were not due simply to the fact that one group had more trusting people in it than another. Instead, the differences can be attributed to the variables in the study, namely the presence of writer information and/or hyperlinks. However, as has been found in the previous studies mentioned earlier, this study did support the finding that those who have a higher propensity to trust, also rate items higher in perceived credibility. In

this study those who had a higher propensity to trust rated the stories, the site, and the people who created the site significantly more credible than those with a lower propensity to trust.

Writer Information

The Importance of the Writer's Picture

The picture of the writer played an important role in the assessment of the credibility of the stories. The more participants felt the writer in the picture looked credible, the higher they rated stories in terms of perceived credibility. A linear regression showed that how credible participants perceived the writer to be based on his picture explained 23% of the variance in the perceived credibility score. In fact, when a multiple regression for the three questions about the writer information was performed (See Appendix I for the questions), the picture of the writer accounted for the largest amount of variance. There were also positive significant relationships, that were predicted through linear regression, between how credible participants rated the writer's picture, and how engaged they reported being in the story, as well as how credible they felt the people who created the web site were. These findings suggest that including pictures of writers on web sites is important. We live in a visual society and high importance is placed on personal appearance, therefore it should not be surprising that such high importance was placed on the picture of the writer—even more importance than on the information about the writer— when forming credibility judgments.

Future studies may examine what it is about the pictures that makes them so important, and what aspects of the pictures participants are keying in on when making credibility judgments. In this study, care was taken to use pictures of writers who were judged in pilot studies to be of equal credibility. Future researchers may wish to examine the impact on credibility if pictures of writers who are not judged to be equal in terms of their perceived credibility are used. Also, an examination could be conducted of the differences in perceived credibility if pictures of female, as opposed to male writers are used, or if pictures of minorities, as opposed to Caucasians are used. Certainly all of these factors could impact credibility judgments.

The Importance of the Written Information about the Writer

When examining whether the written information about the writer's background was helpful, there was a significant positive relationship found for the perceived credibility of the stories, and engagement in the stories (as there were with the picture of the writer). A linear regression showed that information about the writer's background explained about 7% of the variance in the story credibility scores. Getting to know the writer of the story through the background information boosted the story credibility scores. Perhaps participants were able to ascribe more trust to the stories because after reading the writer information they now felt he was qualified to write about the subject matter, based on the background information presented, which raised the participants' credibility perceptions.

Linear regression also showed information about the writer's background accounted for about 9% of the variance in the story engagement scores. It appears that

learning more about the person who wrote the article, helped participants to become more engaged when reading the stories. It could be that learning that the writer had written about a particular subject before, or has an interest in the subject he is writing about, helped to spark interest in the participants.

There was also a significant positive relationship in terms of comprehension of the stories, a relationship that did not exist when respondents examined the picture of the writer. It could be that reading the information about the writer and getting to know him caused participants to pay more attention to the stories. In future studies, this variable could be considered alone. Information about the writer could be varied (positive and negative) across different writers to see what impact that has on credibility ratings. In this study, information provided on the writers by OhmyNews.com was used, however future studies could include “mock” information about each writer to see what impact things like the occupation of the writer, the hobbies of the writer, and previous articles by the writer have on story credibility, engagement, and comprehension.

Hyperlinks

Hyperlinks Clicked

Surprisingly few participants chose to click on hyperlinks in the stories. The average number of hyperlinks clicked on was .93 out of 17 total hyperlinks participants had the opportunity to click on in the study. Also, just 31% of participants chose to click on hyperlinks. When participants were given instructions at the beginning of the study, they were not told whether they should click on the

hyperlinks; this was done so that the most natural possible online behavior could be captured in the computer lab. Future studies may wish to examine what the results might yield if participants are forced, or strongly urged, to click on hyperlinks.

The Importance of the Presence of Hyperlinks

Participants were asked three questions about the hyperlinks in the stories. Only the first question was answered by all participants regardless of whether or not they clicked on the hyperlinks. The question asked about the mere presence of hyperlinks and their impact on perceived credibility. There were several significant positive relationships found in this area. A linear regression showed that the mere presence of hyperlinks significantly predicted the participants' perceived credibility of the story. The presence of hyperlinks explained about 11% of the variance in the perceived credibility score.

A linear regression also showed that the presence of hyperlinks significantly predicts engagement scores. The presence of hyperlinks explained nearly 17% of the variance in the engagement scores. The presence of hyperlinks significantly predicted the time participants spent reading the stories, and accounts for about 7% of the variance. Linear regression also showed that the presence of hyperlinks accounted for 25% of the variance in the sponsor credibility score, and nearly 15% of the variance in the site credibility score.

The other two questions about the hyperlinks were only answered by those who actually clicked on links in the story. It is interesting to note that there were no significant relationships between these other two questions and any of the other

variables. This may mean that the mere presence of the hyperlinks is what really matters, not necessarily whether or not they are clicked on, or whether or not they contain accurate and/or relevant information—it is just the fact that the links are there. The other reason no significant correlations may have been found is because the sample size of 19 subjects was just too small.

All of the stories in this study contained between 4 and 7 hyperlinks. In future studies the number of links in the stories could be varied significantly (perhaps only one link in a certain story, and then 10 or more links in another story) to see if that makes a difference in terms of perceived story credibility. Also, the type of information contained in the links could be varied to see what impact that has.

It is also interesting to note that among those who did choose to click on the hyperlinks a negative relationship (although not significant) was noted; in other words the more hyperlinks participants chose to click on, the lower they scored the stories in terms of their perceived credibility. This may be the case because the information these participants read in the hyperlinks either didn't seem credible to them, or came from web sites that weren't known to them. This notion is supported by a Stewart and Zhang (2003) study on trust transfer that shows linking to unknown sites can have a negative impact on users' trust of those sites. It could also be the case that those who chose to click on the hyperlinks were reading the stories more critically than those who chose not to click on them.

Story Engagement

Story engagement was significantly higher for the story+hyperlinks group and the story+both group, when compared to the story only group. It appears that providing the additional information in the form of hyperlinks and writer information serves to engage the reader in the story. This does not come as a surprise, since hyperlinks allow participants to more fully engage in what they are reading by finding out additional information, and although very few participants reported clicking on hyperlinks in the study, perhaps it is just the fact that the participants had the option of clicking on the hyperlinks that caused them to become engaged.

What was surprising was that there was no significant difference found between the story only group and the story+writer information group. This may be the case because it is the hyperlinks that are causing the increased story engagement, as opposed to the writer information, in the story+both group. Whether they are clicked on or not, hyperlinks are a cue to the user that additional information is available, and that the writer of the article cared enough about what he or she was writing to include a link to additional information. In the future this finding could be studied in greater depth, to determine if that truly is the case. Future research may also wish to investigate if the types of hyperlinks included in stories affect story engagement. For example, do links about people elicit more story engagement than links about places, or is it just the mere presence of the links, regardless of what they're about that elicits this engagement?

The more engaged participants reported being in the stories, the higher they rated those stories in terms of perceived credibility. A linear regression found that

participants' engagement in the story significantly predicted credibility scores, and that story engagement accounted for 32% of the variance in the credibility score. This finding comes as no surprise, and is consistent with previous studies (Flanagin & Metzger, 2003; Gunther, 1992; Petty & Cacioppo, 1981; Petty, Cacioppo, & Goldman, 1981) that show the level of engagement does, in fact, impact perceived credibility.

