MILLENNIAL ASSESSMENT OF CREDIBILITY

AMONG NEWS SOURCES

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DEDICATION

I dedicate this thesis to my husband, Matt, and my daughter, Cameron, who supported me from start to finish.

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ABSTRACT

With so many types of news sources available on the Web, this study sought to examine where those in the millennial generation are turning for credible news and how they are assessing the credibility of that news. A total of 207 participants were asked to use the Web as they would naturally to find news information about a given topic. They were asked to print out a source that they deemed credible, and then complete a questionnaire about their news source and their news consuming habits. The majority of participants turned to the websites of traditional news media sources for information. When evaluating the credibility of their source, participants valued from most to least: type of source, organization of the information, type of information, depth of information, reputation, and presentation. No correlations were found between credibility scores and the frequency of news consumption.

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CHAPTER I

INTRODUCTION: HOW MILLENNIALS ASSESS THE CREDIBILITY OF NEWS SOURCES

Millennials are the next generation of news consumers and, at 77.9 million, they are larger than any previous generation in U.S. history (Rainer, & Rainer, 2011). Thus far, very little research has looked into the news media consumption patterns of millennials. The viability of several news media entities could depend on millennial consumers. Layoffs and coverage area cutbacks at newspapers and magazines across the country are evidence that printed publications are struggling to remain profitable, but such publications still have hope for their online products. The Web has limitless news sources from blogs and social media to traditional news outlet websites and news aggregates. Therefore, the Web seems like the perfect news solution for millennials, who love to use digital technology to access information (Prensky, 2001; Tapscott, 1998; Palfrey, & Gasser, 2008; Rainer, & Rainer, 2011). However, the limitless information available on the Internet can also create information overload for millennials who are not quite comfortable navigating on their own (Palfrey, & Gasser, 2008).

More research in this area is important because it can help news organizations tailor their information to the news consuming patterns of millennials. By allocating their resources most effectively, news organizations can remain viable and even grow their readership and/or viewership. While the world has many more news media consumers who are not millennials,

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news organizations need to begin thinking with an eye toward the future so that they can make their products relevant in the daily lives of millennials as they continue to age. This thesis expands on past work, which has looked at the trends of online media consumption in all age groups.

This study applies the principles of uses and gratifications approach, which seeks to explain the way people use mass communications to satisfy needs and achieve goals (Katz, Blumler, & Gurevitch, 1974). This approach is drawing the attention of several scholars who argue that the ideas behind the approach are even more relevant in today's world of digital media than ever before (Siraj, 2007; Ruggiero, 2000; and Sundar, & Limperos, 2010).

The uses of news information are related to credibility assessment, a hot topic for research in recent years. With the increasing popularity of online news resources, anyone and everyone can create Web content (Metzger, 2007; Howe, 2008; Tapscott, & Williams, 2006; Boas, 2006). While Flanagin and Metzger (2000) found that average news consumers consider news information online more credible if it is from a known news organization as opposed to a blog or social media outlet, it is unknown if millennials feel the same way. Millennials have proven that they are team-oriented with strong ties to friends and family (Moore, 2007). On a daily basis, they are using cell phones and the Internet to keep in constant contact with the people they care about. Scholars have yet to explore how millennials are assigning credibility to news information considering these relational bonds and technology devices.

Trust is also a big issue with millennials. As a whole, this generation not only trusts authority figures, but comes to depend on those authority figures for guidance (Moore, 2007). To further examine this connection, Borah, Vraga, & Shah (2009) researched how parents'

media perceptions are influencing millennials' opinions about news credibility as it relates to politics. They found that adolescents tended to be more critical of news information if their parents were more vocal about their scrutiny of the media.

Methodology

This pilot study considers where millennials are turning to for news media and how they decide if that news is credible. The project required millennial participants to complete an exercise asking them to search the Web for credible news information on a recent news item. After identifying and printing their news items, participants completed a quantitative post-test questionnaire about their news item as well as their news consumption habits.

In this research, questions about the final credible source that participants identified were based on the evaluation criteria that Rieh (2002) identified in earlier work. Her study was similar to this proposal in that participants were asked to find information on the Web that they considered high quality on four general topics. In her Web credibility analysis, Metzger (2007) identified Rieh's work as significant because it suggests that Web users consider the information itself and the source when assessing credibility. Rieh's areas of evaluation include the type of information object, its content, its presentation, and its structure, as well as the source characteristics of reputation and type of source.

Research Questions

RQ1: Where do millennials go on the Web when they are seeking credible news information?

RQ2: What criteria is perceived as most important when assigning credibility?

RQ3: How significant of a role do social networking websites play in news consumption?

Key Words

Credibility, Internet News, Millennials, Interactive Media, Media Literacy

CHAPTER II

THEORETICAL FRAMEWORK

Introduction to Uses and Gratifications Approach

This research project applies the uses and gratifications approach, which offers an explanation for why people are mass media consumers. Siraj (2007) defines gratifications as an individual's rewards or satisfactions obtained from mass media. The approach (sometimes referred to as U&G) relies on the belief that the audience is not a passive group of media consumers, but a group that is active in its selection of media content. In some of the introductory writings about the approach, Katz, Blumler and Gurevitch (1974) describe uses and gratifications approach as a way to explain the way people use communications to satisfy needs and achieve goals. The model contains these elements (Katz, Blumler, & Gurevitch, 1974):

1. The audience is active and goal-directed.
2. Audience members choose specific media sources to meet their need gratifications.
3. Media compete with other sources—including non-media—to satisfy needs.
4. People recognize their own needs.
5. People should withhold value judgments about the mass media until audience orientations are researched further.

A crucial aspect of the approach is identifying and analyzing the gratifications obtained. Katz, Blumler, and Gurevitch (1974) identified these as some of the functions that mass media serves: escape, companionship, personal identity, and surveillance. Posner (2006) describes people's motives for consuming news and opinion as opportunities to learn about things important to their lives. The news also serves as a source of entertainment and is a place to learn about scandals and crime as well as the goings-on of celebrities and politicians. He indicates that news consumers "want to be confirmed in their beliefs by

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seeing them echoed and elaborated by more articulate, authoritative and prestigious voices" (Posner, 2006, pg. 56). Katz, Blumler, and Gurevitch (1974) also determined that mass communication is used to connect with family, friends, society and one's self. The same media source can serve a variety of needs and functions among different audience members. In other words, everyone uses media differently, and media sources have varying meanings among different people.

A recent Pew study found that the majority of people report that they follow the news to fulfill civic responsibilities and so that they can socially interact with others (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010). Seventy-two percent of survey respondents said one reason they consume news is because they enjoy talking about it with friends, family and work colleagues. Sixty-nine percent said they had a civic or social responsibility to stay informed. The Pew study also found that 92 percent of Americans use multiple news platforms, such as TV, the Internet, newspapers and radio, to get daily news. Fifty-nine percent of people use the Internet as one of their news sources, and while online, people use two to five news sources (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010).

A great deal of research about uses and gratifications approach was compiled by a scholar named A.M. Rubin. In Haridakis and Whitmore's (2006) comprehensive overview of the approach, they note Rubin's contemporary view of uses and gratifications approach that includes the ideas that people take the initiative in selecting and using communication vehicles to satisfy their needs, and people are typically more influential than media in the relationship, but not always. These assumptions are particularly helpful when predicting news consumption patterns of those in the millennial generation.

Rubin also identified two types of media orientations: ritualized, such as using a medium to pass the time, and instrumental, using media content more purposively for informational reasons (Haridakis, & Whitmore, 2006). He said ritualized use reflects less intentionality, selectivity and involvement with the content than instrumental use. Research about news consumption and millennials may benefit from the instrumental media orientation because it directly examines how people are selecting credible news sources.

Historically, criticisms of uses and gratifications approach have included that the approach relies too much on self-reporting, it is unsophisticated about the social origin of the needs that audiences bring to the media, and it is not critical enough of possible audience dissatisfaction (Ruggiero, 2000). These factors are all important considerations when examining research based on uses and gratifications approach.

Uses and Gratifications Approach and New Media

Uses and gratifications approach is also useful when applied to research that focuses on new media (Siraj, 2007), which is described as all digital avenues used for mass communication, such as Web capabilities that include interactive content, multimedia, computer applications, e-mail and more. In fact, Ruggiero (2000) argues that uses and gratifications approach is possibly more relevant today, with new media, than ever before. However, he suggests that new models need to be included when researchers consider the approach in regard to electronic communication. New models may include the concepts of interactivity, demassification and asynchroneity. Bucy (2004) makes the distinction that interactivity requires some form of two-way communication, whereas photo slideshows and videos are considered multimedia content. Demassification is the concept that media users have a wider selection of media to choose from, and thus can tailor messages to their needs.

Asynchroneity means that messages can be stored, duplicated or shared at the user's convenience, which gives users more control than traditional media sources (Ruggiero, 2000).

Additional scholars are also calling for new models to measure uses and gratifications with new media. Sundar and Limperos (2010) suggest that traditional uses and gratifications measurement models are too broad when applied to new media because traditional measurement techniques do not expand beyond needs to explore all possible influences on users' gratifications. Their work also challenges the idea that gratifications are created from our inherent needs and proposes that new media technology can shape user needs, which creates more specific gratifications. ". . . The notion of an active audience has steadily moved from an assumption to obvious reality. Internet audiences are so active now that we seldom refer to them as 'audiences.' Instead, we call them 'users' in keeping with the letter and spirit of the U&G paradigm" (Sundar, & Limperos, 2010, pp. 3).

Using social networking websites as an example, Sundar and Limperos (2010) suggest that technological advances create new user needs that people seek to gratify from media experiences. They argue that the interactivity of new media allows users to lack goal direction at the beginning of their media use, but to develop needs during the interaction process. Historically, uses and gratifications approach has distinguished between gratifications obtained from media content and gratifications obtained from using the media. However, Sundar and Limperos (2010) point out that neither the media content nor process is set when users browse the Internet.

Another area of media research related to news consumption patterns and uses and gratifications approach is a term called media attendance, which Diddi and LaRose (2006)

describe as the reaction that people have when they are confronted with a plethora of media options. The idea of media attendance suggests that users will fall into a pattern of habitual media consumption to conserve mental resources rather than repeatedly engage in active media selection. Diddi and LaRose (2006) found that college students rely on the Internet for obtaining news, yet they are not abandoning traditional media for new media forms. Instead, the different media forms appear to be complementing each other. The authors suggest that this is partially due to the fact that the most popular online news sources are powered by content from conventional news sources, so new consumption patterns arise while old ones continue.

Socioeconomic status also influences people's Internet usage patterns. Cho, De Zuniga, Nah, Humane, and Hwang's (2003) study found that young people of high socioeconomic status are most likely to use the Internet to satisfy their motivations and gain their desired gratifications. They are most likely to engage in specific Internet behaviors, such as surveillance and consumption uses, to achieve the gratifications of learning and acquisition. Researchers concluded that while gaps in Internet access are closing, gaps in usage and gratifications gained still continue.

News Consumers Are Also Producers

The changing media landscape brings new meaning to the notion of a participatory news audience. New media has enabled people to not only consume news information available on the Web, but to begin producing their own content and sharing it with other users (Palfrey, & Gasser, 2008; Tapscott, & Williams, 2006; and Howe, 2008). A recent Pew study found that 46 percent of millennials surveyed consider themselves news participators because of their content creation, commentary or the act of sharing news online (Purcell,

Rainie, Mitchell, Rosenstiel, & Olmstead, 2010). "The most creative young people are interacting with news, works of entertainment, and other information in ways that were unimaginable a few years ago. These young people are not passive consumers of media that is broadcast to them, but rather active participants in the making of meaning in their culture" (Palfrey, & Gasser, 2008, pg. 131).

Tapscott and Williams (2006) and Howe (2008) suggest a power shift is taking place that indicates the once all-powerful mainstream media is now vying for audience attention among amateur news producers. They also suggest that the changes extend beyond the media landscape and are affecting commerce. "We are becoming an economy unto ourselves — a vast global network of specialized producers that swap and exchange services for entertainment, sustenance, and learning. A new economic democracy is emerging in which we all have a lead role" (Tapscott, & Williams, 2006, pp. 15).

Tapscott and Williams (2006) use the term "prosumption" to describe how the difference between producers and consumers is no longer visible. Consumers now participate in the creation of the products they consume. Citizen journalism is a perfect example of prosumption in action. ". . . A person can seamlessly shift from consumer to contributor and creator" (Tapscott, & Williams, 2006, pp. 143). Tapscott and Williams (2006) argue that prosumption will enable the media to reflect more balance, fairness and accuracy in news coverage. "Media organizations that fail to see the writing on the wall" about the changes possible as a result of prosumption "will be bypassed by a new generation of media-savvy prosumers who increasingly trust the insights of their peers over the authority of CNN or the Wall Street Journal." (Tapscott, & Williams, 2006, pp. 147)

Building on Tapscott and Williams' (2006) work, Howe (2008) coined the term

"crowdsourcing" to describe the act of outsourcing tasks traditionally completed by an

employee to an undefined, large group of people through an open call. He claims that media

are at the front of this movement because of the general public's accessibility to affordable,

user-friendly equipment and software. User-generated content is the product of

crowdsourcing (Howe, 2008), and although much of user-generated content is amateurish, a

portion of it is innovative and allows for new ideas and advancement.

Howe (2008) estimates that less than 10 percent of user-generated content draws the

attention of anyone outside of the creator's circle of friends and family. However, he suggests

that 10 percent is actually captivating a significant portion of the public's attention.

"According to my rough estimate, as of February 2008, YouTube was hosting some 80

million videos. If even 1 percent—or 800,000 videos—can compete with some of the fare

that passes for entertainment on television, it would explain the persistent and growing

popularity of all the stuff on the Web that wasn't created by a major label or big movie

studio." (Howe, 2008, pp. 76)

Also consistent with Palfrey and Gasser's (2008), Tapscott and Williams' (2006), and

Howe's (2008) work is a Pew Internet & American Life Project survey that found "people's

relationship to news is becoming portable, personalized and participatory" (Purcell, Rainie,

Mitchell, Rosenstiel, & Olmstead, 2010, pp. 2). The report indicates that news consumption

is becoming a "shared social experience" (pp. 2) because people frequently share and

comment on the news items they find. More than eight in 10 online news consumers share e-

mail news links. The Pew study reports that news consumption behavior is being influenced

by social media websites and blogs as well as mobile Internet access on devices such as cell phones.