Story engagement also appears to play a role in story comprehension. The more participants reported being engaged in the story, the better they performed on the comprehension questions. A linear regression found that participants' engagement in the story predicted comprehension scores, and accounted for about 22% of the variance. This too was not unexpected, since the more engaged a person is in a story, the more likely they are to pay attention to it, and understand its content.

Comprehension Scores

There were no significant differences found among the groups in terms of comprehension of the stories; however, it is interesting to note that those who saw the story only did better (although not significantly) on the comprehension questions than the other groups that were presented with the writer information and the hyperlinks. In fact, the group that had the lowest comprehension score was the group that saw the most information (story+both group). Perhaps those who were presented with the additional information became distracted by it, and were less able to focus on the content of the story. They may have been more apt to pay attention to the information about the writer than the actual content of the story.

The comprehension questions used in this study were developed based on pilot study data where participants were asked to summarize, in their own words, what the story was about and what they remembered about the story. Future research could explore alternate methods for developing comprehension questions. An alternative method to the one used in this study may be to have participants in the study recall information in list form. That recalled information could then be analyzed to determine story comprehension. In this study, 67% of the participants either scored an 8 or a 9 (out of 9 total points), so perhaps the questions used were too easy.

Time Spent Reading

The story+both group spent significantly more time reading the stories (they spent about 20 minutes reading, as compared to about 17 minutes for the other groups) than the other groups. This additional time spent reading can be explained in two ways. First, the story+both group simply had more to read than the other groups, therefore accounting for the extra time. While this may seem like a viable option, it does not appear to account for the difference, since very few of the participants clicked on hyperlinks, and there was no significant difference between the story+writer information group and the other groups. An alternate explanation, and the one that is perhaps better suited to explaining the data, is that the writer information and the hyperlinks served to engage the participants in the stories more (which is supported by the story engagement findings above), and because the participants were more engaged in the stories, they spent more time reading them.

Site and Sponsor Credibility

Both site and sponsor credibility scores were higher for the groups that saw the additional information (writer and/or hyperlinks) than for the story only group, however the results were not significant. There may not have been any significant changes because participants were tightly controlled in terms of where they could, and could not go on the OhmyNews.com site. All of the links that were normally active (excluding those in the actual stories) were deactivated. Therefore, participants were not given the opportunity to explore the site. Future studies may want to allow participants to look at other areas of the site, to see if this has an impact on site and/or sponsor credibility.

There was a significant positive relationship between how credible participants found the site to be and how credible they rated the stories. A linear regression showed that site credibility explained nearly 39% of the variance in the story credibility rating. This highlights the importance of making sure the site is perceived as being credible by users, because site credibility can translate into credibility for individual items on the site, in this case, the stories.

Media Habits

It is interesting to note that most participants in the study reported getting their news most often from the Internet (53%), yet when they were asked from which media they prefer to get their news, the majority responded television (51%). Perhaps the Internet is their primary, although not their preferred news source, because it is

available on-demand, and on a college campus the Internet is more widely available than television. For example, the student center and library on the Elizabethtown campus are full of computers with high-speed Internet access, but there are no televisions. Perhaps if television news was available on-demand participants might list that they get their news most often from television, since they clearly reported preferring to get their news from television as compared to the Internet (33%).

Very few students (7%) reported getting their news most often from the newspaper. This finding supports studies (Online Newspaper Readership Countering Print Losses, 2005) that show dwindling newspaper readership. Those who work in the newspaper industry may want to take note of these findings and figure out what it is about the Internet and television that students like. Leaders in the newspaper industry may want to develop ways to start building newspaper reading and buying habits in college age students, and foster those habits through adulthood.

Distribution of Participants Based on Media Used

Care was taken to distribute participants evenly into groups according to the source they reported getting their news from most often because studies show that the source people go to most often to get news is also the one they find the most credible (Bucy, 2003; Carter & Greenberg, 1965; Flanagan & Metzger, 2000; Johnson & Kaye, 1998; Johnson & Kaye, 2004). The equal distribution of participants was accomplished; however, the researcher did not find that those who got their news most often from the Internet rated the stories as more credible than those who got their news from other sources. This may have occurred because the site being used in

the study was not a mainstream news site. Had a mainstream news site been used, the findings in this study may have supported what previous studies found.

Previous studies have shown that those who use media heavily tend to judge the Internet as highly credible (Flanagin & Metzger, 2002; Johnson & Kaye, 2002). That was not the case in this study. No significant relationship was found between media use and perceived credibility of either the site, the people responsible for the site, or the stories. This contradiction may have occurred because the other studies were investigating more traditional Internet sites, whereas in this study a citizen journalism site, which was not widely known to the participants, was used. Another reason for the results may be that the Internet has changed quite a bit in the five years since those studies were published, and the Internet may now be considered to some, just as traditional as “traditional” media outlets; in other words, the Internet isn’t that special anymore. This difference may also be due to substantial efforts to promote information literacy in schools, leading to changed perceptions of how web sites are evaluated.

As expected, the sample was very high in terms of Internet experience. In the future other studies may wish to use participants who have less Internet experience and see if that has any impact on the results.

Internet Content Creation

There was an interesting positive relationship found between the amount of time participants reported getting news online, and sharing something they have created online. It appears that those who like to share things they have created

themselves online (like a weblog) also spend time getting news online. These online content creators may be a good group for web sites hoping to build an audience to target. It also could mean good news for the citizen journalism movement, as this is a movement that requires content creation and contribution by the audience.

Citizen Journalism Awareness

Participants in the study indicated that they had heard about citizen journalism (28%); however, as a group they reported never visiting a citizen journalism site. This is not surprising since citizen journalism is still relatively new. Actually, the percentage of participants who reported hearing about citizen journalism prior to the study seemed quite high, considering its relative newness.

Gender

In the literature there was conflicting evidence as to whether men or women ranked web sites higher or lower in perceived credibility. One study showed men ranked web sites higher in terms of perceived credibility (Flanagin & Metzger, 2003), while another (Fogg, et al., 2001) showed women did. In this study there were no differences found in terms of gender and credibility perceptions. Credibility ratings by males and females were almost identical. There may have been no differences found because females were overrepresented in the sample (68% female, 32% male). Future research may wish to make sure gender is more balanced.

CHAPTER 6: CONCLUSION

The presence of writer information and hyperlinks increase the perceived credibility of stories on the participatory journalism web site OhmyNews.com. These markers of credibility are more important in forming credibility perceptions to people reading hard news, as opposed to feature type stories. In hard news stories it appears that people care more about whether the information is correct than they do in stories that tend to be more feature-like.

The information on the writer, particularly the picture of the writer, plays an important role in terms of how credible participants perceived stories to be. The more credible participants thought the writer in the picture looked, the higher they rated stories in terms of perceived credibility. This finding speaks to the importance of visual cues in our society, and how we do indeed tend to “judge a book by its cover.” The importance of visual cues is something television news has long recognized, as much time and money is invested in making sure anchors and reporters on television newscasts look attractive and therefore credible. The findings of this study suggest that those involved in delivering Internet news need to also allocate resources to make sure their reporters are perceived as credible by users based on looks alone.