However, contrary to Palfrey and Gasser's (2008), Tapscott and Williams' (2006), and Howe's (2008) work, the Pew's survey found that most people's participatory role comes in the form of sharing and commenting on news items, not in actually producing news content (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010). Clearly, more research is needed to examine who is producing news content and what gratifications are received from that action.

Summary

Uses and gratifications approach is based on the concept that the audience is not a passive group of media consumers, but a group that is active in its selection of media content. In some of the introductory writings about the approach, Katz, Blumler and Gurevitch (1974) describe uses and gratifications approach as a way to explain the manner in which people use communications to satisfy needs and achieve goals. They identified these as some of the functions that mass media serves: escape, companionship, personal identity, and surveillance. Posner (2006) describes people's motives for consuming news and opinion as opportunities to learn about things important to their lives. The news also serves as a source of entertainment and is a place to learn about gossip and crime as well as actions of public figures.

With the popularity of new media, uses and gratifications approach is possibly more relevant today than ever before (Ruggiero, 2000). However, new models need to be included when researchers consider the approach in regard to electronic communication. New models may include the concepts of interactivity, demassification and asynchroneity (Ruggiero,

2000). The changing media landscape also brings new meaning to the notion of a participatory news audience. New media has enabled people to not only consume news information available on the Web, but to begin producing their own content and sharing it with other users (Palfrey, & Gasser, 2008; Tapscott, & Williams, 2006; and Howe, 2008). A Pew Internet & American Life Project survey that found "people's relationship to news is becoming portable, personalized and participatory" (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010, pp. 2).

Definitions

New media: Refers to all digital avenues used for mass communication, such as Web capabilities that include interactive content, multimedia, computer applications, e-mail and more.

Millennials: Those born between 1980 and 2000 (Rainer & Rainer, 2011).

Prosumption*:* A term used to describe how the difference between producers and consumers is blurring (Tapscott and Williams, 2006).

Gratifications: An individual's rewards or satisfactions obtained from mass media (Siraj, 2007).

Demassification: The concept that media users have a wider selection of media to choose from, and thus can tailor messages to their needs (Ruggiero, 2000).

Asynchroneity: Messages can be stored, duplicated or shared at the user's convenience, which gives users more control than what they were accustomed to with traditional media sources (Ruggiero, 2000).

Media Attendance Theory: suggests that when users are given a plethora of media options, they will fall into a pattern of habitual media consumption to conserve mental resources rather than repeatedly engaging in active selection (Diddi, & LaRose, 2006).

Crowdsourcing: term to describe the act of outsourcing tasks traditionally completed by an employee to an undefined, large group of people through an open call (Howe, 2008).

CHAPTER III

REVIEW OF LITERATURE

Meet the Millennials

The term millennial generation refers to those born between 1980 and 2000 (Rainer & Rainer, 2011). These youths are the first generation to grow up surrounded by digital technology (Prensky, 2001a; Rainer & Rainer, 2011; Howe, 2008; Palfrey, & Gasser, 2008). Prensky (2001a) refers to millennials as Digital Natives because they are native speakers of the digital language, are used to receiving information very quickly and like to multi-task, as opposed to those in older generations who are considered Digital Immigrants because they learned how to use digital technology but did not grow up with it. To help magnify the distinction, consider that by the time average college students graduate today, they have spent less than 5,000 hours of their lives reading, but more than 10,000 hours playing video games and 20,000 hours watching television. Text messaging, surfing the Web, and playing video games are part of their daily routines (Prensky, 2001a), and they know that information can be reshaped into many forms (Palfrey, & Gasser, 2008).

Palfrey and Gasser (2008) contend that digital natives are not a generation because the majority of the world's population still does not have access to digital technologies; they refer to Digital Natives as a population. However, for the purposes of this research, it can be assumed that the millennials referred to do have access to digital technologies because those that have been studied in the literature reviewed here live in developed nations.

While proficiency with digital technologies helps define the millennials, the group certainly has other characteristics. Tapscott (1998) claims that previous descriptions of

millennials as "materialistic, self-absorbed, cynical and demanding of immediate gratification" (p. 9) are inaccurate. Millennials do value material goods, but they are not self-absorbed. He points out that they are the most educated generation, and they care deeply about social issues. "They have no ethos of individualism, thriving instead on close interpersonal networks and displaying a strong sense of social responsibility" (p. 9).

Millennials also differ from previous generations regarding their relationships with family, friends and others who hold influential positions, such as teachers. Millennial parents are the most influential, followed by friends and extended family for secondary support (Rainer, & Rainer, 2011). Half of all millennials see their parents in person every day, and 45 percent talk to their parents daily on the phone (Winograd, & Hais, 2008). Millennials are group- and community-oriented, and they tend to share their thoughts and activities with the people they have formed relationships with, unlike the baby boomers and Gen-Xers that came before them (Winograd, & Hais, 2008).

Millennials' strong relationships play an important role when they are forming opinions and making decisions. When obtaining political information to form an opinion, baby boomers and Gen-Xers tend to give more importance to traditional media such as print, radio and materials from candidates (Winograd, & Hais, 2008). In contrast, millennials tend to rely on the Internet and personal interactions with friends, parents and siblings to influence their decisions. It can be assumed that this approach to opinion formation carries over to other current events and not just political issues.

Winograd and Hais (2008) concluded that the best way to reach millennials is through their friends on the Internet. Two-thirds of millennials they surveyed reported that their friends were their most important source of information about what is "cool." Rounding out

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the top five, from most influential about what's "cool" to least, were the Internet, magazines, cable TV and parents.

In opposition to the idea that millennials are community-oriented, at least one scholar argues that advancements in news media consumption have lead to other consequences. Serazio (2008) contends that today's media environment mirrors the values and character of millennials (which he refers to as Generation Mash-up). He notes new media technologies focus on individualization, segmentation and customization, which create a "cultural fragmentation" that may make it difficult for millennials to form a generational identity.

Computers, the Internet, satellite and wireless communications affect almost every aspect of contemporary life. Millennials expect their communication tools to be temporary and continuously advancing technologically (Serazio, 2008). Serazio suggests that if a generation sees its communication tools as only a "brief iteration of progress" (p. 31) it can also view itself in that same way. As a result of permanently upgradeable technologies, Serazio argues that millennials tend to have high expectations and a sense of entitlement. Today's media environment allows millennials to get a sense that they are not just media consumers alongside people in older generations, but that they are in advance of them because of their natural instincts with digital technology (Serazio, 2008).

Serazio's point about digital media fundamentally affecting the millennial way of life is an argument that other scholars can agree with, but Howe (2008) suggests that millennials are warranted to their sense of entitlement. "They can concentrate on multiple projects simultaneously, they collaborate seamlessly and spontaneously with people they've never met, and most important, they create media with the same avidity that previous generations consumed it" (Howe, 2008, p. 261). Howe argues that millennials will thrive and form close

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bonds in communities of crowdsourcing, a term that he uses to describe the act of outsourcing tasks traditionally completed by an employee to an undefined, large group of people through an open call. Copying and pasting content and sharing links are viewed as entertainment pastimes for millennials.

Beyond ideas about how digital technology is shaping the millennial generation is the question of how these individuals are processing media information, which is a concept known as digital literacy. Prensky (2001a) states that today's youths think and process information fundamentally differently than previous generations. They develop "hypertext minds" that jump from place to place as if their cognitive structures were parallel as opposed to sequential (Prensky, 2001b). They prefer graphics before text and function best as part of a network. As one can imagine, comfort with technology plays a big factor in people's preferred method of news consumption as well as their patterns of use.

Current News Environment

Introduction and Web News History

The first generation of online news appeared in the 1990s when news organizations learned how to take their print efforts online (Deuze, 2003). Brown (2000) described Internet news at the time of the new millennium as second generation because of the ability of news outlets to publish stories around the clock, which created online news communities. Writing about it before it caught on with the masses, Brown (2000) referred to today's news landscape as the third generation of Internet news. He stated that this generation is defined by mobile devices and multimedia content such as video clips. Brown (2000) claims that this third generation of Internet news presents opportunities for journalists to become engaged with readers as they explore new storytelling tools. "The passive newscast and the hours-old

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newspaper are being replaced by fresh, refocused products that use technology to bring people closer to the news, to educate, inform and entertain them" (Brown, 2000, p. 1). But today, not only are people getting closer to the news, they *are* the news, thanks to user-generated news information. The concept of sharing user-generated content took shape after the terrorist attacks of Sept. 11, 2001 (Trench, 2004). In the aftermath of the attacks, news consumers demanded more information, so news agencies turned to victims' and observers' stories and video recordings. Now, users generate their own content about all types of news subjects.

Today's news consumption environment is defined by technological advances, generational differences, and "a new kind of hybrid news consumer/participator" (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010, p. 8) with online news leading the way. "The 'wired society' or the 'networked society' becomes both a statement about the telecommunications infrastructure and a metaphor for a society that is more equitable and more open" (Trench, 2004, pg. 205). A Pew survey about participatory news consumers found that the Web has beaten out newspapers and radio in terms of popularity of a news platform and now ranks only behind television (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010). Deuze (2003) states that scholars and professional journalists regard online journalism as a "fourth" kind of journalism alongside print, radio and television. Most traditional news organizations have established a Web presence as a way of generating more revenue (Choi, Watt, & Lynch, 2006). Digital media news sources such as portal sites and online-only news sites compete with these traditional news outlet websites, but the competition also extends beyond the online realm. "The notion that people have a primary

news source, one place where they go for most of their news, in other words, is increasingly obsolete" (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010).

Whether consuming news on a traditional media website or via a social networking website, online news is characterized by interactivity, immediacy and liquidity (Karlsson, & Stromback, 2010). Users expect to interact with the authors of the information as well as people in their online community or social network (Bucy, 2004). This interactivity is changing the news industry communication model from a one-to-many model to a new model that allows for many-to-many communication (Chung, 2008). Immediacy refers to the shortened time between when a news organization learns about a news story and when that information is published, as opposed to waiting for a nightly news broadcast or a morning newspaper. Online stories also can be updated as more information becomes available, which often means that the first version of an online story is incomplete. When interactive features and immediacy are considered together, they demonstrate the liquidity, or ever-changing nature, of online news (Karlsson, & Stromback, 2010). Interactive features allow users to contribute to the news gathering process and changes the notion that the news organization is in complete control of the content.

Despite all the new advances of the Web, Trench (2004) argues that online news has yet to create a new standard for journalism, even though users are now able to contribute to news content, unlike in previous times in history. Part of the reason that online news is not living up to its potential, Trench argues, is because interactive features are not being used regularly or at an even level across the media sectors. Users' abilities to customize their news experience also complicate any possibilities of creating new standards for journalism. In today's news environment, people choose to pay attention to news based on their interest in

the issue, the perceived usefulness of the information, accompanying photos or images, mood, anticipated activities, and level of prior knowledge or exposure to the subject matter (Sundar, Knobloch, & Hastall, 2005).

The Internet is also influencing the way journalists gather information for the news stories they produce. Cassidy (2007) found that in the past decade, the Internet has increasingly become a tool that journalists turn to during the news gathering process. Journalists questioned in Cassidy's study indicated that they perceive online news produced by fellow journalists as moderately credible.

Interactivity

In today's news environment, media entities must provide news consumers with more than just the facts in order to stay competitive. Meyer, Marchionni and Thorson (2010) found that news consumers enjoy being part of the story—they no longer want the one-to-many communication model that media moguls used in generations' past to inform the public of important news events.

However, providing news consumers with interactive content requires much more planning on the journalists' part. Online journalists have to make decisions about which media format or formats best lend themselves to telling a particular story, which typically requires factoring in multimedia (Deuze, 2003). Online journalists also have to consider how users will be able to respond to stories, which lends itself to the interactivity component. And lastly, online journalists need to identify other content, such as older news stories, documents or other resources, that supplement the story, which fulfills hypertexuality characteristics.

Online News Habits

With all the new media capabilities on the Web, it is crucial to study how people are actually using them. In the Pew study "How mobile devices are changing community information environments," Purcell, Rainie, Rosentiel, and Mitchell (2011) found that of those who use cell phones or tablets to access news information, more than half (51 percent) use six or more sources monthly to get local news. Of the cell phone and tablet news consumers, 75 percent report using social media sites.

But just because the Web is exploding with information does not mean it is the only source that people are turning to for news. Bucy (2003) reports that more and more people are telewebbing, a term he used to describe surfing the web while watching television, with 18-34-year-olds the most frequent group to engage in this activity. Participants who practiced telewebbing evaluated TV and online news credibility higher than a group that just consumed online news. The Pew study was complementary to Bucy's findings. It found that mobile devices such as smart phones and tablet computers are viewed as a supplemental source for news information, but not a primary source (Purcell et al, 2011). The study found that young people are more likely to use mobile devices for specific types of local news and information. In the 18-29 age group, 70 percent reported using cell phones or tablet computers to get local news and information. Pew researchers suggest that as millennials age, mobile devices are likely to gain in popularity for news consumption.

The social nature of online news is a huge part of what makes it so attractive. Of those who receive news information online, three-quarters get news forwarded to them via e-mail or posts on social networking sites (Purcell, Rainie, Rosentiel, & Mitchell, 2011). Of those who receive e-mail news information, 50 percent reported sharing that information with others. Twenty-eight percent of all Internet users get news via social networking with

friends, and 23 percent of social networking users who consume online news information

report getting news from news organizations and individual journalists that they follow on

social media websites. Overall, 30 percent of Internet users get news from friends,

journalists, or news organizations they follow on social networking websites. What is more,

44 percent of online news consumers factor in the capabilities of sharing news content with

others when choosing websites for news online (Purcell, Rainie, Mitchell, Rosenstiel, &

Olmstead, 2010), and younger news consumers have significantly more attachment to the

social features of news websites than do people in other age groups.

Agenda Setting, Customizing News and User-Generated Content

　　　Traditional media entities such as newspapers and television news affiliates have long

been known for "setting the news agenda" for news consumers because of the linear format

and space or time allocations for the news presented. Agenda-setting theory (McCombs, &

Shaw, 1972) suggests that the public places importance on news items based on the emphasis

that the mass media places on those news items. In contrast, online news websites allow

users to set their own news agendas, or customize their news, because of the nonlinear format

used on news websites (Conway, & Patterson, 2008; Burbules, 1998). Burbules (1998) notes

that the nonlinear format created by hypertext links within website content means that users

have no beginning, middle or end when they are consuming news. "'Text' becomes

something more than merely a collection of printed words on pages: it becomes a

performance, a journey, an arena of exploration and experimentation, inviting many different

kinds of readerly responses" (Burbules, 1998, p. 106-107). In fact, Chaffee and Metzger

(2001) suggest that in the near future, scholars may change their focus from the effects that

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the media has on people to what people are doing with the media. They argue that as society moves forward, social control from elite groups will be diminished.