In terms of hyperlinks, contrary to expectations, very few participants chose to click on them in the study. Future studies may wish to explore why this occurred. A qualitative study could be undertaken and researchers could observe users reading the story, and ask questions as to why users chose to click, or not to click, on particular hyperlinks. Also the think aloud method could be used to gain more qualitative

information about what users are thinking while interacting with sites that feature user created content. Also, in future studies participants could be forced to click on hyperlinks to see if that has a positive or negative impact on perceived credibility. However, this study did find that the mere presence of hyperlinks, whether or not participants chose to click on them, made the stories seem more credible.

Including information about the writer and hyperlinks served to engage the reader in the story more than if that information was not included. Figuring out ways to engage users in a media landscape where millions of choices constantly compete for users' attention is no easy task. Including the information about the writer and the hyperlinks is one way to do this. Perhaps a future study could look at the use of video and/or audio, as opposed to a still picture of the writer to see what impact that has on perceived story credibility.

There was also a significant positive relationship between how credible participants found the web site to be and how credible they rated the stories. If the site is perceived as credible this translates into instant credibility for individual stories on the site. Future studies may wish to explore further this connection between site and story credibility.

Some limitations of the study included the demographics of the sample. The participants included college students at a small private college in Pennsylvania. Females were over represented, and there wasn't much ethnic diversity in the sample. Future studies may wish to explore a broader demographic.

Another limitation of the study was that stories from just one participatory journalism web site (OhmyNews.com) were chosen. Perhaps in future studies stories

from several participatory journalism sites could be chosen to see if that makes any difference.

In terms of the writers of the stories, only Caucasian males were chosen. Future studies could examine whether or not varying gender and ethnicity of the writers impacts the results. For example, pictures of African-American males could be used to see what impact that has on perceived story credibility. Also, the same story could be presented to participants and the picture of the writer could be varied...perhaps pictures of Caucasian, Hispanic, and Asian females could be used.

Future studies could also allow participants to further explore the web site. In this study, participants' movements were very tightly controlled on the site so confounding variables weren't introduced into the study. Links that were not directly related to the story were "turned off" so participants could not navigate to another page if they clicked on them. In future studies participants' movements on the site could be tracked to see what they choose to click on and how that impacts credibility ratings of the site and the site's content.

It would also be interesting to follow up on one of the findings that was not significant, but was, nonetheless, interesting. This had to do with how participants did on the comprehension questions following each story, and whether or not they were presented with additional information (writer information and hyperlinks). This study found that those who were given the most information (writer information and hyperlinks) achieved the lowest scores on the comprehension questions. It could be that the additional information served to distract the participant from the main points

of the story. If this is the case, these findings could be instructive for those building sites (like educational or training sites) where comprehension of content is important.

This study could also be repeated using other types of stories. Weather and business stories could be used to see what impact, if any, the markers of credibility tested in this study have on those story types.

In future studies other markers of credibility on sites that feature user created content could be tested— for example, a rating system for stories on a site. If a rating scale on a site says that 10 out of 10 people rated an article as “excellent” what impact does that have on a user’s view of the credibility of the article? What would the impact on credibility be if, according to the scale, 10 out of 10 people rated the story as “poor”?

Within the last year there has been a proliferation of participatory journalism web sites, and sites that feature user created content, such as YouTube. The researcher would like to see if the results of this study extend to sites that feature video produced by citizens. Is there something inherently different between words written on a computer screen and video people watch on a computer screen? If so, what are the differences, and how do they impact credibility?

The results of this research can be used by not only those who write stories on participatory journalism web sites, but also by those who generate any type of user created content to improve the perceived credibility of their work. Including a picture of the person who created the content, information about the person, and hyperlinks are all important first steps in improving credibility perceptions.

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Appendix A

Questions Used in the Scales

Internet Experience Scale Questions

How often do you use the Internet/Web?

How would you characterize your level of expertise in using the Internet/Web?

How much experience do you have using the Internet/Web?

Perceived Credibility Scale Questions

How believable did you find the story to be?

How accurate did you find the story to be?

How trustworthy did you find the story to be?

How biased did you find the story to be?

How complete did you find the story to be?

Issue Salience Scale Questions

How relevant is the story to your life?

How interesting was the story?

How much did you enjoy the story?

How important did you think the story was?

Site Credibility Scale Questions

To what degree would you describe the web site (OhmyNews.com) to be trustworthy?

To what degree would you describe the web site (OhmyNews.com) to be believable?

To what degree would you describe the website (OhmyNews.com) to be reliable?

To what degree would you describe the website (OhmyNews.com) to be authoritative?

To what degree would you describe the website (OhmyNews.com) to be honest?

To what degree would you describe the website (OhmyNews.com) to be biased?

Sponsor Credibility Scale Questions

The people who created OhmyNews.com are credible.

The people who created OhmyNews.com have high integrity.

The people who created OhmyNews.com have a positive reputation.

The people who created OhmyNews.com are successful.

The people who created OhmyNews.com are trustworthy.

Propensity to Trust Scale Questions

I usually trust people until they give me a reason not to trust them.

I generally give people the benefit of the doubt when I first meet them.

My typical approach is to trust new acquaintances until they prove I should not trust them.

Appendix B

Comprehension Questions

Sports Story Comprehension Questions

17) **What was the main idea of the story you just read?**

- Brazil beat the United States in the Swatch FIVB Beach Volleyball World Tour event
- The United States beat Brazil in the Swatch FIVB Beach Volleyball World Tour event
- The United States beat China in the Swatch FIVB Beach Volleyball World Tour event
- Brazil will play China in the 2008 Olympics
- I don't know what the story was about

18) **In which country did the Swatch FIVB Beach Volleyball World Tour event take place?**

- Brazil
- China
- Italy
- United States
- I don't know

19) **Which team won third place in the Swatch FIVB Beach Volleyball World Tour event?**

- Brazil
- China
- Italy
- United States
- I don't know

Feature Story Comprehension Questions

17) **What is the main idea of the story you just read?**

- All Top 10 movie lists have exactly the same movies on them
- Top 10 movie lists tend to change based on who's making the list and what the criteria are
- There is one right way to choose the top 10 movies of all time
- Everyone agrees that Pulp Fiction is the best movie of all time
- I don't know what the story was about

18) **According to the story there is one film that shows up time and time again on top 10 movie lists. Which one of the following is it?**

- Casablanca
- Schindler's List
- One Flew Over the Cuckoo's Nest
- Psycho
- I don't know

19) **When film critic Roger Ebert makes his list of the top 10 greatest films ever made, what criteria does he use?**

- A formula that includes dividing the number of votes for the movie, by the weighted mean number of minimum votes required to be listed in the top 250 movies
- How many other film critics said they enjoyed the movie
- The originality of the storyline
- His emotion when he sees a movie
- I don't know

Hard News Story Comprehension Questions

17) **What is the main idea of the story you just read?**

- Fourteen South Koreans are charged after protesting against the World Trade Organization (WTO)
- The WTO conference kicks off in Hong Kong
- People from all over the world attend the WTO conference
- No problems are reported at the WTO conference
- I don't know what the story was about

18) **According to the story which one of the following statements is true?**

- All of the farmers arrested in connection with the protest against the WTO were released immediately
- Farmers from South Korea were protesting against the WTO
- The Hong Kong police are being praised for their handling of those who were arrested in connection with the protests
- Local businessmen were staging the protest against the WTO
- I don't know

19) **According to a statement by the Asian Human Rights Commission, which of the following is true?**