However, a lack of an agenda-setting effect could result in other noteworthy changes to the news landscape. As people gain the ability to personalize their news content, fewer people may be exposed to stories about important issues (Tewksbury & Althaus, 2000; Chaffee and Metzger, 2001). Because of this, online news publications may develop a readership of poorly informed users. One fear, with so many news sources and topics, is that people will not be able to come together in large numbers to make an impact for any given cause (Chaffee, & Metzger, 2001).

Scholars have started researching the effects of Web browsing to fit users' individual news interests. In Conway and Patterson's (2008) research, they found that participants who had watched a television news broadcast had free recall of a much larger percentage of the journalist-determined top stories than an Internet group. However, the Web users remembered a much broader range of news stories because they had many more possible stories to follow than the rigid line-up of the television broadcast. For their study, Tewksbury and Althaus (2000) compared the user experiences of those who read the newspaper edition of the *New York Times* and those who read the news content online. The online format "severely mutes the effect of editorial presentation decisions" (Tewksbury & Althaus, 2000, p. 461). Variables such as headline size, article length and visuals that guide readers' choices in the newspaper may not be distinguishable online. Tewksbury and Althaus (2000) found that online readers of the *New York Times* were less likely to begin reading international, national and political news. These readers were also less likely to recall reading national and political news and were more likely to recall business and other news topics. This study

found that the mode of delivery had the greatest effect on the most prominent stories of the day. Researchers also found evidence that salience cues related to online news formats can substantially redirect reader attention. ". . . When online editors give special prominence to the most up-to-the-minute news, readers are willing and able to follow their lead" (Tewksbury & Althaus, 2000, p. 472).

On a related topic, Chaffee and Metzger (2001) argue that new media technologies are allowing for the "demassification" of mass communication, and they suggest that the masses are being broken down to niche groups with information tailored for each one's interests. This change allows smaller media outlets to enter the landscape and be competitive. However, with more control over news content in users' hands, people collectively are becoming knowledgeable about a broader range of topics, but individually not so much (Tewksbury & Althaus, 2000). To help combat this problem, Trench (2004) contends that journalists can best serve news consumers by "providing a map" (pg. 208) to the most significant materials and letting users determine what they will do with that information based on their interest in the issue. Similar to demassification is the fact that with advances in digital news information, no two people have the same media experience because of the different hyperlink capabilities that can allow users to adjust their Web browsing to their interests (Chaffee, & Metzger, 2001). These new capabilities give researchers cause for re-evaluating or extending previous mass communication models.

An Overwhelming Volume of Information

The Internet has created an explosion of news information. "The public's consumption of news and opinion used to be like sucking on a straw; now it's like being sprayed by a fire hose" (Posner, 2006, p. 55). The addition of so many media sources makes

attracting consumers highly competitive, and thus, more prone to sensationalism (Posner, 2006). Despite the plethora of information available on the Web, Palfrey and Gasser (2008) suggest that the Internet follows the "80/20 rule" (p. 195): about 20 percent of websites attract 80 percent of all Web traffic.

Not only is the amount of information vast, but it is also very challenging to navigate. Even though a keyword search for news can garner 50,000 results, Burbules (1998) argues that the information is useless because of its inability to narrow the parameters of the search to really provide users with the information they seek.

> "The sheer overwhelming volume of material may (and I have suggested will) foster a kind of nostalgia for the time when editors, publishers, librarians, archivists and other scholars performed the task of altering, evaluating and organizing material in a useful format for others. And while the Web may vastly increase the number of people performing such functions (raising the issue of credibility again at a second-order level), the number of people who can or will practically perform such selecting or sorting functions for themselves will always remain relatively small" (Burbules, 1998, p. 119).

Credibility in the Current News Environment

The Web has not only affected users' news consuming habits, but it also has a huge impact on how people perceive the credibility of news information. News consumers still consider newsworthiness and credibility when selecting which news items to read, but they no longer rely on text size or front-page placement when choosing what to read (Sundar, Knobloch, & Hastall, 2005). On the Web, people often turn to multiple news sources for information about the same subject, which Choi, Watt and Lynch (2006) explain has to do with different perceptions of credibility. For instance, one type of media may be viewed as most optimal for in-depth news coverage while another is thought to provide more timely information. "There is an emerging perspective on media credibility studies that news

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credibility may be a factor in audience involvement in the issue, rather than internal or external characteristics of news content itself. According to this perspective, news credibility is not solely an objective feature of news story or source, but a subjective perception by audiences" (Choi, Watt and Lynch, pg. 215).

The Web can also be seen as another tool for bolstering media credibility. Traditional media outlets have learned that they can enhance their media credibility by establishing a strong Internet presence (Bucy, 2004). Local television affiliates are generating significant online traffic, but newspaper websites are attracting more readers and providing more online content. Another area for news credibility growth on the Web is in the area of video, with newspapers even delving into the medium. Online, video has been found to be more credible than print when it comes to telling a news story (Hyunmin, Sun-A, YoungAh, & Cameron 2010). If video, referred to technically as motion media, appears to have been well-produced and is believable, it is viewed as credible.

Because the Web is ever-changing and the ways people use it continue to evolve, credibility continues to be a crucial consideration for scholars. To help convey today's media challenges, Bucy (2003) provides this explanation for the need to continue examining credibility on the Web: "In a time of rapid technological change and format experimentation, credibility remains central to understanding public perceptions of network news as well as encouraging acceptance of the Internet as a trusted source of news and information" (p. 250-51).

News Consumption

<u>Millennials, Digital Technology and News Consumption</u>

More than 75 percent of teens ages 12-17 use the Internet to get news and information about current events (Palfrey, & Gasser, 2008). Millennials are reportedly spending more and more time online every year, so evidence would suggest that they are decreasing the time spent with other traditional media such as TV, music and print (Palfrey, & Gasser, 2008), but that is not necessarily the case. "By multitasking, Digital Natives have simply come to consume more media content in the same period of time" (p. 191).

Each generation comes of age with a new communication medium of which they are the masters (Kundanis, 2003). For the millennials, the Internet is that medium. Drawing from McLuhan's (1964) statement that the medium is the message and affects how people think and perceive the messages they receive, a dominant communication tool may also affect a generation's communication and problem-solving skills. Kundanis (2003) claims that the Internet is at the heart of a "digital nervous system for our society" that has expanded over the years to become an interactive and personalized form of communication.

Peer-to-Peer Format

Perhaps one of the reasons millennials are drawn to the Web is because it is not controlled by a person or organization in an authoritative position. Tapscott (1998) states that the Internet is "fundamentally different from previous communication innovations" (p. 25-26) because previous technologies only allowed for one-way communication and were controlled by adults. Millennials (whom he calls the Net Generation) were able for the first time to "take control of critical elements of a communications revolution" (p. 26). The Internet is a communications media that is controlled by no one, and that makes people in older generations nervous.

Winograd and Hais (2008) state that the peer-to-peer architecture of the Internet—the fact that anyone and everyone can contribute Web content—places the power in the hands of the users, a concept that millennials have fully embraced. This peer-to-peer format "truly empowers the user, creating a mindset that resists any attempt of any kind to control what is shared, whether it comes from a music industry magnate, publisher, or political power broker" (p. 144). News information previously was controlled by those who owned news establishments, but the Web and its ability to facilitate user-generated content allows the power to flow in the opposite direction (Kushin, 2009; Winograd, & Hais, 2008). "User-generated content is eating away at the very foundation of the news media's fortress" (Winograd, & Hais, 2008, p. 152-153).

Internet Uses

Internet access has been reported to significantly change the way people use the Web. The Center for the Digital Future found that those with continuous access to the Internet, such as through a broadband connection, integrate the Web into their daily activities instead of using it as a disruptive experience (Winograd, & Hais, 2008). Those with continuous access to the Internet are likely to spend more time online for everything from socializing and shopping to researching and downloading music. "And, for most Millennials, it is this world of broadband access to the Internet that is the only world they have ever known" (Winograd, & Hais, p. 142).

To say that millennials enjoy using the Internet is an understatement. About 29 percent of online news users are younger than 30 (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010). Millennials use the Internet for work, entertainment and socializing (Rainer & Rainer, 2011). Of 168 hours in a week, the average millennial spends 17 hours per week

on a computer for work and 17 hours per week on a computer for personal use. Combined, that amounts to nearly a third of millennials' weekly waking hours spent on a computer. "Media has caused attention spans to decrease dramatically. The Millennial Generation is used to short bursts of information. . . . Brevity is a must for the Millennials. Acronyms and abbreviations are a part of the Millennial language" (p. 200).

No discussion about millennials and Internet use would be complete without mentioning social networking websites. Engaged news consumers rely on their social networks as alert systems (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead, 2010). Twenty-two percent of those in the millennial age group rely on social networks for news alerts, and particularly social networks in the form of social media websites.

<u>Millennials and News Content</u>

Another area where more research is needed is in regard to the news media interests of millennials. Kundanis (2003) argues that millennials' coming of age was marked by the events of Sept. 11, 2001. The terrorist attacks helped attract millennials to news issues and the government's response to terrorist threats. Kundanis found that millennials are most interested in issues that affect their lives, such as post-secondary education, violence in schools, the quality of high school education, the environment, poverty and gun control. However, Schwalbe (2009) suggests that millennials top news interests cover issues and events at the local, national, and international levels, and they also enjoy travel news and sports. She found that many millennials look for news and information online to help them understand the world around them.

A recent Pew study found that portal news sites such as GoogleNews are the most frequently used online news sources (Purcell, Rainie, Mitchell, Rosenstiel, & Olmstead,

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2010). The Pew survey also found that the websites of media outlets that have an offline

presence, such as those of cable television, network television and local and national

newspapers, were popular choices. In the 18-29 age group, 68 percent reported using portal

websites on a daily basis, which is a higher percentage than any other age group. Fifty

percent of 18-29-year-olds visit TV organization websites, while 38 percent visit a newspaper

website. Eleven percent regularly read a news blog authored by someone not in the

mainstream media. Thirteen percent check in with a news organization's social media web

page. ". . . Younger online news users tend to frequent more sites on a daily basis. The

youngest online news users, those under age 30, are particularly likely to use portal news

sites and to get news from journalists, news organizations, and others on Facebook" (Purcell,

Rainie, Mitchell, Rosenstiel, & Olmstead, 2010, p. 27). The Pew study also found that news

aggregators such as Yahoo! and MSN are popular with millennials, which indicates that

online news consumers enjoy reading about several topics through the same platform.

Those who choose to use websites from traditional news sources now have more

control over story selection because the sites do not provide as many cues about story

importance as traditional newspapers or television broadcasts. Tewksbury and Althaus's

(2000) study examined whether readers obtained more national, international and political

news in an online format than in a traditional newspaper format. Results indicated that online

users read fewer national, international and political news stories than did newspaper readers,

and online users were also less likely to recognize and recall as many events.

Varying Information About Millennials and News Consumption

Some research discrepancies exist regarding where millennials are finding news

information. In addition, research from Pearson, Carmon, Tobola and Fowler (2009)

compared with work from Schwalbe (2009) shows inconclusive results about whether millennials are using digital technology to seek news information. Schwalbe found that 96 percent of college students have a cell phone that is most often used for phone calls and text messages. Ninety-eight percent of students have Internet access and spend a median of 14.5 hours online every week (Schwalbe, 2009). Millennials use four technological devices — cell phones, televisions, computers and MP3 players — for entertainment, companionship, social interaction and passing time (Pearson et al, 2009). But in contrast to Schwalbe's study, Pearson et al found that youths are less likely to use their devices, in general, for escape or for information.

Schwalbe (2009) contends that millennials are "always on, always connected news grazers" (p. 53) who are very social beings. Her research shows that cable channels and online news have significant influence on how millennials access news. They want to get news, but they want to get it on their own terms, and they want to spend a minimal amount of time consuming news. Those surveyed "dabbled in the news at various times throughout the day" (Schwalbe, 2009, p. 54). Of the 18-to-24-year-olds she surveyed, 14 percent said they visited a newspaper website daily, 33 percent weekly, and 47 percent monthly. Of those, 88 percent spent up to half an hour on news sites.

Yet another study reports varying information about millennial news consumption. Greenhow and Reifman (2009) found that one-third of people younger than 25 receive no daily news. For their research, they built two Facebook news community applications to observe how students would use and engage in news communities. Youths used the Web pages for "Faceworking," a term sociologist Neil Selwyn uses to describe how people intentionally use their social networking site to seek or promote information, problem solve

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or peer share. Greenhow and Reifman (2009) learned that niche media-sharing communities within Facebook could be successful, but they also need to be engaging for users, and they need to stimulate conversation.

Conversation and a feeling of connectedness seem to be the key to attracting millennials to media websites. Stassen (2010) notes that Facebook was intended to help people connect with friends, but has morphed into a powerful tool for communication that the news media can use to interact with audiences. In turn, news sites are becoming more than just informative: people want interaction with the news story and updates through different social media channels (Stassen, 2010). Social networking websites have inspired this change in the way people receive and share information. Part of the reason social media is popular is because of its ability to facilitate conversation and provide a sense of community. Social networking sites offer a higher degree of interactivity, sociability, autonomy, playfulness and personalization than earlier forms of media (Stassen, 2010).

Despite the lack of media consumption reported by researchers like Greenhow and Reifman (2009), Kushin (2009) argues that it is misleading to say that millennials have a decreased interest in current events just because they have a declining use of newspapers and television. In place of television, youths can use social networking websites to find interesting news stories, save time by using a really simple syndication (RSS) feed to receive updates on news that interests them, and watch video clips on YouTube. Kushin (2009) claims that scholars have been unable to make accurate measurements about young adults' civic lives because they have not been able to compare traditional media use and today's online media consumption.

Millennials rely intensely on the Internet for political information and they enjoy sharing news information with others via social networking websites (Kushin, 2009). During the 2008 presidential campaign, about one-fourth of young adults who identified that they used the Internet for political information reported acquiring information through a social networking site. This data represents an important generational difference between where older and younger people turn for information (Kushin 2009).