- There were no problems with the way Hong Kong police handled the arrest and detainment of demonstrators
- Hong Kong police were praised for making so many arrests, but the Asian Human Rights Commission felt police could have handled the prisoners in a more humane manner following the arrests
- The Asian Human Rights Commission condemned the action of the Hong Kong police and say the protestors were treated brutally and inhumanly
- The Human Rights Commission felt media coverage of the arrests was very one sided and portrayed those arrested in a poor light
- I don't know

Appendix C

Online Activities

22) **Have you ever created or worked on your own online journal or weblog?**

never very rarely rarely occasionally often very often all the time

23) **Have you ever created or worked on your own webpage?**

never very rarely rarely occasionally often very often all the time

24) **Have you ever shared something online that you created yourself, such as your own artwork, photos, stories, or videos?**

never very rarely rarely occasionally often very often all the time

25) **Have you ever contributed content to a participatory or citizen journalism site? (A news site where much of the content is written by ordinary citizens, not journalists. For example: *backfence.com*, *ibrattleboro.com*, *mymissourian.com*, *ohmynews.com*)**

never very rarely rarely occasionally often very often all the time

26) **Prior to this study had you ever heard of participatory or citizen journalism? (A news site where much of the content is written by ordinary citizens, not journalists. For example: *backfence.com*, *ibrattleboro.com*, *mymissourian.com*, *ohmynews.com*)**

Yes No

27) **Prior to this study had you ever visited a participatory or citizen journalism site? (A news site where much of the content is written by ordinary citizens, not journalists. For example: *backfence.com*, *ibrattleboro.com*, *mymissourian.com*, *ohmynews.com*)**

never very rarely rarely occasionally often very often all the time

Appendix D

Stories Used in the Study

Sports Story



HOME
KOREA | WORLD | SCI&TECH | ART&LIFE | ENTERTAINMENT | SPORTS
GLOBAL WATCH
INTERVIEWS
WORLD CUP
CITIZEN JOURNALISM
2006-07-23 11:51 KST

Korean

LOGIN

JOIN OMNI

NEWS

KOREA

WORLD

SCI&TECH

ART&LIFE

ENTERTAINMENT

SPORTS

GLOBAL WATCH

INTERVIEWS

PODCASTS

OPINION

FEATURED WRITERS

TALK BACK

ABOUT US

FAQ







Brazil Spikes U.S. in Beach Volleyball Action

Juliana Felisberta Silva and Larissa Franca win Swatch FIVB event in Italy

Rick Capone (racapone)  [Email Article](#) [Print Article](#)

Published 2006-05-16 13:32 (KST)

If the play at this past weekend's season opening [Swatch FIVB Beach Volleyball World Tour](#) event in [Modena, Italy](#), is any indication of the level of play to be expected this summer, then beach volleyball fans better get ready to watch a lot of exciting tournaments.



In a closely played final this past Sunday, May 14, 2006, the 2005 FIVB points champions, [Juliana Felisberta Silva](#) and [Larissa Franca](#) of Brazil, defeated the reigning Olympic Gold Medalists, [Misty May-Treanor](#) and [Kerri Walsh](#) of the United States, 21-19 and 27-15 in 55 minutes to win the FIVB Play Station Portable Italian Open.

With the win, the Brazilian's collected the gold medal and split the US\$32,000 first prize, while the American's took home the silver medal and split \$22,000.

"This one is for our mothers," said the 22-year-old Juliana of their Mother's Day championship win. "We have been working hard to beat Misty and Kerri and make ourselves the top team in the world entering the Beijing Olympic Games in 2008. They are such a talented team. but we made the plays to win the match today. We are almost perfect this season, but we still have a lot of room for improvement."

Along with winning the title, Larissa also collected the Most Outstanding Player trophy for her excellent play in the tournament.

"The American's are considered the best, but we were better today," the 24-year-old Larissa said after the event. "Except for a slow start, we played extremely well. This was a perfect place to launch our season as the Italians were great hosts."

For the Brazilian's, the win on Sunday was their second victory in the last three meetings against the Americans. Overall, however, May-Treanor and Walsh have won six of the eight meetings against Juliana and Larissa, including a win at the 2005 FIVB World Championships last year in Berlin, and a win at the 2005 FIVB season finale in Cape Town, South Africa.

In the championship match, which was played in front of a standing-room only crowd of 3,500 people on a beautiful, sunny afternoon, the match was close from the start.

In game 1, May-Treanor and Walsh opened up a quick 10-6 lead, before Juliana and Larissa began to chip away and begin their comeback. Finally, the Brazilians caught up to the Americans and tied them, 17-17. The two teams swapped points to make it 18-18, before the Brazilians won three of the last four points to take game 1, 21-19.

Game 2 saw the Brazilians get off to a good start, as they opened up numerous leads through the first half of the game. This time, however, it was the Americans who began to rally, as May-Treanor and Walsh came back from deficits of 12-8 and 14-10, to finally tie the match at 16-16 on an interference call on Larissa after a long rally.

Title: 90

Do you live in a news hotspot? No?



Send us your story. (Buzztracker Map)

OhmyNews at a glance

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- Log On and Be Part of History
- Citizen Journalism: Theory and Practice

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IRAQ: 4 YEARS ON

DATELINE NORTH KOREA

ON SCREEN My Movies

KOREAN CINEMA

Poll

Do you think Iran and Syria are fanning the flames of the Israel-Hezbollah conflict?

Yes

No

I don't know

* Vote to see the result.

INTERNATIONAL Herald Tribune

- Israel masses forces on Lebanese border
- Rice heading to Middle East but rules out 'false promise'
- Jihadists split on Islam's true enemy
- Somali urged to prepare for war
- Diaries add to shrine controversy in Japan

The match stayed close, until the Americans served for the set at 21-20. Juliana and Larissa won that point and then won the next point to take a 22-21. The teams then split points until 25-25, when the Brazilian's were finally able to close out the game 27-25 to win the match and the title.

"They played great," said May-Treanor afterwards. "They were the best team today and we had our chances in both sets. Juliana and Larissa are the leaders on this tour right now, so we are the ones chasing them along with all the international teams. There are no Olympics or World Championships this season, so everyone is playing to get ready for the next Olympic cycle. Hopefully, we'll play them again next month when we return to Athens."

The FIVB Italian Open final was the 64th time in 135 FIVB World Tour Beach Volleyball tournaments, that the U.S. and Brazil met in the championship match. The U.S. now holds a 37-27 advantage in those meetings.

In the third place match, the Chinese team of Wang Jie and Tian Jia held on to win a close three-set match over American's Rachel Wacholder and Elaine Youngs, 15-21, 21-18 and 15-11, to take home the bronze medal in the tournament. The Chinese team split \$16,000 for their third place finish, while the Americans split \$12,000 for fourth place.

The next FIVB Tournaments for the women are May 24-28 in Shanghai, China and May 31-June 4 in Athens, Greece. In addition, the American teams, men and women, next play on the AVP Tour, the beach volleyball tour held in cities around the United States, this coming weekend, May 19-21, at the AVP Santa Barbara Open.