Creating media content specifically to appeal to millennials is not necessarily important. Graybeal and Hollifield (2009) surveyed college students about news adoption and whether a teen page in students' hometown newspapers made them more likely to read newspapers as college students. Researchers found that exposure to a teen page was not related to a greater interest in hard news or public affairs content, suggesting that teen pages may be catering to young people's entertainment interests rather than engaging them with news content. Students' primary sources for news were broken down as follows: television, 40 percent; newspapers, 29 percent; Internet, 24 percent; and radio, 7 percent. Also of particular interest in Graybeal and Hollifield's (2009) findings was that more students reported reading newspapers than using the Internet as a primary news source. This finding is in opposition of Palfrey, & Gasser's (2008) statement that "Most digital natives don't buy the newspaper—ever. It's not that they don't read the news, it's just that they get it in new ways and in a wide variety of formats" (p. 6).

Even though content specifically geared toward millennials proved ineffective at attracting them to the news, another study found that presenting the news as entertainment may draw greater audiences. While Cao's (2008) study was not specific to the millennial generation, the research findings may produce similar results when contained just to a

millennial demographic. Cao examined the impact of the soft news program *The Daily Show*

with Jon Stewart on political knowledge among citizens with varying levels of traditional

news consumption. The researcher used Pew Media Consumption Surveys to determine that

watching the show was positively related to political knowledge of those who do not

typically consume traditional news. The knowledge gained from the show is of significance

because soft news programs are primarily intended to entertain audiences rather than educate

them. This study was useful because it highlights the concept that entertainment sources can

be used as news information sources.

Interactive Media

<u>Introduction</u>

Online news is changing the media landscape because of its interactive

communication features, such as the ability to leave comments on stories, e-mail stories to

family and friends, and rate the quality of stories (Sundar, Knobloch, & Hastall, 2005;

Chung, 2008; Karlsson, & Stromback, 2010; and Tapscott, & Williams, 2006). Media

producers also have the ability to track how many users are visiting particular new items,

how long they are staying on a Web page, and if they used any hyperlinks to exit that Web

page (Sundar, Knobloch, & Hastall, 2005).

While previous technology-driven economic changes took at least 50 years to take

shape, the scope and scale of resources used for advancement today are becoming accessible

to the masses at a hyper speed (Tapscott, & Wiliams, 2006). The ability to collaboratively

contribute to innovation is what Tapscott and Williams (2006) refer to as "peer production"

(p. 11), another popular capability made possible by online interactivity.

However, interactivity is multifaceted, and media scholars have yet to determine how it should be measured (Karlsson, & Stromback, 2010). Bucy (2004) argues that interactivity should only be used to describe instances of reciprocal communication exchanges that involve a form of media. He states that interactivity happens through platforms such as online discussion forums or it can take the form of impersonal interactions with media content and not people, such as video downloads. For the purposes of this review of literature, interactivity refers to two-way communication, unless otherwise stated.

The collaboration that interactivity creates is also changing mindsets about where knowledge should be contained. Lankes (2008) points out that old business models established security when only a few people had access to the inner workings of the development of products, such as software. Now, with the emergence of online collaboration, the opposite stance is taken in that security is established through transparency in that everyone can see how open source software works and can trust in it. The same model can be applied to the news industry.

However, those in the millennial generation don't have to change their mindset because interactivity was such a large part of their upbringing. It creates the expectation for millennials to be both a source and a receiver of information (Flanagin, & Metzger, 2008). Because millennials have grown up experiencing a media environment with technologies to access, consume and create information, they may be especially susceptible to learning how to navigate complex media environments. However, more research is needed in this area because it is also possible that youths may lack essential skills and abilities to effectively find and process information (Flanagin, & Metzger, 2008).

Much about interactivity has yet to be explored by scholars. Bucy (2004) argues that interactivity is not being researched to its full potential because of a lack of a coherent theory to explain the function of interactivity in society. He states that many efforts have been devoted to categorizing different types of interactivity, but that these actions only aid in surface-level knowledge and do not offer the insight of a theoretical framework. Bucy (2004) also states that scholars need to examine the consequences of the different types of interactivity in society.

<u>News Sites and Interactive Content</u>

Despite all the interactive capabilities available on the Web, some news websites are still struggling to fully employ all of them. Deuze (2003) identified four aspects of online journalism that have implications for news content: operationality, hypertexuality, interactivity and multimediality. Web news content can be either originated (produced for the Web) or aggregated (linked from a parent news site and pulled in a computer-automated feed of content based on keywords). Deuze (2003) found that in terms of hypertexuality, the majority of mainstream news websites mostly link to other content housed within the entity's website. Where interactivity was concerned, Deuze discovered that the majority of websites he examined did not even contain journalists' e-mail addresses, which can make interactivity difficult. And only rarely do news websites offer multimedia content.

Some traditional news sources are struggling online more than others. Interactive news features such as polls and hyperlinks to related content can enhance media credibility (Bucy, 2004) because news consumers perceive that they are closer to the news when interactive features are used to make information easier to understand and personally tailored. Given that newspapers specialize in creating written content, it comes as no surprise

that newspaper websites have a lead over television news affiliate websites when it comes to using interactive news features (Bucy, 2004).

Interactive features not only enhance news content, but they can add new types of formats for presenting the news that were not previously available in traditional news mediums. Schumacher's (2008) research analyzed how users interacted with combinations of linear, time-dependent visual components such as video and non-linear, non-time dependent components such as written text and photos. Results indicated that users navigated the content based on their prior knowledge of the Internet and trial-and-error. Users wanted a high level of control over the time-dependent content, such as the ability to decide if they wanted to play a video (Schumacher, 2008).

In many ways, interactive components of news websites present more questions than answers. Sundar and Bellur (2009) began researching interactive features on news websites because they were thought to be processed consciously as opposed to automatically because they require users to make decisions while consuming content. This means that news consumers are compelled to make deliberate content decisions on the Internet. Sundar and Bellur (2009) compared news consumer habits of those reading interactive news stories with links to related content, transcripts and audio files to those reading non-interactive news stories. Researchers found that participants reading interactive news stories were more likely to click on other news information on a website than those reading non-interactive stories. However, it appeared that interactive news consumers paid more conscious attention to the non-interactive aspect of the news. These results suggest that interactivity is processed automatically as opposed to consciously, but Sundar and Bellur (2009) stated that more research is needed before this can be confirmed.

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While many speculated that the Internet would completely change the way people consume news information, Quandt's (2008) research concluded that is simply not the case. Consistent with Deuze's (2003) findings, Quandt's (2008) analysis of multiple news websites across several countries uncovered a lack of multimedia content, missing options for direct contact with journalists, and an expected range of types of news available, among other qualities. Seven out of 10 news sites did not enhance more than one-fifth of news stories with multimedia content. "Online journalism is basically good old news journalism, which is similar to what we know from 'offline' newspapers" (Quandt, 2008, pg. 735). However, he points out that maybe news consumers do not want all the bells and whistles of multimedia journalism, and that possibly they just want the news as it has always been produced, with timeliness and dependability at the core of their needs.

To complement Quandt's (2008) and Sundar and Bellur's (2009) works, Chung (2008) found that news consumers are infrequently using news websites' interactive features, particularly those that allow for human-to-human communication. Chung expanded the definition of interactivity by breaking it into user-to-system interactivity and user-to-user interactivity. User-to-system/document interactivity or content communication exists between users and technology. Examples include links to government documents or links to related news content, as well as the ability to customize news alerts to users' preferences. User-to-user interactivity allows news consumers to talk with each other or to contact the news staff who produced a particular news item. User-to-user communication is considered the higher level of interactivity. Contrary to media scholars' predictions, news consumers are not using interactive news features extensively (Chung, 2008). However, this study found that younger news consumers, including millennials, and those who perceive the Internet as a

credible source for news information were more likely to use interactivity features. Younger users were also more willing to express their opinions online.

Even though online interactive features have not transformed the news industry, technological advancements are changing what people expect out of news information. One of those expectations is to continuously be updated on developing news stories. Because of online news immediacy, news stories are continuously cycling on and off the home page of a news website. "Every news story online has its own publishing rhythm, and how long a particular news story remains on the front page may depend on whether it can be updated with new information or not" (Karlsson, & Stromback, 2010, p. 13). In addition, contrary to what earlier studies found, Meyer, Marchionni and Thorson (2010) point out that news consumers have choices for their news information, and they prefer online news that allows for interactivity and socialization.

Interactivity and Credibility

In addition to turning the news industry on its head, online interactivity capabilities are also challenging traditional notions of credibility. Of Flanagin and Metzger's (2008) four contemporary forms of credibility—conferred, tabulated, reputed, and emergent—the final category has implications for research about Web interactivity. Emergent credibility is a product of group and social engagement and frequently occurs via social networking sites or wikis. "Credibility can sometimes be an emergent phenomenon that arises from a pool of resources, achieved through a system of open access to all" (Flanagin, & Metzger, 2008, p. 12). The emergent phenomenon is similar to Howe's (2008) definition of crowdsourcing.

Credibility assessment that depends on social networking sites (emergent credibility) for distribution points to the advantages of millennials, who are typically better able than

those who are older to quickly and efficiently share information (Flanagin, & Metzger, 2008). The researchers noted that millennials enjoy social networking sites and are turning to those sources to find opinion leaders. As an example of such an instance, in the summer of 2011, the U.S. national news was filled with headlines and broadcasts centered on the trial of Casey Anthony, a woman accused of killing her 3-year-old daughter, Caylee. Stelter and Wortham (2011) state that the trial captivated the public's attention to a level that had not been seen in years. "Thanks to social networking Web sites like Facebook, members of the public reacted to every moment of the televised testimony in real time, driving even more coverage on national morning news programs and on local newscasts" (Stelter, & Wortham, 2011). It appeared most people following the trial suspected Anthony was guilty because following the announcement that a jury found her not guilty, Facebook, Twitter and other similar sites were bombarded with comments about the trial (Stelter, & Wortham, 2011). Media outlets that appeared to draw the largest audience were those who picked a side during the trial. "Real-time reactions to the trial and the verdict reflected the gradual adoption of the Web as a primary mode of communication throughout the day" (Stelter, & Wortham, 2011).

Expanding on the idea of emergent credibility, Lankes (2008) notes youths find that the ability to engage in conversation about information or a product allows them to verify credibility (Lankes, 2008). In this context, individuals do not evaluate credibility, a community engaged in conversation does. Lankes (2008) states that reliability takes over for authority in an online format because users themselves are becoming the authorities who evaluate, combine and produce information.

Types of News Sites

<u>Traditional Media Outlets</u>

Traditional media outlets are those that produce print products, such as newspapers and magazines; radio news broadcasts; and network and cable newscasts as well as news talk shows that feature commentary about current events. Internet news heavily relies on parent media companies, such as newspapers and broadcast television affiliates, for news content (Quandt, 2008). "Overall, the World Wide Web is not as 'global' as we might believe, at least when it comes to news. The content is very much limited by the traditional, national context and the (expected) interests of the users" (Quandt, 2008, pg. 733).

Traditional media outlets have always taken the news seriously, but the capabilities of the Web make the stakes even higher. The race to be the first to break a story is greater than it ever has been because of the ability to publish news stories at any time of day (Brown, 2000). What is more, these news outlets are now exploring formats that they did not have before. Newspapers are dabbling in video, and television newscasts are able to provide more in-depth coverage in the form of text and additional video clips on the Web. In essence, the Internet has broken down the restrictions that previously limited each traditional media format.

Blogs

Blogs are websites that allow people to post entries in reverse chronological order and allow others to leave comments. Most people associate blogs with more opinionated writing, although a few mini-media empires such as the Huffington Post and Silicon Alley Insider began as blogs but now read nearly the same as traditional news sources (Kopytoff, 2011). Boas (2006) suggests that bloggers are engaged readers who feed on the traditional media outlets for news content so that they have something to write about. He argues that mainstream media is essential to the survival of blogs.

The capability of posting comments on traditional media outlets' websites created a huge change for the media industry, but the phenomenon—and sheer popularity—of blogs may have paved the way for even more change in the industry. Blogs can produce and publish news stories much faster than traditional media outlets because they do not have to be concerned with complete accuracy, and as such, the preservation of reputation (Posner, 2006). Blogs vary in credibility based on the style of the writer—some are meticulous about getting facts correct while others think nothing of publishing rumors (Korzi, 2006). Often, bloggers are opinionated in their writings and lack expertise in the areas they write about (Korzi, 2006). They do not have to go through layers of editing and many do not have to concern themselves with angering advertisers (Posner, 2006). "The blogosphere is a collective enterprise—not 12 million separate enterprises, but one enterprise with 12 million reporters, feature writers and editorialists, yet with almost no costs" (Posner, 2006, p. 61).

Social Networking Websites

If blogs have paved the way for significant change in the online news business, social networking websites are the product of that legwork. Kopytoff (2011) notes that blogs largely went unchallenged until Facebook and Twitter "reshaped consumer behavior" by allowing everyone to post concise entries or status updates about "everything social." With these social media tools, users could do everything from sharing rants and posting links to commenting on news events and sharing photos, which are all items that the blog forum promoted. Kopytoff (2011) found that the numbers of blogs among millennials are tapering off, but acknowledges that some blog services report that social media sites are complementary to blogs because they allow bloggers to post links to their latest entries and possibly garner more regular readers.

Rainer and Rainer's (2011) survey about Internet use found that social networking websites were widely popular among millennials, with Facebook the most used social networking site (73 percent) followed by MySpace (49 percent), reading blogs (30 percent), Twitter (18 percent), writing blogs (13 percent) and LinkedIn (6 percent). Rainer and Rainer (2011) continue the social media discussion with this statement: "A new world of communication is now established, and Millennials are using it. Social media is the most powerful form of media; the Millennials feel empowered. The Millennial Generation is America's largest generation, and they well may be America's most powerful generation as well" (p. 202).

News Aggregates (News Portals)

News aggregators, such as Google News, Yahoo! News and MSN.com, typically do not create news content and are primarily used because they link to news provided by other sources (Tew, 2008). Many aggregates use algorithms that factor in audience activity when selecting and sorting stories. Because so many people use news aggregates to find news information, news mediums can drive up Web hits to their stories by allowing aggregators to link to their content (Tew, 2008).

News consumers instantly get an idea about how extensively a topic is covered in the media because news aggregates generate results based on how many related articles are available as a result of hyperlinks (Sundar, Knobloch, & Hastall, 2005). It is difficult for users to gauge the credibility of news aggregates because this platform provides news content from other media sources that actually serve as the base of a credibility judgment. Aggregates can, therefore, produce results for both sources that are perceived as highly credible and those that are considered not very credible (Sundar, Knobloch, & Hastall, 2005).

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Some news aggregates provide e-mail and recommendation functionalities on news stories (Tew, 2008). While some might make the case that these interactive functionalities are breaking down the media's agenda-setting and gate-keeper capabilities, it should still be noted that news consumers are still only choosing their favorite stories from news and information provided by professional journalists. Tew's (2008) research about the types of stories rated as most popular or most e-mailed on the news aggregate Yahoo! News found that the three largest contributors—the Associated Press, Reuters and Agence France-Presse—comprised 80 percent of the selected content. These results indicate that active online news consumers, though selecting from a large collection of news sources, are still turning to some of the major news providers that professional editors make their selections from.

Credibility

<u>Introduction</u>

Credibility is more than an attribute of a news media source; it is an audience perception (Choi, Watt, and Lynch, 2006). Presumed credibility refers to how much an individual believes someone or something because of perceived general assumptions (Tseng, & Fogg, 1999). The concept of credibility is multidimensional and is frequently examined at one of three levels of perceived believability: the message (article), source (journalist or media company) or medium (newspaper, website, etc.) (Hovland, Janis, & Kelley, 1953; Meyer, Marchionni, & Thorson, 2010).

Being able to assess credibility is important because it allows people to filter information so that they only retain what is useful (Wathen, & Burkell, 2002). Credibility is defined through expertness and trustworthiness (Hovland, Janis and Kelley, 1953). Flanagin

and Metzger (2008) point out that some researchers examine what makes an information source worthy of being believed, while others examine what makes a source or information likely to be believed. Reputation, reliability, and trust are closely aligned with the trustworthiness dimension, while quality, accuracy, authority and competence are elements related to the expertise dimension.

Today, scholars are exploring the new factors that digital media introduce during credibility assessment. As the medium of delivery, the Web in itself is a huge part of the credibility equation. Web news information creates a two-fold challenge: (1) it presents an overload of information and entertainment offerings; and (2) a lack of consistency in content quality requires users to continually assess credibility (Sundar, 2008). ". . . Assessing credibility inaccurately can have serious social, personal, educational, relational, health, and financial consequences. As a result, determining trust, believability, and information bias— key elements of credibility—become critical as individuals process the information in their lives gleaned from digital media." (Flanagin, & Metzger, 2008, p. 5)

Media Source Type and Credibility

Media source type is a huge area of research for credibility scholars. A popular area of inquiry in recent years has pitted Web sources against traditional sources with mixed results. Some find that the Web is more credible than traditional media, while others indicate that newspapers still reign. Others introduce the idea that Web credibility is related to the perceived credibility of traditional media.

Although not focused on news information, Kink and Hess (2008) surveyed 14- to 66-year-old Internet users to find out whether search engines are likely to complement or replace paper-based encyclopedias, yellow pages and telephone-based directory assistance.

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Researchers found that compared to the traditional information sources, search engines gratify more of users' needs. One key finding was that media are likely to be displaced if they are seen as inferior to search engines in terms of functionality and efficiency. While search engines provide users with cost-efficient, quick, convenient, up-to-date and versatile information, they are seen as weaker in the areas of reliability, quality, relevance and clarity of results. These findings are useful because news aggregates are frequently used when looking up specific news information, and functions like Google News Alerts may be seen as competitors to other traditional news sources that have developed an online presence.

Researchers Choi, Watt and Lynch (2006) took a different approach to their cross-platform credibility research. They used a specific news issue to guide their credibility measurement. When comparing the credibility of the Internet with other news sources, they found that the minority opinion group—in their case, opponents of the war in Iraq— perceived the Internet as a more credible news source.

In yet another study, respondents considered Internet information as credible as information from television, radio and magazines, but not as credible as newspaper information (Flanagin & Metzger, 2000). News, reference, and entertainment information were perceived as more credible than commercial information. Interestingly, those surveyed said they rarely verified information found on the Web. Flanagin and Metzger (2000) found through their study that Web information ranked second only to newspapers in its perceived credibility for reference and commercial information. It should also be noted here, however, that Flanagin and Metzger's study was completed in 2000, and Internet usage has largely expanded in the past decade. Other scholars have also shown an interest in comparing online media to traditional news sources. In their study comparing the credibility of Web

publications and traditional media, Johnson and Kaye (1998) found that online content was viewed as more credible than traditional media, but both forms of media were still only perceived as somewhat credible.

Four years later, Johnson and Kaye (2002) found that the trend of finding online information more credible than traditional media was picking up speed. They indicated that more people found online news media credible during the 2000 presidential race than in the 1996 campaign. Those who relied the most on traditional media also rated online credibility higher, with the convenience of the Web boosting credibility. Johnson and Kaye (2002) found that people rated online newspapers and newsmagazines as highly credible sources, but respondents were evenly divided about the credibility or lack thereof of television news online. Their research also indicated that the Internet is frequently used as an additional source to traditional media sources.

Another study made similar connections. Sundar and Stavrositu (2006) suggest that traditional media use predicts Internet credibility because the Internet serves as a supplement to traditional media sources. Sundar and Stavrositu (2006) acknowledge that much of the news on portal websites is a copy of the work produced for newspapers or other news organizations, so most people can assume that the same standards for reliability apply.

However, even if traditional media use predicts Internet credibility, it does not mean that credibility is assessed in the same way. Johnson and Kaye (2004) suggest that credibility assessments of online media may differ greatly from the way that credibility is judged in traditional media platforms. Along those same lines, Sundar and Stavrositu (2006) suggest that those who rely heavily on traditional media have more goal-oriented Web activity because they are seeking specific types of information from specific sources. Another idea is

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that traditional media train people to look at information more critically because media audiences know that mainstream media outlets deploy gatekeeping and other quality controls.

Another factor to consider is the perceived credibility of the websites of traditional media sources. Online news sources are often viewed with what Choi, Watt and Lynch (2006) refer to as the halo effect because people who view traditional media sources, such as newspapers and television news programs, as credible sources will assume that the websites tied to those entities are credible as well. Hyperlinks within the text on those websites also will be viewed as credible based on their association. Building on that same idea, Bucy (2003) suggests a synergy effect between on-air and online news. Synergy is a marketing term used to describe selling two or more products in the same transaction. Within his study, Bucy (2003) refers to synergy of on-air and online news consumption having a greater effect on media credibility perceptions than the solitary use of either medium.

Another topic related to source type is that of medium reliance. Carter and Greenberg (1965) found that the medium most frequently used is seen as the most believable. When people rely on a medium for information, they have to perceive that medium as credible, because otherwise they could not justify to themselves the dependence on that medium (Mackay, & Lowrey, 2007). Directly related to Carter and Greenberg's (1965) work is Johnson and Kaye's (1998) finding that the more credible audiences find a specific medium, the more audiences rely on it as a news source. Following this concept, "the most relied-upon sources are deemed the most credible" (p. 331). Their study supported prior research that reliance is associated to credibility. "The young are the heaviest users of the Internet, which may contribute to their higher credibility scores" (p. 335). However, Bucy's (2003) findings indicate that today's Web environment may lead to a credibility and reliance connection that

is the opposite of Carter and Greenberg's (1965) study. He found when comparing broadcast and online network news that credibility perceptions increased when the channel was used more frequently.

Another popular area of research for scholars is comparing credibility among different types of websites. Kiousis and Dimitrova (2006) found no differences in college students' credibility assessments of online stories from public relations sources and news media sources. Researchers did, however, discover significant differences for the effects of multimedia and audience engagement. Kiousis and Dimitrova (2006) studied the influence of source (public relations versus news), modality, and participation on perceptions of credibility, salience, attitudes and general website evaluation. They suggest that public relations messages do not appear less effective than news messages "because of the ambiguous role of source on the Web" (p. 179). Research by Hyunmin, Sun-A, YoungAh, and Cameron (2010) found similar results: public relations messages were perceived as equally credible as messages from news organizations.

However, one researcher found the opposite to be true when comparing news and public relations messages. In a study on the effect of online media credibility, media source type and news content had a significant effect on trust relationships with organizations featured in the news (Jo, 2005). Newspaper stories were viewed as more credible than similar stories posted in online news releases on organization websites. The finding suggests that organizations may better deliver their persuasive messages through traditional media as opposed to using their own online Web resources, particularly in cases of negative news information (Jo, 2005). Another study yielded similar results. In their work examining multiple media outlets on the topic of political information, Johnson and Kaye (1998)

reported that most of their respondents found online newspapers, news magazines, and political issue-oriented sites "somewhat" credible, while online candidate literature was perceived as "not at all" to "not very" credible by just more than half of the respondents.

In that same vein of research, Flanagin and Metzger (2007) assessed perceptions of message, site and sponsor credibility across four types of websites. Results showed that credibility was highest among news organization websites, followed by e-commerce and special interest sites, and the least credible appeared to be personal Web pages. People tend to discredit sources with obvious persuasive purposes. Salwen (1992) found similar results in a study about source type, even when the sources were experts. A pharmaceutical company, which had expertise in health matters, should have been judged as high in expertise about aspirin's effectiveness as a medical journal, but it was not. Salwen (1992) assumed the company's "vested interest" in the information detracted from its perceived expertise.

Cross-cultural credibility studies indicate that not everyone assesses credibility in a similar manner. In a study of both American and German news consumers, Sundar, Knobloch and Hastall (2005) found that frequent online news consumers in Germany and rare online news consumers in the U.S. spent more time with reports from credible sources. Frequent online news consumers in the U.S. were found to favor news from sources of low credibility, indicating to researchers that Americans enjoy alternative views of news topics.

Another area of increased interest in credibility research is that of user-generated content. Poorsiat, Detenber, Viswanathan and Nofrina (2009) found no significant difference in credibility rating between websites perceived to have information from experts and those perceived to have user-generated information. The type of website and the presence or absence of references also was not found to be significant. Researchers found that websites

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with user-generated content were thought to be as credible as those with expert content because Web users perceived that volunteers were producing content with good intentions, and not with biased interests. Hyunmin, Sun-A, YoungAh, and Cameron (2010) conducted research that produced similar results. User-generated content was seen as just as effective as messages from media organizations or public relations agencies.

To more specifically examine user-generated content, Mackay and Lowrey (2007) questioned study participants about the credibility of blogs. They found that after viewing Web pages, respondents gave blogs higher credibility ratings than traditional media outlets' websites. However, in a pretest, blogs were considered less credible. Mackay and Lowrey (2007) suggested the discrepancy was a result of participants' inexperience with blogs. This study surveyed college students who were mostly millennials, which caused researchers to question whether young news consumers are more likely to trust blogs, even without experience with the medium.

Online News Credibility

Credibility scholars have considered how previous Internet experience affects credibility ratings and found mixed results, even among the same researchers. Johnson and Kaye (2002) found that the more people use the Web, the less credible they perceive online newspapers. But two years later, another study on a related topic returned different results. Johnson and Kaye (2004) surveyed politically interested Internet users to gauge how Internet experience relates to Internet reliance and Web credibility. They discovered that years of Internet use did not predict Web reliance or Web credibility. Their research indicated that those who had been online for only a limited time were more likely to depend on the Web for information than more experienced users. More experienced news consumers are better able

to assess the credibility of media sources and messages (Johnson & Kaye, 2004). However, time spent online does not have much affect on media credibility judgments. "Predictions of credibility of the online print media—newspapers and newsmagazines—cannot be predicted by the Internet experience variables or by Internet expertise. Apparently, users' online activities, years of experience, and Internet literacy have no bearing on how credible they judge online newspapers and newsmagazines" (Johnson & Kaye, 2004, p. 36-37).

However, Flanagin and Metzger (2000) conducted similar research with different results. More experienced Internet users were somewhat more likely to view the Internet as a credible source of information but did not rate it as more credible when compared with other media forms. Flanagin and Metzger (2000) found that more experienced users are somewhat more likely to view the Internet as a credible source of information and tend to verify more often the information they obtain. More research is needed to determine if millennials, being more experienced users, view the sources from the Internet as more credible than other forms of news media.

Audience characteristics are also essential to credibility assessments (Wathen & Burkell, 2002). Audiences that are receptive to a message are more likely to consider the information credible. Poorsiat, Detenber, Viswanathan and Nofrina (2009) indicate that those with a vested interest in the content and those who were older were more likely to give a website a higher credibility rating regardless of the type of website or any listing of references. Contrary to those findings, Jo (2005) suggests that source credibility is more influential when the issue has a lower level of relevance for a person. The more closely someone is involved with the media content, the more likely that person is to be skeptical of the media message (Jo, 2005). Building on Jo's ideas, Flanagin and Metzger's (2000)

research suggests that when information is least damaging, as with entertainment news, it is verified the least vigorously, and information that relies more seriously on accuracy, such as news and reference materials, is verified significantly more often.

Source credibility manifests itself in many ways on the Web, and one of those ways is through hyperlinks to other pages with related content. Tseng and Fogg (1999) argue that a link on a website to another source is often perceived by Web users to be a third-party endorsement, which boosts the linked site's perceived credibility. "Users often corroborate what they find on a site by consulting other resources in the networked system" (Warnick, 2004, p. 263). Building on that idea, Dochterman and Stamp (2010a) found that if a source could easily be cross-checked, people were more likely to get a sense that the source was more credible—even without doing the cross-checking. However, if sources were difficult to find in the information on a Web page, people were less likely to trust or believe the information.

Related to hyperlinks is the notion of site familiarity. Dochterman and Stamp (2010a) measured the effects of site familiarity on perceived credibility. Site familiarity included knowledge or experience with the larger site that contained the Web page in question. They found that users did not have to have prior knowledge of a site to feel familiar with it. Advertisements, word of mouth and affiliations with other groups depicted on the page provided a sense of familiarity.

<u>Credibility in Peer-to-Peer Formats</u>

The Internet and digital technologies lower the costs associated with publishing, increasing everyone's access to information and allowing for easier dissemination of information (Metzger, 2007). In the past, high production costs limited publishing to just

those with the funds and the authority to distribute information. However, on the Internet, anyone can be an author because authority is not required to publish information, which, of course, raises questions of credibility. A lack of oversight and editing on many websites just adds to the problem. Also, no standards exist for posting information online, so work can easily be altered, misrepresented or plagiarized.