Click [HERE](#) to go to the questions (once you move to the next page, do not return to this one)

attacks
 • At first Hague appearance, Taylor lists his complaints

News From AP
 Japan and U.S. considering six-party talks on North Korean missiles at ASEAN conference

- Key leader of Cambodia's Khmer Rouge regime dies in hospital
- Diners at famous New York City restaurant eat, run because of basement fire
- Microsoft profit down 24 percent, but shares rise on buyback plan
- Ethiopia's incursion into Somalia is meant to provide protection, but could stoke war
- Indonesia vows to speed up creation of nationwide tsunami warning network
- Pakistani president calls on Israel to end attacks in Lebanon

Weekly Top Ten Views

- 'Lady in the Water' Drowns in Shyamalan Ego
- Why Is Israel Back in Gaza?
- Ethiopia in Somalia to Stop Islamists
- Middle East Crisis Continues
- G-8 Responds to Middle East Crisis
- Strange Tempests Follow Missile Tests
- Shuttle Lands Safely
- Citizen Journalism in Java's Tsunami
- Unanimous Vote for N. Korean Sanctions
- 'Never Say Goodbye'

THAT'S FIT TO SHARE WITH YOU

Feature Story

OhmyNews INTERNATIONAL ENTERTAINMENT

HOME | KOREA | WORLD | SCI&TECH | ART&LIFE | ENTERTAINMENT | SPORTS | GLOBAL WATCH | INTERVIEWS | WORLD CUP | CITIZEN JOURNALISM | 2006-07-23 11:21 KST

- Korean
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- TALK-BACK
- ABOUT US
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The Best Films of All Time...

Who decides which films make the lists?

Todd Kipp (toddkipp) **REPORTER**

Email Article | Print Article

Published 2006-04-10 16:00 (KST)

Every January readers and viewers around the world are inundated with countless year-end lists of the best and the worst from the previous 12 months. The subjects range from kitchen appliances to cars to albums, depending on the newspaper, magazine, website or television show.



Other lists are ongoing, evolving and ultimately defining the supposed "best of all time." As consumers, we love these lists because we can use them to back up our own opinions or disagree with them when they don't match our tastes.

Independent film, and film in general, is a common subject and gets its fair share of newspaper and armchair critics alike pronouncing their favorites, filtered through their own criteria. Sometimes the reasons make sense and other times they boil down to such things as nostalgia, who you were dating at the time or that nude scene that you'll never forget! In any case, no one will ever agree, and no two lists will ever be the same.

"The Top Rated 50 'Independent' Titles" on the Internet Movie Data Base (IMDB), for example, aren't necessarily going to match "The 50 Greatest Independent Films" on the Empire Magazine list. If we pitted them against each other, side by side--and we will--the differences are obvious and instantly raise a few questions. What are the criteria? What constitutes an independent film? Who decides which films make the lists?

In the IMDB corner the winners are: 1. "Pulp Fiction," 2. "One Flew Over the Cuckoo's Nest," 3. "The Usual Suspects," 4. "Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb," 5. "Psycho," 6. "Memento," 7. "The Silence of the Lambs," 8. "Eternal Sunshine of the Spotless Mind," 9. "Hotel Rwanda," 10. "Apocalypse Now."

Title go

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OhmyNews at a glance

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Empire Magazine rates them as: 1. "Reservoir Dogs," 2. "Donnie Darko," 3. "The Terminator," 4. "Clerks," 5. "Monty Python's Life of Brian," 6. "Night of the Living Dead," 7. "Sex, Lies and Videotape," 8. "The Usual Suspects," 9. "Sideways," 10. "Mean Streets."

So, how does that happen? Only one film common to both indie top 10s? Well, the former is based in the U.S., while the latter in the U.K. IMDB doesn't seem to have many criteria for the films selected, Empire fashions criteria in relation to "the circumstances and spirit in which the films were made, the quality of the result and its mark on the movie world." IMDB's general readership votes, while Empire's staff makes the selections. Who's right? Depending on your tastes and point of view, they're both right.



▲ "Casablanca's" leading commodity, Bogie and Bergman in this case. ©2006 WarnerBros

The execution of the story, how the cinematography parallels the subject matter, the characters, the dialogue, the acting, the directing, the special effects, the production value, and a host of other factors form the basis of our opinions when it comes to films. The other day I overheard a teenage girl in a parking lot declare that "Anchorman" was the best film ever made. It's subjective. Connecting with the audience, however, is one of the most important responsibilities of a film; if it wins loads of awards but puts the audience to sleep, the message or story, no matter how many millions are spent, is obviously lost.

On April 6, the **Writers Guild of America** and **Premiere** magazine teamed up to present their list of the top 101 screenplays of all time. In this case, the guild members voted for their favorites. Any guesses? Topping the list, without too much surprise, are: 1. "Casablanca," 2. "The Godfather," 3. "Chinatown," 4. "Citizen Kane," 5. "All About Eve," 6. "Annie Hall," 7. "Sunset Boulevard," 8. "Network," 9. "Some Like It Hot" and 10. "The Godfather Part III". Since the voters are writers themselves, no doubt structure, characters, dialogue, integration of sub-plots and other literary devices played a hand in the selection process.

The **American Film Institute** is also running their "100 Years" series with lists including best songs, best heroes/villains, best actors/actresses, and best films. Here the voters are "leaders of the American movie community." In the best films category, the top 10 are as follows: 1. "Citizen Kane," 2. "Casablanca," 3. "The Godfather," 4. "Gone With The Wind," 5. "Lawrence Of Arabia," 6. "The Wizard Of Oz," 7. "The Graduate," 8. "On The Waterfront," 9. "Schindler's List," 10. "Singin' in the Rain."



▲ One of "Casablanca's" main competitors for the title, "Citizen Kane" opens in 1941. ©2006 RKO

Chicago Sun-Times critic **Roger Ebert** lists his "Ten Greatest Films of All Time," stating "I have a criterion for choosing the greatest films, it's an emotional one."

"These are films that moved me deeply in one way or another. The cinema is the greatest art form ever conceived for generating emotions in its audience. And so my greatest films must be films that had me sitting transfixed before the screen, involved, committed, and feeling."

Ebert breaks down the top 10 as: 1. "Casablanca," 2. "Citizen Kane," 3. "Floating Weeds," 4. "Gates of Heaven," 5. "La Dolce Vita," 6. "Notorious," 7. "Raging Bull," 8. "The Third Man," 9. "28 Up," 10. "2001: A Space Odyssey."



▲ The only Pulitzer Prize-winning critic on Hollywood's Walk of Fame, Roger Ebert.

Another popular film Web site, **Rotten Tomatoes** compiles their "best" lists according to reviews by a very limited number of respected critics, and so those results are even more varied. On their "100 Best Reviewed Of All Time", all 100 scored a perfect 100 percent and are positioned, therefore, by the number of reviews rather than their actual score.

The **IMDB** boasts dozens of lists, some calculated by genre or box-office sales, others by a system designed to calculate "a true Bayesian estimate."

The **IMDB** Top 250, for example, uses the following formula:

$$\text{Weighted rating (WR)} = (v \div (v+m)) \times R + (m \div (v+m)) \times C$$

Where:

- R = average for the movie (mean) = (Rating)
- v = number of votes for the movie = (votes)
- m = minimum votes required to be listed in the Top 250 (currently 1300)
- C = the mean vote across the whole report (currently 6.8)

(For the Top 250, only votes from regular voters are considered).