The Web changes previous news models that indicated only credible news sources could provide information to a passive audience (Tapscott, & Williams, 2006). "Digital media . . . have in many ways shifted the burden of information evaluation from professional gatekeepers to individual information consumers" (Flanagin, & Metzger, 2008, p. 12). The Internet also leads to a change from authority-based approaches to credibility to a "reliability approach"(Lankes, 2008, p. 106). Using the reliability approach, people establish credibility by combining multiple sources. Lankes claims that online information is not lacking authority, but that new ways of measuring it are necessary. Flanagin and Metzger (2008) share similar ideas: "Digital media thus calls into question our conceptions of authority as centralized, impenetrable, and singularly accurate and move information consumers from a model of single authority based on hierarchy to a model of multiple authorities based on networks of peers" (Flanagin, & Metzger, 2008, p.17).

Assessing credibility online is not as much about authority as it is about selection because of the plethora of options available (Lankes, 2008). One technique for avoiding information overload on the Web is to use mental shortcuts (Flanagin, & Medders, 2009). One of those short cuts is consulting a social network, both online and offline, to help assess information. Recommendations from friends and family were perceived as highly reliable. Source, message and medium credibility serve as cues that allow for mental shortcuts to

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assess the believability of information (Sundar, 2008). Johnson and Kaye's (2004) study of politically interested Internet users found that experienced Web users tend to regularly visit the same websites as opposed to venturing out in wider Internet searches for news, thus supporting the notion of mental shortcuts.

Not only are recommendations from friends and family helpful in avoiding information overload, but they may also be a superior way to identify credible information. Metzger (2007) suggests that collaborative filtering and peer review online formats (i.e., Amazon.com, social networking sites) may be some of the most practical ways that people can determine the credibility of information found on the Web. "It allows users to pool their intellectual and experiential resources when evaluating the trustworthiness, reliability, or quality of a Web site or information residing on a site, making credibility assessment a collective rather than an individual task" (p. 2086). She does, however, point out that peer review formats are can still be biased or inaccurate.

Credibility and the Presentation of Information

The presentation of news information refers to the manner in which the news is conveyed as well as the design of a Web page. Meyer, Marchionni, and Thorson (2010) suggested that credibility ratings are affected by the manner in which a news story is presented. While news has long been presented as strictly the facts or strictly an opinion piece, the Web is introducing new ways of conceptualizing the news. Meyer, Marchionni and Thorson's (2010) research found that when examining the credibility of straight news stories, opinion pieces, blog news and collaborative journalist and citizen news, straight news stories received the highest rankings. While adding opinion to the news significantly weakened an author's perceived credibility, collaborative news stories—a journalism concept not

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previously available before the Internet age—scored significantly higher than blogs and opinion pieces.

The visual appeal of a website has shown to be increasingly influential with users. Wathen and Burkell (2002) propose that users first make judgments about a website's look and navigation when assessing credibility. What's more, in her analysis of recent online credibility assessment research, Metzger (2007) states that Internet users as a group do not put very much effort into credibility judgments on the Web, and when they are assessing credibility, professional website design is one of the top criteria used for evaluation.

Dochterman and Stamp (2010a) found that poor page layout frequently resulted in a loss of credibility, but a well-designed page did not make information any more believable. They examined how professionalism in Web design affects perceived credibility and found that credibility ratings were higher for sites that were perceived as difficult to construct or more advanced than participants' own skill levels in Web design. These findings may be of particular interest when looking at millennials, who have learned in school about how to build websites.

Wathen and Burkell (2002) propose that users first make judgments about a website's look and navigation when assessing credibility. Next, they determine if they would believe the information on the site if it is what they are looking for. Lastly, users identify if the information on the site matches their previous knowledge of the subject, how much they need to learn about the subject, and if they believe the information and would act on it. When people understood the motives of a site and the intended audience, they were more relaxed about credibility cues (Dochterman, & Stamp, 2010a). If people found that a website had the

information they were looking for, they also felt that the site was likely to be credible (Dochterman, & Stamp, 2010a).

Differing Credibility Research Methods

Previous research indicates that scholars need to develop new methods for measuring credibility in online formats. Source credibility, channel credibility and media credibility must be re-examined in an online media environment because traditional criteria for gauging credibility cannot be applied in the same sense. Digital media has not changed the needs for credibility assessment, but it has changed "the need to assess credibility, the frequency with which to do so, and the strategies that may be useful and available to assess information and its source" (Flanagin, & Metzger, 2008, p. 14). As an example, news aggregators pull news media stories from all types of sources, and as a result, it is difficult to gauge the credibility of the news aggregator itself (Sundar, Knobloch, & Hastall, 2005). Advancing that idea, Warnick (2004) suggests that people rely on aesthetics when making credibility judgments and the process of assessing credibility is based on ongoing attributes and probabilities. However, she found that visual design issues were less common on news websites and more frequent on other search and business websites. Warnick also suggests that credibility criteria for websites varies depending on the type of website, and that news sites require specific guidelines for evaluation that consider the website content and the user's purpose. Generic standards are not specific enough. Consistent with the concept of crowdsourcing and peer-to-peer contributions, Lankes (2008) indicates that industrialized countries may have progressed to the point that youths can disregard traditional methods of assessing credibility that are based on authority and hierarchy and can instead use digital tools and new network approaches.

In contrast to ideas about developing new methods for studying online credibility

assessment, Sundar (1999) indicates that people use the same attributes to evaluate online

news stories as they do with print news stories. But he makes his distinction in the idea that

people can have news perceptions separate from source perceptions. Sundar (1999)

differentiates among the media platforms by suggesting that more disturbing stories in print

publications are perceived as more newsworthy, while in an online format, more disturbing

stories are viewed as more newsworthy but also less credible. He found that accuracy,

believability and disturbing content were likely to comprise a single criterion of news

perception in a print format than in an online environment.

Another reason to develop new ways of measuring credibility in digital environments

is because source and medium are frequently considered one in the same (Wathen & Burkell,

2002). Even though Internet tools such as blogs and e-mail communicate separately from

entire websites, messages on a website, or authors of information, Flanagin and Metzger

(2008) argue that in an online environment, source, message and medium credibility overlap,

and strong study design can help researchers distinguish among them.

> "To date, however, research examining the credibility of information people obtain
> via digital media has primarily examined the perceived credibility of Web sites, as
> opposed to considering the full range of available digital information sources (e.g., e-
> mail, blogs, text messaging), and has tended to emphasize how individuals assess
> credibility in isolation, rather than considering group and social-level processes. Yet,
> in addition to commercial, informational, and other Web sites produced by
> organizations or individuals, blogs, wikis, social networking sites, and other digital
> media applications—linked across a wide variety of devices — constitute a
> significant portion of today's media environment."
> (Flanagin, & Metzger, 2008, p. 10)

Agreeing with Flanagin and Metzger, Sundar and Stavrositu (2006) suggest that when

considering credibility, the Web needs to be taken as a whole because it features everything

from organization and corporation messages to unrestricted content and many variations in between.

  To help develop new ways of measuring credibility online, Flanagin and Metzger (2008) named four contemporary forms of online credibility: conferred, tabulated, reputed, and emergent. Conferred credibility is effective because it relies on the positive reputation of the referring entity, such as Yahoo! News, to ease user skepticism. Tabulated credibility relies on peer ratings, such as those visible on Amazon.com or eBay.com. Reputed credibility is endorsement created through personal and social networks. Emergent credibility functions as crowdsourcing and is a product of group and social engagement. This frequently occurs via social networking sites or wikis.

  However, Flanagin and Metzger are not the only researchers to develop new models for assessing credibility on the Web. Sundar (2008) reports that The Media Effects Research Laboratory at Penn State University has identified four media affordances that produce psychological effects: Modality (M), Agency (A), Interactivity (I), and Navigability (N), also known as the MAIN approach. Each of these elements tips to the credibility judgment process. Digital media complicates modality because it rolls several modalities into one (Sundar, 2008). If content lacks strong opinions or commitments on issues, young people may rely on modality judgments to assess credibility. Sundar also found that young people are less likely than those in older generations to have preferred modalities for information. In regard to agency, the source of digital media content is often unclear. Sundar (2008) states that to an extent, the computer, the website, the author of a news story and the news organization are all considered sources. The advantage of Web interactivity is that it allows people to be the source and the receiver of communication (Sundar, 2008). "When young

people go to a portal site and decide which particular features and content domains to consume on a regular basis, they are serving as their own gatekeeper" (p. 88). And lastly, where navigation is concerned, hyperlinks can communicate to users about the nature of the content on the site (Sundar, 2008). As navigation improves, so do credibility perceptions. Sundar (2008) argues that the MAIN affordances can improve or diminish credibility assessments. He claims that the MAIN approach is an effective way to evaluate credibility "because it taps into the natural, automatic ways in which youth make implicit credibility judgments during their interactions with digital media" (p. 93).

Other scholars have also had the idea that they need to document Web users in action. Metzger (2007) calls for more research into what people actually do on the Web to assess credibility. "Credibility research has the potential for response bias problems, as people know they 'should' critically analyze the information they obtain online, yet rarely have the time and energy to do so" (Metzger, 2007, p. 2087). She calls for research methods beyond survey questionnaires.

Dochterman and Stamp (2010a) examined Web users' experiences during actual website navigation and divided their credibility data into 12 categories: authority, page layout, site motive, URL, crosscheckability, user motive, content, date, professionalism, site familiarity, process, and personal beliefs. They questioned participants about believability, trustworthiness, perceived expertise, and overall credibility of each website. Dochterman and Stamp (2010a) found that factors related to authority on websites included the host of the page, sources used on the page, affiliations that the page had with other sites or businesses that produce information, and authority cues in the page's URL.

Millennials and News Credibility

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It is apparent that millennials hold more value in digital technology devices that can access news information than they hold in traditional news resources such as newspapers, radio and television. However, due to the immense popularity of social networking sites and scholars' lack of a consensus on how to measure their use, it is unclear how frequently millennials are seeking and consuming news information. And while website credibility is an expanding area for research, it is unclear how millennials in particular are determining credible news sources.

Based on survey data, Palfrey and Gasser (2008) concluded that the majority of millennials do not think the credibility of information is an important issue. Limited research has been conducted about how millennials actually seek out credible news information. Rieh and Hilligross (2008) examined the importance of credibility during information seeking among groups of college students. Students in this study were looking up information, but not necessarily news information. Researchers made an interesting discovery: even though credibility was an important consideration for college students, they often compromised information credibility for speed and convenience, especially when the information they sought was less important or of less personal interest to them. These findings are consistent with theoretical predictions of dual-processing models of persuasion and social judgment, such as the Elaboration Likelihood Model. Research in this study indicates that college students made judgments by learning from past experiences or other knowledge that could inform them about media or source options. It remains to be seen if this research finding can be applied to news information seeking as well.

News consuming habits can form at a young age, which prompted one group researchers to focus on millennials. Borah, Vraga and Shah's (2009) study compared media

source credibility among 12-to-17-year-olds and their parents to determine the items that shape judgments of news credibility among American youths. The study concluded that perceptions of news media accuracy and bias were not related among youths. Researchers also found perceptions of media accuracy did not vary depending on whether millennials were viewing traditional news sources or online news. However, they did find that print news received lower ratings of media bias. The study also indicated that perceived news media credibility was lower among older youths (Borah, Vraga and Shah, 2009).

The news-consuming habits that millennials are forming are having significant effects on where they are turning for credible online information. Bucy (2003) explored the question of whether media use leads to increased perceptions of credibility or whether people tend to use media that they already perceive as credible. He found that 18-24-year-olds are most likely to rate news media as highly believable, and network news was found most credible. Younger audiences rated TV and online news significantly higher in credibility than other age groups surveyed. Older adults rated online news as more credible, while 18-24-year-olds found TV news to be the most credible. Bucy noted his surprise at this finding given that the audience for broadcast news tends to be older and online news consumers typically are younger. Bucy's study counters Carter and Greenberg's (1965) finding that the medium most frequently used is seen as the most believable. Bucy concluded that his study indicates that media exposure effects student and adult perceptions of news credibility differently.

Media Literacy

Directly related to media credibility is the idea of media literacy, or the ability to access, analyze, evaluate and effectively communicate in a variety of forms including print and nonprint texts (Considine, Horton, & Moorman, 2009). Considine et al calls into

question millennials' development of media literacy. They argue that being surrounded by media does not mean that those in the millennial generation recognize or understand its content or intent. Information Communication Technology (ICT) gives millennials access to more information than any generation in history, but the technologies have created an increasingly complex environment for millennials to navigate. Their extensive use of ICT often creates a false sense of competency and a misperception that they are media savvy. Millennials are expected to be both a source and a receiver of information on the Web as a result of the interactive features available online (Flanagin, & Metzger, 2008). Because they have grown up in a digital environment, they may be able to easily learn how to navigate complex media environments, but they may also be lacking in the skills necessary to process the information they find.

Researchers agree that millennials may have a more difficult task assessing credibility than generations before them that did not have access to the World Wide Web. In fact, the Internet presents several unique challenges when compared with television (Yang, Eastin and Nathanson, 2004). Searching for content is more complex because users have to understand how certain Web pages are related and they have to assess whether the search results fulfill their information needs. It is also important to note that Web pages can contain content and advertisements, which can make identifying appropriate information difficult for some children (Yang, Eastin and Nathanson, 2004). Palfrey and Gasser (2008) also share similar ideas about young people and credibility assessment: ". . . The advent of the Internet has spawned significant concerns about the challenges facing young people, who are growing up surrounded by so many information sources and so many services that let anyone become an author or an editor that it has become even more difficult than before to distinguish good

information from bad" (Palfrey, & Gasser, 2008, pg. 157). It is not instinctive to know how to assess the credibility of information in an online environment. More experience using the Internet does not create better skills for evaluating credibility, but some digital-media literacy skills can be taught (Palfrey, & Gasser, 2008).

Yang, Eastin and Nathanson (2004) researched children's perceptions of online credibility and the role that author, dynamic presentation and advertising play in the assessments of Web pages. Research revealed that half used directory searches, such as Google.com, and many did not look any further than the first page of search results, which researchers interpreted as children being quick to judge a website as credible for their needs. Results also revealed that children were judging the medium for credibility rather than the content provider. Children also indicated that the level of website dynamism or design elements as well as advertising were factored into a Web page's credibility assessment (Yang, Eastin and Nathanson, 2004).

Palfrey and Gasser (2008) also expressed concern about millennials depending on search engines to only retrieve reliable information in the top results. No technology tool can provide a substitute for a lack of media literacy, but Palfrey and Gasser (2008) suggest that when people experience information overload, the common way to deal with the situation is cut down on the amount of information processed. This can be problematic because pertinent information can be excluded.

Another study found similar results about the lack of time young people spend assessing credibility. The Joint Information Systems Committee (2008) compiled a report about the information search strategies of the Google Generation, or those born after 1993 who have only known a world where the Internet exists. Although this group does not match

the exact demographic of millennials, the knowledge of digital devices serves as a unifier. "Internet research has shown that the speed of young people's web searching indicates that little time is spent in evaluating information, either for relevance, accuracy or authority" (Joint Information Systems Committee, 2008, pg. 23).

The Joint Information Systems Committee's (2008) report on information seeking behavior calls the idea that young people have different information literacies than previous generations an "untested assumption" (p. 5). Researchers indicated that young people's technological know-how has disguised the fact that they do not have higher levels of information literacy. Their Internet search behaviors assessment revealed that young people tend to skim and move rapidly through Web pages and do not have a firm understanding of their information needs. The research indicated that young people consider the search engine the primary Internet brand. Some young people assume that search engines understand what they are searching for and only retrieve authoritative results (Joint Information Systems Committee, 2008).

Part of the problem may be that millennials are using only the Web for news information. Johnson and Kaye (2002) argue that using traditional media sources is essential for learning how to judge credible online information. They found that people who rely heavily on the Internet for news information do not also consult traditional media sources.

> "Because of their limited experience with the traditional news media, they do not become trained to know which online sources are credible and which ones are not. Readers of traditional news media can use various guideposts to judge the credibility of information they find, such as the name of the newspaper, its characteristic content, and the placement of the story. Such contextual clues are often missing from sources of information on the Internet, making it hard to judge the Internet's credibility." (Johnson, & Kaye, 2002, p. 634)

Flanagin and Metzger (2008) echoed similar sentiments about millennials not approaching digital media as skeptically as others.

Logging more hours online also does not appear to be the answer for millennials. Johnson and Kaye's (2004) research supports the idea that the amount of time individuals spend online does not create greater Internet literacy. Their study found that young, less educated and lower income Web users rated the Internet highest in credibility. To help fill digital literacy gaps, Flanagin and Metzger (2008) discuss the idea of teaching youth to be prosumers (producers and consumers) of digital media as a way to begin teaching them about credibility assessment. While this may be a possible solution, more research is necessary to determine if this method would actually improve media literacy.

CHAPTER IV

EXPERIMENT

Research Questions

This study examines how millennials assess the credibility of online news sources and poses the following questions:

RQ1: Where do millennials go on the Web when they are seeking credible news information?

RQ2: What criteria is perceived as most important when assigning credibility?

RQ3: How significant of a role do social networking websites play in news consumption?

Methodology

<u>Demographics</u>

To conduct this research, millennial participants will be recruited from history and communication core courses with the intention of getting students from a broad range of majors at a regional Southwestern university. Students will either attend evening sessions for extra credit or receive class participation points if the researcher visits the classroom. Each group of participants will go to a computer lab, where they will be given a state, national or international news topic and will be told to search online as they would naturally to find credible news information about that topic. Once students make a selection, they will print the Web page and receive a questionnaire that will ask about the credibility of their specific news item as well as their general news consuming habits.

<u>Research Design</u>

Students in this pilot study were instructed to search the Web as they would naturally to find credible news information about one of three news items. Once students identified the news source they thought was credible, they were asked to print the Web page and were then instructed to complete a questionnaire. (See Appendix A.) The copy of the news item was attached to each corresponding questionnaire, and the total time to complete the exercise and the questionnaire was approximately 25 minutes.

The news items used for this study were categorized as state, national and international, and were selected based on their timeliness during the week of March 19-23, 2012. The news items were presented to each group in one of the following ways: state, Texas lawsuit against the federal government; national, rising gas prices; and international, U.S. soldier who killed Afghan civilians. Participants were asked questions about the credibility of their news item as well as questions pertaining to their news consuming habits and their use of interactive media when consuming news. The six elements of credibility used in this study are those identified by Rieh (2002) as most important when people are making judgments about information quality on the Web and are as follows: source type, reputation, organization of information, presentation of website, content (in this study, depth of news coverage), and type of information. It should be noted that in Rieh's (2002) study participants were scholars and they were assessing the credibility of scholarly sources. However, for this study, the elements of credibility were applied to news sources and the subjects were college students.

Each participant was given a credibility score as well as scores for news consuming habits and interactive media use. (See Appendix B.) The news sources that participants identified were also categorized by news type. In addition, the researcher and research

assistant, both with journalism backgrounds, classified each participant's news source using objectivity levels of 1-3, with 1 = Poor, 2 = Average, and 3 = Good. Each news source was evaluated individually. Any traditional news media sources were given a classification of good because they generally rate high in each of the credibility categories identified by Rieh (2002). Web-only publications ranged across all three levels, while blogs could receive no rating better than average because blogs are opinion-based. News releases scored no better than average because they provide one-sided information. Scholarly publications earned no better than average because they were not timely, and therefore, not accurate.

Results

The exercise and questionnaire were completed by 207 undergraduate participants across 44 college majors. The median age of participants was 19, with ages ranging from 17 to 31. Males comprised 39.1% of participants while females made up 48.3%, and the remaining 12.6% were unknown. Sixty-nine participants found a state-level news item, while 68 found a national-level news item and 70 found an international news item. Participants were given three scores based on the information they provided in the questionnaire: their credibility assessment of their news item (coded as CRED); news consuming habits (coded as NCH); and interactive media (coded as IM). See Appendix B1-B3 for specific coding information.

RQ1: Type of News Source Identified

The first research question asks about where millennials are going on the Web to find credible news information. The totals from all news groups indicate that the majority of participants (57%) sought credible news information from a traditional news media source, defined in this study as a news website belonging to a newspaper, television or radio station

affiliate. As indicated in Table 4.1, the next most used credible news source was a Web-only

publication (17.4%), followed by a news release (16.4%), a blog (6.3%), and a scholarly

publication (2.9%).

Table 4.1: Cumulative Totals - Type of News Source Student Identified

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Blog	13	6.3	6.3	6.3
	News release	34	16.4	16.4	22.7
	Scholarly publication	6	2.9	2.9	25.6
	Web-only publication	36	17.4	17.4	43.0
	Traditional news media	118	57.0	57.0	100.0
	Total	207	100.0	100.0	

However, several variations in those results exist among the different news groups

assigned. The majority of participants (40.6%) in the state-level news item group selected a

news release as their credible news source, followed by 34.8% who turned to a Web-only

publication. Traditional news media sources ranked third at 23.2%. See Table 4.2 for

complete data.

Table 4.2: State News Item - Type of News Source Student Identified

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Blog	1	1.4	1.4	1.4
	News release	28	40.6	40.6	42.0
	Web-only publication	24	34.8	34.8	76.8
	Traditional news media	16	23.2	23.2	100.0
	Total	69	100.0	100.0	

While the national news item group followed the trend of having a traditional news media source rank the highest at 58.8%, this group had a particularly large number of participants turn to blogs (14.7%). Full data is available in Table 4.3.

Table 4.3: National News Item - Type of News Source Student Identified

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Blog	10	14.7	14.7	14.7
	News release	6	8.8	8.8	23.5
	Scholarly publication	6	8.8	8.8	32.4
	Web-only publication	6	8.8	8.8	41.2
	Traditional news media	40	58.8	58.8	100.0
	Total	68	100.0	100.0	

For the international news item, the majority (88.6%) sought traditional news media sources, while 8.6% consulted Web-only publications and 2.9% turned to blogs. As Table 4.4 indicates, no one in this group identified a news release or a scholarly publication as a source.

Table 4.4: International News Item - Type of News Source Student Identified

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Blog	2	2.9	2.9	2.9
	Web-only publication	6	8.6	8.6	11.4
	Traditional news media	62	88.6	88.6	100.0
	Total	70	100.0	100.0	

The credibility scores that students gave their news items varied somewhat among the three news item groups. On an 83-point scale, marked numerically from 19-102, those in the international group rated their information as more credible than the other groups. The

median credibility score for the state news item group was 78, which was also the median

score for the national group, while the international group median was 85. View Table 4.5 for

more information.

Table 4.5: Credibility Scores by News Item Type

		State CRED	National CRED	Internat'l CRED
N	Valid	66	63	61
	Missing	3	5	9
	Mean	79.0758	78.3492	82.5410
	Median	78.0000	78.0000	85.0000
	Mode	75.00	72.00	86.00
	Std. Deviation	9.52456	9.74706	9.33912
	Sum	5219.00	4936.00	5035.00

The credibility scores that students gave their news items also varied among the type

of news sources identified. Using the same 83-point scale grade, marked numerically from

19-102, traditional news media sources received the highest median credibility assessment at

82. The median scores on remaining source types were as follows: Web-only publications,

77; news release, 78; blog, 78; and scholarly publication, 78.5. See Table 4.6 for complete

data.

Table 4.6 Credibility Scores Among News Media Source Types

		Traditional Media CRED	Web-Only Publication CRED	News Release CRED	Blog CRED	Scholarly Publication CRED
N	Valid	106	35	33	10	6
	Missing	12	1	1	3	0
	Mean	81.1226	77.2857	79.9091	79.8000	75.1667
	Median	82.0000	77.0000	78.0000	78.0000	78.5000
	Mode	86.00	76.00	71.00[a]	65.00[a]	61.00
	Std. Deviation	8.87340	10.62066	9.37871	12.95977	11.66905
	Sum	8599.00	2705.00	2637.00	798.00	451.00

The researcher and research assistant in this study also classified each participant's news source using objectivity levels of 1-3, with 1 = Poor, 2 = Average, and 3 = Good. The majority of participants (70%) received credibility categories of good, while 26.1% were labeled average and 3.9% were poor. See Table 4.7 for complete data.

Table 4.7: Researcher Assessment – Classification of News Sources By Objectivity Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	8	3.9	3.9	3.9
	Average	54	26.1	26.1	30.0
	Good	145	70.0	70.0	100.0
	Total	207	100.0	100.0	

RQ2: Credibility Criteria Rated Most Important

The second research question asks which criteria millennials consider most important when assessing credibility. The questionnaire contained six sub-scores following Rieh's (2002) elements of credibility on the Web and are coded as follows: TS, Type of Source; R,

Reputation; TI, Type of Information; Org, Organization of Information; P, Presentation; and

D, Depth. On a 15-point scale, marked numerically from 3-17, all six areas received

generally high credibility ratings in the study, with scores ranging from 12.45 to 13.87. Type

of source scored the highest in importance, followed by organization of information, the type

of information, and the depth of news information. Reputation and presentation of

information ranked least important, respectively. A one sample t test comparing the mean

scores found a significant difference among the means of the groups. Significance levels less

than .05 are considered significant. See tables 4.8 and 4.9 for more details.

Table 4.8: Credibility Sub-scores One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
TS	204	13.8725	2.14348	.15007
R	200	13.0250	2.55873	.18093
TI	203	13.5517	2.20509	.15477
Org	200	13.6350	2.00546	.14181
P	204	12.4559	2.51753	.17626
D	204	13.3922	2.20906	.15467

Table 4.9: Credibility Sub-scores Comparison of Credibility Elements
One-Sample Test

	Test Value = 0				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
TS	92.438*	203	.000	13.87255	13.5766	14.1685
R	71.989*	199	.000	13.02500	12.6682	13.3818
TI	87.562*	202	.000	13.55172	13.2466	13.8569
Org	96.151*	199	.000	13.63500	13.3554	13.9146
P	70.667*	203	.000	12.45588	12.1083	12.8034
D	86.588*	203	.000	13.39216	13.0872	13.6971

* $p < .0001$

Of significance are the differences in the Type of Source (TS) and Reputation (R) mean sub-scores because those elements are typically related. The mean scores for Organization of Information (O) and Presentation (P) also had notable differences, although those elements can also be connected.

RQ3: Role of Social Networking Websites

The third research question asks what role social networking websites play in millennial news consumption. No participants identified a social networking Web page as their type of source for credible news information. However, question 19 in the questionnaire asked participants to rank the frequency in which they use these news sources: traditional news organization, Web-only publication, blog, and social networking site. As indicated in Table 4.10, 26.6% use social networking sites most frequently when they are consuming news information, while 11.8% use them the second most, 36.5% use them infrequently for news information and 25.1% use them the least.

**Table 4.10: Rate The Online News Sources You Use From Most to Least -
Social Networking Websites**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Used the most	54	26.1	26.6	26.6
	Used the second most	24	11.6	11.8	38.4
	Used infrequently	74	35.7	36.5	74.9
	Used the least	51	24.6	25.1	100.0
	Total	203	98.1	100.0	
Missing	System	4	1.9		
	Total	207	100.0		

The questionnaire also asked participants if they subscribed to news updates on Facebook or Twitter, of which 44.2% reported that they did. See Table 4.11 for more data.

Table 4.11: Subscription to News Updates on Facebook or Twitter

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	115	55.6	55.8	55.8
	Yes	91	44.0	44.2	100.0
	Total	206	99.5	100.0	
Missing	System	1	.5		
	Total	207	100.0		

A related question asked students if they share online news content with family and friends, of which 65.4% reported that they did. Table 4.12 contains more details.

Table 4.12: Sharing Online News With Family and Friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	71	34.3	34.6	34.6
	Yes	134	64.7	65.4	100.0
	Total	205	99.0	100.0	
Missing	System	2	1.0		
	Total	207	100.0		

Interactive Media

Participants were asked specific questions to produce interactive media sub-scores. The data from those questions also helps reveal how students are prioritizing online news content. Table 4.13 shows that 51.2% reported that they are not more likely to use a news source if it offers interactive features such as user comments and opportunities to contact the

author; however, Table 4.14 reveals that a much higher percentage (77.3%) reported they are more likely to use a news source if it offers multimedia features, such as videos and photo slideshows.

Table 4.13: Are You More Likely to Use a News Source if it Offers Interactive Features?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	106	51.2	51.2	51.2
	Yes	101	48.8	48.8	100.0
	Total	207	100.0	100.0	

Table 4.14: Are You More Likely to Use a News Source if it Offers Multimedia Features?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	47	22.7	22.7	22.7
	Yes	160	77.3	77.3	100.0
	Total	207	100.0	100.0	

News Consuming Habits

The questionnaire also gathered information about the role of news media in millennials' lives. Table 4.15 shows how participants answered a question about time spent consuming online news information. The largest group (42%) reported spending two to three hours a week consuming news information, while 34.8% spend less than one hour each week consuming news information.