Poll

1 Do you think Iran and Syria are fanning the flames of the Israel-Hezbollah conflict?

Yes

No

I don't know

* Vote to see the result. 1 VOTE

- INTERNATIONAL Herald Tribune**
- Israel masses forces on Lebanese border
 - Rice heading to Middle East but rules out 'false promise'
 - Jihadists split on Islam's true enemy
 - Somali urged to prepare for war
 - Diaries add to shrine controversy in Japan
 - Police arrest 4 suspects in Mumbai train attacks
 - At first Hague appearance, Taylor lists his complaints

- News From AP**
- Japan and others considering six-party talks on North Korean missiles at ASEAN conference
 - Key leader of Cambodia's Khmer Rouge regime dies in hospital
 - Diners at famous New York City restaurant eat, run because of basement fire
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- Weekly Top Ten Views**
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 - Shuttle Lands Safely
 - Citizen Journalism in Java's Tsunami
 - Unanimous Vote for N. Korean Sanctions
 - Never Say Goodbye!

THAT'S FIT TO SHIRRE WITH HOLL

Ah... the results, therefore, are a little more diverse. The top 10 of the IMDB's Top 250 are: 1. "The Godfather," 2. "The Shawshank Redemption," 3. "The Godfather Part II," 4. "The Lord Of The Rings: The Return Of The King," 5. "Shichinin No Samurai," 6. "Schindler's List," 7. "Casablanca," 8. "Pulp Fiction," 9. "Star Wars: Episode V: The Empire Strikes Back," and 10. "Star Wars."



▲Special effects and story collide to make one of the most popular film franchises in history.

©2006 LucasFilm Ltd.

In the end, is it ever really possible to qualify a film as "the best"? It's doubtful, but we can have our favorites.

What's more interesting than the simple lists themselves are the reasons behind the choices. Unfortunately most lists don't provide those reasons, so when Ebert and Empire cite motivations behind their choices, the insight not only makes us think, whether in agreement or disagreement, it might even swing our own decisions.

In keeping with the tradition of compiling lists of favorites, or at any rate "the best of the best," if you will, what are your favorite films? OhmyNews wants to assemble our own list of favorite films as selected by our diverse readership.

Since taste is filtered through our unique experiences and influences, what's dominant where we come from and what we've been exposed to, the universal readership of OhmyNews should make for an interesting list.

We don't have to get complicated here, the criteria doesn't need to boil down to certain budget windows, awards collected or what's flying off the shelves at the Wal-Mart. In simple terms, which films make you laugh, cry and want to watch them over and over again?

Click [HERE](#) to go to the questions (once you move to the next page, do not return to this one)

Hard News Story

OhmyNews INTERNATIONAL GLOBAL WATCH

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Korean

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FAQ



Police Charge 14 in WTO Protests, 944 Released

Eleven South Koreans among those detained; Hong Kong police accused of 'inhuman treatment'

David Kootnikoff (kaspian) REPORTER

Email Article Print Article

Published 2005-12-19 22:44 (KST)



▲An anti-WTO group stage a sit-in in Hong Kong, Dec. 18
©2005 AP/Yonhap



Hong Kong police have charged 14 men with unlawful assembly late Monday evening for participating in the WTO protests that shook the territory to its core over the weekend. Among those being charged are 11 South Koreans, one Japanese, one Chinese and one Taiwanese, police said in a statement. Another 944 were released.

South Korean Gov't Intervenes

Late Sunday evening, South Korean Prime Minister Lee Hae Chan expressed concern for protesters instructing the Foreign Ministry to "make its best diplomatic effort for the protection and early release of our farmers."

Vice-Foreign Minister Lee Kyu Hyung arrived in Hong Kong Monday afternoon and met with officials. He reportedly apologized for the violent protests and appealed for lenience. Hong Kong Chief Executive Donald Tsang said Sunday that the detained protesters would be dealt with according to local law.

South Koreans Win Over Locals

In the battle for hearts and minds this past week during the WTO's MC6 conference, the South Korean farmers appear to have won the day, despite the mass arrests. Ironically, attempts by the media to stereotype and marginalize the group as "fanatics" and "criminals" have backfired as the extensive coverage served to raise the sympathies of the majority in this once agricultural/fishing community.



▲Hong Kong police detain Korean protesters, Sunday ©2005 AP/Yonhap

Rather than appearing as irresponsible rioters out to wreck havoc on Hong Kong, the farmers have impressed locals with what many described as their fortitude, discipline and dignity. The violent clashes with police that occurred on Saturday have been widely interpreted as valiant attempts to protect their livelihoods.

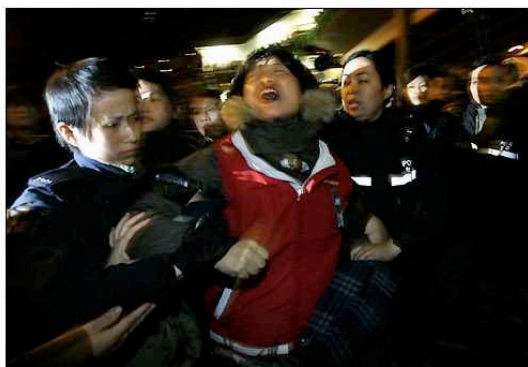
In the face of a globalization process that many view as lacking transparency and accountability, the South Koreans have come to represent legitimate discontent.

Throughout the week's events, the farmers have made a point of saying their quarrel is not with the police, but with the politicians behind the barricades. Most in Hong Kong understand the difference, despite criticism by some community leaders that they are naive for believing so.

Local Outrage Over Arrests

After over 1,000 demonstrators were "rounded up," in the words of police commissioner Dick Lee, and jailed, local legislator Albert Ho condemned the police for their "inhuman treatment" of the protesters.

Speaking outside Kwun Tong jail in Kowloon on Sunday, Ho said one Korean woman was reportedly subjected to a strip search. He also complained that the police refused to allow him to visit with more than three detainees, stating they were denied access to legal advice and had been sleeping in an open-air car park without warm clothing, blankets or basic amenities.



©2005 AP/Yonhap

In a press conference Monday morning, a recently released South Korean woman said through a translator that the police were denying detainees basic medical treatment and complained that adequate translation was not provided. One woman had a high fever but was not attended to, according to the South Korean.

Other detainees included protesters from Taiwan, Indonesia, Japan, and Thailand. Local supporters gathered outside the prison, shaming the police for using excessive force on the detainees.

Their allegations were supported by the Asian Human Rights Commission. In a blunt statement issued Dec. 18 and titled "HONG KONG SAR: Police brutality and inhuman treatment of WTO protesters," the commission condemned the actions of the Hong Kong police:

The brutality and inhuman treatment of the protesters against the World Trade Organisation (WTO) by the Hong Kong police comes as a shock and must immediately be stopped...Despite the protesters being unarmed, the Hong Kong police commissioner declared the peaceful demonstration as a violent riot against Hong Kong law and pledged to take serious action against the protesters. At about 4am on December 18 about 500-600 protesters, mostly South Korean, were arrested and detained in various police stations..."

Media Response

The general tone in the local media was one of disdain for the protesters and support for the police. Some reports today praised the restraint the police demonstrated while being under the attack of violent protesters.

Other reports bordered on the extreme, courting racism by singling out the "mass of Koreans" in a desperate attempt to hold the group responsible for all the violence that transpired during the WTO conference.

Click [HERE](#) to go to the questions (once you move to the next page, do not return to this one)

Appendix E

Writer Information

Sports Story Writer, Rick Capone



Rick Capone is a freelance writer living in Ocala, Florida. His articles have appeared in numerous publications, including the South Marion Citizen and other weekly Florida newspapers, USA Volleyball Magazine, Volleyball Magazine and StockCarCity.com. He is currently the managing editor of eSports (www.e-sports.com), an online sports magazine.

Feature Story Writer, Todd Kipp



Todd Kipp is an independent filmmaker and freelance writer, specializing in culture and entertainment. In the past he has contributed to The Vietnam News, The Korea Herald and continues to publish articles in The National Post. Current projects include a short film set to shoot in the spring, a feature film set to shoot in the fall, a documentary on the English trade in South Korea and a six-episode television show.

More information can be found at www.prizefighterproductions.com.

Hard News Story Writer, David Kootnikoff



David Kootnikoff is a freelance writer/musician who enjoys traveling and uncovering nuggets of rapture along the way. In the words of the Russian poet Vladimir Mayakovsky, 'with me / anatomy has gone mad / nothing but heart / roaring everywhere.'

He has co-edited a book on teaching in Japan and has had work appear in a variety of newspapers and magazines. Currently based in Hong Kong, David grew up in and around Vancouver, Canada. His Web site is www.alldaybliss.com.

Appendix F

Study Welcome Page

Hello and welcome to today's study.

What you are about to look at are stories taken from a participatory journalism site called ohmynews.com. Participatory, or citizen journalism as it is sometimes called, is when news is written by ordinary citizens, not professional journalists.

You will be presented with three stories total. After you read each story you will be asked a series of questions about the story. Three of these questions will test your comprehension of the story. Take as much time as you need reading each story. If at any time you have any questions please let the researcher know.

Your progress during the study may be monitored by the researcher via a computer at the front of the room.

When you entered the room you were given a card with a color and number on it. Please find the color and number below that matches the color and number on your card and then click on it to begin the study.

GREEN 1	RED 1	YELLOW 1	BLUE 1
GREEN 2	RED 2	YELLOW 2	BLUE 2
GREEN 3	RED 3	YELLOW 3	BLUE 3
GREEN 4	RED 4	YELLOW 4	BLUE 4
GREEN 5	RED 5	YELLOW 5	BLUE 5
GREEN 6	RED 6	YELLOW 6	BLUE 6

Appendix G

Group Questionnaires Used

Sports Story Questionnaire

Questions About the Volleyball Story (Blue 1 Group)

Please answer the following questions. After answering all of the questions, please click on the link at the bottom of the page to go to the next story. Do not return to the story you just read to help you answer the following questions.

1) Please enter your subject ID number. (*You MUST answer this*)

2) How believable did you find the story to be?

Not at all
believable

Very
believable

- 1 2 3 4 5 6 7

3) How accurate did you find the story to be?

Not at all
accurate

Very
accurate

- 1 2 3 4 5 6 7

4) How trustworthy did you find the story to be?

Not at all
trustworthy

Very
trustworthy

- 1 2 3 4 5 6 7

5) How biased did you find the story to be?

Not at all
biased

Very
biased

- 1 2 3 4 5 6 7

6) How complete did you find the information in the story to be?

Not at all
complete

Very
complete

- 1 2 3 4 5 6 7

7) How relevant is the story to your life?

Not at all
relevant

Very
relevant

- 1 2 3 4 5 6 7

8) How interesting was the story?

Not at all
interesting

Very
interesting

- 1 2 3 4 5 6 7

9) How much did you enjoy the story?

Not at all
enjoyable

Very
enjoyable

- 1 2 3 4 5 6 7

10) How important did you think the story was?

Not at all
important

Very
important

- 1 2 3 4 5 6 7

11) **The information on the writer's background was helpful in determining whether or not the story was credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

12) **I found the picture of the writer to be helpful in determining whether or not the story was credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

13) **I thought the writer in the picture looked credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

14) **Just the fact that the story contained hyperlinks (even if you didn't click on them) made the story seem credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

15) **I found the hyperlinks in the story helpful in determining whether or not the story was credible (If you didn't click on any hyperlinks, skip this question)**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

16) **I found the hyperlinks in the story enhanced the credibility of the story. (If you didn't click on any hyperlinks, skip this question)**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

17) **What was the main idea of the story you just read?**

- Brazil beat the United States in the Swatch FIVB Beach Volleyball World Tour event
- The United States beat Brazil in the Swatch FIVB Beach Volleyball World Tour event
- The United States beat China in the Swatch FIVB Beach Volleyball World Tour event
- Brazil will play China in the 2008 Olympics
- I don't know what the story was about

18) **In which country did the Swatch FIVB Beach Volleyball World Tour event take place?**

- Brazil
- China
- Italy
- United States
- I don't know

19) **Which team won third place in the Swatch FIVB Beach Volleyball World Tour event?**

- Brazil
- China
- Italy
- United States
- I don't know

When you are finished answering the above questions, please click on the "Submit Survey" button below to continue.

[Submit Survey](#)

Feature Story Questionnaire

Questions About the Movies Story (Blue 1 Group)

Please answer the following questions. After answering all of the questions, please click on the link at the bottom of the page to go to the next story. Do not return to the story you just read to help you answer the following questions.

1) Please enter your subject ID number. (You **MUST** answer this)

2) How believable did you find the story to be?

Not at all
believable

Very
believable

1 2 3 4 5 6 7

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5) How biased did you find the story to be?

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biased

Very
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6) How complete did you find the information in the story to be?

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complete

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complete

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14) Just the fact that the story contained hyperlinks (even if you didn't click on them) made the story seem credible.

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15) I found the hyperlinks in the story helpful in determining whether or not the story was credible (If you didn't click on any hyperlinks, skip this question)

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16) I found the hyperlinks in the story enhanced the credibility of the story. (If you didn't click on any hyperlinks, skip this question)

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

17) What is the main idea of the story you just read?

- All Top 10 movie lists have exactly the same movies on them
- Top 10 movie lists tend to change based on who's making the list and what the criteria are
- There is one right way to choose the top 10 movies of all time
- Everyone agrees that Pulp Fiction is the best movie of all time
- I don't know what the story was about

18) According to the story there is one film that shows up time and time again on top 10 movie lists. Which one of the following is it?

- Casablanca
- Schindler's List
- One Flew Over the Cuckoo's Nest
- Psycho
- I don't know

19) When film critic Roger Ebert makes his list of the top 10 greatest films ever made, what criteria does he use?

- A formula that includes dividing the number of votes for the movie, by the weighted mean number of minimum votes required to be listed in the top 250 movies
- How many other film critics said they enjoyed the movie
- The originality of the storyline
- His emotion when he sees a movie
- I don't know

When you are finished answering the above questions, please click on the "Submit Survey" button below to continue.

[Submit Survey](#)

Hard News Story Questionnaire

Questions About the WTO Story (Blue 1 Group)

Please answer the following questions. After answering all of the questions, please click on the link at the bottom of the page to go to the next story. Do not return to the story you just read to help you answer the following questions.

1) Please enter your subject ID number. (You **MUST** answer this)

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Disagree

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15) I found the hyperlinks in the story helpful in determining whether or not the story was credible (If you didn't click on any hyperlinks, skip this question)

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

16) I found the hyperlinks in the story enhanced the credibility of the story. (If you didn't click on any hyperlinks, skip this question)

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

17) What is the main idea of the story you just read?

- Fourteen South Koreans are charged after protesting against the World Trade Organization (WTO)
- The WTO conference kicks off in Hong Kong
- People from all over the world attend the WTO conference
- No problems are reported at the WTO conference
- I don't know what the story was about

18) According to the story which one of the following statements is true?

- All of the farmers arrested in connection with the protest against the WTO were released immediately
- Farmers from South Korea were protesting against the WTO
- The Hong Kong police are being praised for their handling of those who were arrested in connection with the protests
- Local businessmen were staging the protest against the WTO
- I don't know

19) According to a statement by the Asian Human Rights Commission, which of the following is true?

- There were no problems with the way Hong Kong police handled the arrest and detainment of demonstrators
- Hong Kong police were praised for making so many arrests, but the Asian Human Rights Commission felt police could have handled the prisoners in a more humane manner following the arrests
- The Asian Human Rights Commission condemned the action of the Hong Kong police and say the protestors were treated brutally and inhumanly
- The Human Rights Commission felt media coverage of the arrests was very one sided and portrayed those arrested in a poor light
- I don't know

When you are finished answering the above questions, please click on the "Submit Survey" button below to continue.

[Submit Survey](#)

Appendix H

Final Questionnaire

Final Questions

Please answer the following questions. After answering all of the questions, please click on the "Submit Survey" button at the bottom of the page.

1) Please enter your subject ID number. (You MUST answer this)

2) To what degree would you describe the website (ohmynews.com) to be trustworthy?

Not at all
believable

Very
believable

1 2 3 4 5 6 7

3) To what degree would you describe the website (ohmynews.com) to be believable?

Not at all
believable

Very
believable

1 2 3 4 5 6 7

4) To what degree would you describe the website (ohmynews.com) to be reliable?

Not at all
reliable

Very
reliable

1 2 3 4 5 6 7

5) To what degree would you describe the website (ohmynews.com) to be authoritative?

Not at all
authoritative

Very
authoritative

1 2 3 4 5 6 7

6) To what degree would you describe the website (ohmynews.com) to be honest?

Not at all
honest

Very
honest

1 2 3 4 5 6 7

7) To what degree would you describe the website (ohmynews.com) to be biased?

Not at all
biased

Very
biased

1 2 3 4 5 6 7

8) The people who created ohmynews.com are credible.

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

9) The people who created ohmynews.com have high integrity.

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

10) The people who created ohmynews.com have a positive reputation.

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

11) **The people who created ohmynews.com are successful.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

12) **The people who created ohmynews.com are trustworthy.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

13) **How often do you watch television?**

never very rarely rarely occasionally often very often all the time

14) **How often do you read the newspaper?**

never very rarely rarely occasionally often very often all the time

15) **How often do you listen to the radio?**

never very rarely rarely occasionally often very often all the time

16) **How often do you use the Internet/Web?**

never very rarely rarely occasionally often very often all the time

17) **How would you characterize your level of expertise in using the Internet/Web?**

Not an
Expert

Expert

1 2 3 4 5 6 7

18) **How much experience do you have using the Internet/Web?**

No
Experience

Much
Experience

1 2 3 4 5 6 7

19) **Which one of the following media do you use to get news most often?**

Internet Newspaper Radio Television Other (please specify)

If you selected other, please specify:

20) **From which of the following media do you prefer to get your news?**

Internet Newspaper Radio Television Other (please specify)

If you selected other, please specify:

21) **Do you ever use the Internet to get news on-line?**

never very rarely rarely occasionally often very often all the time

22) **Have you ever created or worked on your own online journal or weblog?**

never very rarely rarely occasionally often very often all the time

23) **Have you ever created or worked on your own webpage?**

never very rarely rarely occasionally often very often all the time

24) **Have you ever shared something online that you created yourself, such as your own artwork, photos, stories, or videos?**

never very rarely rarely occasionally often very often all the time

25) **Have you ever contributed content to a participatory or citizen journalism site? (A news site where much of the content is written by ordinary citizens, not journalists. For example: backfence.com,ibrattleboro.com, mymissourian.com, ohmynews.com)**

never very rarely rarely occasionally often very often all the time

26) **Prior to this study had you ever heard of participatory or citizen journalism? (A news site where much of the content is written by ordinary citizens, not journalists. For example: backfence.com,ibrattleboro.com, mymissourian.com, ohmynews.com)**

Yes No

27) **Prior to this study had you ever visited a participatory or citizen journalism site?** (A news site where much of the content is written by ordinary citizens, not journalists. For example: *backfence.com*, *ibrattleboro.com*, *mymissourian.com*, *ohmynews.com*)

never very rarely rarely occasionally often very often all the time

28) **I usually trust people until they give me a reason not to trust them.**

never very rarely rarely occasionally often very often all the time

29) **I generally give people the benefit of the doubt when I first meet them.**

never very rarely rarely occasionally often very often all the time

30) **My typical approach is to trust new acquaintances until they prove I should not trust them.**

never very rarely rarely occasionally often very often all the time

31) **What is your sex?**

Male Female

32) **How old are you?**

18 19 20 21 22 23 or older

33) **In terms of the number of college credits completed, which one of the following do you consider yourself to be?**

Freshman
 Sophomore
 Junior
 Senior
 Don't know
 Other (please specify)

If you selected other, please specify:

34) **What is your race?**

Caucasian Black Middle Eastern Asian Native American Pacific Islander Hispanic Other (Please specify) Other (please specify)

If you selected other, please specify:

When you are finished answering the above questions, please click on the "Submit Survey" button below.

Thank you for participating in today's study.

If you have any questions you can contact the researcher at johnsonka@etown.edu or (717) 361-1258.

You are free to leave the study area after you click the "Submit Survey" button below.

Appendix I

Writer Information Questions

11) **The information on the writer's background was helpful in determining whether or not the story was credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

12) **I found the picture of the writer to be helpful in determining whether or not the story was credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

13) **I thought the writer in the picture looked credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

Appendix J

Hyperlink Questions

14) **Just the fact that the story contained hyperlinks (even if you didn't click on them) made the story seem credible.**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

15) **I found the hyperlinks in the story helpful in determining whether or not the story was credible (If you didn't click on any hyperlinks, skip this question)**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

16) **I found the hyperlinks in the story enhanced the credibility of the story. (If you didn't click on any hyperlinks, skip this question)**

Strongly
Disagree

Strongly
Agree

1 2 3 4 5 6 7

Vita

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EDUCATION:

- June 2008, Ph.D., Information Science and Technology, Drexel University, Philadelphia, Pa.
- May 2002, M.S., Telecommunications, Kutztown University, Kutztown, Pa.
- May 1996, B.A., Broadcast News, Drake University, Des Moines, Ia.

EXPERIENCE:

- August 2003-Present: Assistant Professor, Department of Communications, Elizabethtown College, Elizabethtown, Pennsylvania.
- February 2007-Present: Online Consultant, Lancaster Newspapers.
- 1998-2003: News Producer, WGAL-TV in Lancaster, Pennsylvania.

PROFESSIONAL ACTIVITIES:

- Allen, R.B., Johnson, K.A. (in press). Preserving Digital Local News. *The Electronic Library*.
- Johnson, K. (2007, September). The Impact of Hyperlinks and Writer Information on the Credibility of Stories on a Participatory Journalism Web Site. *Proceedings of INTERACT 2007*, Rio de Janeiro, Brazil, September 10-14,
- Johnson, K. (2007, August). Markers of Credibility on Citizen Journalism Web Sites. *Proceedings of the 12th International Conference, HCI International 2007, Beijing, China, July 22-27*, 1099-1103.
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- February 2007: Presentation, Pennsylvania Newspaper Association, Harrisburg, Pa. *The Virtual Newsroom and Citizen Journalism: Driving Reader Provided Content*.