Table 4.15: Time Consuming Online News Information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than one hour	72	34.8	34.8	34.8
	Two to three hours	87	42.0	42.0	76.8
	Three to five hours	31	15.0	15.0	91.8
	More than five hours	17	8.2	8.2	100.0
	Total	207	100.0	100.0	

Complementing the data about time spent consuming news information is the question about the importance of news information in the participants' lives. Table 4.16 shows that the majority of students reported that news information at least held some level of importance in their lives, while 1.9% said it was not at all important and 7.7% reported it was not important. News information was moderately important for 44.9%.

Table 4.16: Importance of News Information in Student's Life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all important	4	1.9	1.9	1.9
	Not important	16	7.7	7.7	9.7
	Moderately important	93	44.9	44.9	54.6
	Important	70	33.8	33.8	88.4
	Very important	24	11.6	11.6	100.0
	Total	207	100.0	100.0	

Testing for Correlations Among Scores

This study sought to identify if higher credibility scores were related to higher levels of news consuming habits. A Spearman's rho correlation was calculated examining the relationship between participant's credibility (CRED) scores and news consuming habit

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(NCH) scores. A weak correlation that was not significant was found ($R^2 = .198$, p > .05).

Credibility score is not related to news consuming habits. See Table 4.17 for full data.

Table 4.17: Correlation Level Between Credibility Scores and News Consuming Habits Scores

			CRED	NCH
Spearman's rho	CRED	Correlation Coefficient	1.000	.198[**]
		Sig. (2-tailed)	.	.006
		N	190	190
	NCH	Correlation Coefficient	.198[**]	1.000
		Sig. (2-tailed)	.006	.
		N	190	207

**. Correlation is significant at the 0.01 level (2-tailed).

A Spearman's rho was also calculated examining the relationship between

participants' interactive media (IM) scores and news consuming habit (NCH) scores. A weak

correlation that was not significant was found ($R^2 = .133$, p > .05). More focus on interactive

media is not related to news consuming habits. See Table 4.18 for complete information.

Table 4.18: Correlation Level Between Interactive Media Scores and News Consuming Habits Scores

			NCH	IM
Spearman's rho	NCH	Correlation Coefficient	1.000	.133
		Sig. (2-tailed)	.	.059
		N	207	202
	IM	Correlation Coefficient	.133	1.000
		Sig. (2-tailed)	.059	.
		N	202	202

CHAPTER V

DISCUSSION

This pilot study applied the uses and gratifications approach to discover where the millennial generation is going on the Web to find credible news information, as well as which credibility criteria are perceived as most important. The research also examined the role of social networking websites in the news consumption process. The study involved asking participants to complete an exercise to find credible news content about a given topic, and then requiring participants to complete a questionnaire about that news item as well as their news consuming habits. Questions about the elements of credibility were adapted from Rieh's (2002) Web credibility assessment of scholarly information.

RQ1: Where Millennials Go For Online News

A solid majority of millennials turned to traditional news media sources to find credible news information on the Web. However, Web-only publications and news releases were also perceived as credible news sources by a sizeable number of participants, suggesting that alternative news sources are playing a more important role in the news media landscape. Few participants turned to blogs as credible news sources, but many who did found their source on a traditional news media website, which calls into question whether they knew the information they were reading was opinion-based. This highlights the need for more research and attention to the media literacy of millennials.

This study also found several variations in source type among the three news groups. While the international and the national news item groups largely turned to traditional news media sources for information, the state group had higher percentages of students who

identified news releases and Web-only publications. It is unknown if the news release and Web-only publication information for the state item ranked higher in news aggregate and news portal searches for the topic than did items from traditional news media sources. If so, this could provide support to Rieh and Hilligross's (2008) finding that college students often compromised information credibility for speed and convenience, especially when the information they sought was less important or of less personal interest to them.

Another component to consider is that each of the topics ranged in popularity. Obviously, the international story returned more search results from a broader range of sources than the statewide news item. The results of this study indicate that when more resources are available, millennials tend to turn to traditional news sources for credible news information. Also for consideration is the fact that the national news topic—rising gas prices—was open to interpretation in a way that neither of the other topics was. The state and international news topics were based on events, but the national topic could have been approached from a business standpoint, or an opinion topic, or, given the 2012 presidential election, political debate and commentary. As it was, the majority of participants still sought out hard news stories on traditional news media websites.

Overall credibility scores indicate that millennials felt reasonably confident in the information they found but, in general, are not unquestioning believers. These results could have good implications about millennials' levels of digital media literacy, but much has still yet to be answered. Some researchers (Considine, Horton, & Moorman, 2009; Flanagin, & Metzger, 2008; Palfrey, & Gasser, 2008) have expressed concern about millennials' abilities to find and evaluate credible information. Even though millennials, for the most part, found reasonably credible news sources in this study, it is unknown if they just identified those

sources because they appeared first on search engine results, news portals and news aggregates. If this is the case, new arguments could be made for the effects of Agenda Setting Theory (McCombs, & Shaw, 1972) and its ability to control news search results based on the number of links to a particular news item. This could create new emphasis on the agenda setting power that traditional news sources have on millennials, since traditional news sources typically garner the most links about given news topics.

RQ2: Criteria For Establishing Credibility

The most surprising data of this study was in the ranking of importance of the criteria for establishing credibility. It was not strange that type of source would be rated highest, but rather it was the two lowest scoring criteria that were not expected. Reputation was fifth and presentation of information was sixth in importance. This finding counters previous research (Wathen and Burkell, 2002; and Metzger, 2007) that indicates visual appeal is a top concern when assessing credibility on the Web. These results also contradict the actions of the participants in this study. In each group, nearly all participants had sent their selected news item to the printer in fewer than five minutes of starting the exercise. This would lead scholars to believe that reputation of a news source and the presentation of the information were some of the top indicators of credibility since it is unlikely that participants could review several sources and feel confident in making a credibility judgment in fewer than five minutes if they were not relying on reputation and/or visuals to guide them. Once again, this aspect of the research calls into question the digital media literacy of the participants and implies that perhaps the participants did not realize that reputation and/or visuals played an important role in their decision-making process.

When considering the variety of sources identified in this study, it is also thought-provoking that the type of source credibility sub-score rated higher than any of the others. Does this imply that those who turned to news releases always turn to news releases for news because they consider them to be reliable sources, regardless of who produced them? This seems highly unlikely and once again brings up questions of digital media literacy. The second highest rated credibility sub-score was the organization of information, which also seems highly unusual given that most participants probably printed their news item before reading it, and thus, they would not have noted the organization of information before making their selection. It's also worthwhile to note that organization of information rated so high, while presentation, in contrast, was least important. This finding is particularly perplexing because the presentation of information can often affect perceptions of how a news item is organized.

RQ3: Role of Social Networking Websites

While this study gathered important data related to the role of social networking websites in the news consumption process for millennials, it has created more questions than answers. No participants submitted news content from a social networking website, but that does not mean that social networking websites were not used to lead participants to news information on another type of website. On the questionnaire, a little less than half of participants reported that they subscribe to social media news updates on Facebook and Twitter, and a little more than one-fourth reported that social networking websites are their top source for news information. This information could counter scholars (Siraj, 2007; and Ruggiero, 2000) who argue that uses and gratifications approach is more relevant in today's digital world than ever before. It is possible that social networking websites are having a

profound impact on how news information is presented to users, making the news consumption process more passive, and in turn, making users more susceptible to the effects of Agenda Setting Theory (McCombs, & Shaw, 1972). It creates more room for debate with scholars like Sundar and Limperos (2010), who argue that uses and gratifications approach needs to be retooled to account for a lack of goal direction at the beginning of media use on social networking websites. They say goal direction is something that develops during the interaction process. But the question remains, then, if uses and gratifications approach can even be applied to scenarios that lack goal direction on social networking websites. Perhaps the goal can become redirected so that it becomes engaging in a social conversation or a current events conversation as opposed to seeking news information.

One concept this study does support is Purcell, Rainie, Rosentiel, and Mitchell's (2011) idea that news consumption is becoming a social activity. More than half of participants reported sharing online news items with family and friends. This indicates that while millennials themselves may not be active news consumers, they trust the judgment of family members and friends to find and share news that is relevant to them.

In the questionnaire, a little more than half of all participants said they were not more likely to use a news source that offered interactive features such as user comments and opportunities to contact the author. It is possible that user comments are not a priority for millennials because rather than post comments in an anonymous online community, they can post a link to a news source on a social networking website and have a conversation with their friends about the news item, thus getting interaction from people they know and care about. Curiously, though, more than three-quarters of participants reported that they are more likely to use a news source if it offers multimedia features, such as videos and photo

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slideshows. Videos and photos are easily shared via social networking sites—could the popularity of these items be directly related to the ease with which they can be shared via social networking sites? Or do the visuals lend credibility to the fact that an event did actually occur?

Most participants in the study indicated that news was at least moderately important in their life. However, their news consuming habits told a different story, since more than a third reported that they spend less than an hour a week consuming news. Even more interesting, those who reported being heavier news consumers did not give their news items higher credibility scores than others. It is still unknown which habits, qualities or characteristics of millennials may lead them to perceive news as highly credible.

Limitations

Participants in this study only printed out information on the final source that they considered credible for their news topic. If the researcher had the ability to track Web page histories of each of the participants, that information would have provided more information about how millennials search for credible news information and how they navigate online news content before making their selections. Another limitation was the fact that all participants were college students, and therefore, may not be representative of the average millennial. It is possible that college students would have different search methods and credibility assessments than those who are not attending college.

An additional limitation to this study is that participants were asked to find credible news information about a news topic. It is possible that they do not ordinarily actively search for credible news information. Another factor to consider is that students could have approached this search for credible news information differently than when they are

searching for information about a news topic they are passionate about. It is also worth noting that participants were finding their news items in a computer lab setting and could have easily been influenced by or copied the news selection of people sitting nearby.

Future Research

This study sets the stage for countless more studies about millennials' news consuming habits and credibility assessments. Future research could track participants' Web page histories to determine where they are going in search of news information. Another change could be made in the methodology to more specifically categorize news items found as either national or international news sources as well as newspaper blogs versus personal blogs, etc. Researchers could also consider timing participants to see just how quickly they determine the credibility of a news item. An option for qualitative research could entail asking participants to talk aloud while they are finding news content, which may actually help participants think more consciously about the way they assess news media credibility.

Additional research could focus specifically on millennials' news consumption via social networking websites. Scholars could explore how millennials are consuming news on social networking sites as well as how frequently they are commenting and sharing news. More research could also identify the types of online news topics that are more likely to attract millennial news consumers.

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APPENDIX A

QUESTIONNAIRE

Age: _____ Computer #:_____

Gender *(circle one)*: Male Female   Major: _____

CREDIBILITY OF YOUR NEWS ITEM							
*Using the table below where **7= Very Important and 1 = Not At All Important***, please place a check mark in the appropriate box when answering each question.							
When you were assessing the credibility of the news information you found, how important was. . .							
	7	**6**	**5**	**4**	**3**	**2**	**1**
The type of source (Ex.: newspaper website, personal blog, social networking website)?	☐	☐	☐	☐	☐	☐	☐
Reputation of the source?	☐	☐	☐	☐	☐	☐	☐
Organization of the information?	☐	☐	☐	☐	☐	☐	☐
Presentation of the website (Ex: graphics, design)?	☐	☐	☐	☐	☐	☐	☐
The depth of the news coverage?	☐	☐	☐	☐	☐	☐	☐
Type of information (Ex: video, news story, blog entry, social media status update)?	☐	☐	☐	☐	☐	☐	☐

Based on the credible news information you found, how would you rate it on the following criteria? Please circle your answers.

1. Completeness of story:

    Not At All Satisfied   Not Satisfied   Neutral   Satisfied   Very Satisfied

2. Visual appeal:

    Not At All Satisfied   Not Satisfied   Neutral   Satisfied   Very Satisfied

3. Information presented in a logical manner:

    Not At All Satisfied   Not Satisfied   Neutral   Satisfied   Very Satisfied

4. Reputation of the news source:

Not At All Satisfied   Not Satisfied   Neutral   Satisfied   Very Satisfied

5. The type of source I chose (newspaper website, blog, social media website, etc.) is typically a reliable choice for news information.

True   More True Than False   Neutral   More False Than True   False

6. The news information I found answered all or nearly all of the questions I had about this subject.

True   More True Than False   Neutral   More False Than True   False

7. The graphics, photos, video and/or page layout of the news item I selected were appealing to me.

True   More True Than False   Neutral   More False Than True   False

8. The type of source I chose (newspaper website, blog, social media website, etc.) is more believable than other types of sources on the web.

True   More True Than False   Neutral   More False Than True   False

9. The news information I found told the story in a way that was easy to understand.

False   More False Than True   Neutral   More True Than False   True

10. The type of information I chose (video, photo gallery, news story, etc.) is typically a reliable choice for news.

False   More False Than True   Neutral   More True Than False   True

11. I had heard of the news source I used or had previous experience relying on that news source for information.

False   More False Than True   Neutral   More True Than False   True

12. The type of information I chose (video, photo gallery, news story, etc.) is more believable than other news formats on the web.

False   More False Than True   Neutral   More True Than False   True

NEWS CONSUMING HABITS
Please circle your answers below.

13. In a given week, about how much time do you spend consuming news information on the web?

Less than one hour   Two to three hours   Three to five hours   More than five hours

14. In your daily life, how important is news information to you?

Very Important   Important   Moderately Important   Not Important   Not At All Important

15. Do you subscribe to news organization updates via Facebook or Twitter?

    Yes   No

16. Do you share online news information with friends and family?

    No   Yes

17. How do you typically access the Internet?

    On a personal computer

    In a computer lab

    At work

    On a mobile device

    Other _____

18. How do user comments on a website affect its credibility rating?

It is more credible than other sites that do not offer comments.

It is less credible than other sites that do not offer comments.

It does not affect credibility ratings.

19. With 1 being the most and 4 being the least, rate the online news sources you use from most to least:

    _____Traditional news organization website

    _____Web-only publication

    _____Blog

    _____Social networking websites

20. Are you more likely to use a news source if it offers interactive features, such as user comments and opportunities to contact the author?

    Yes   No

21. Are you more likely to use a news source if it offers multimedia features, such as video and photo slideshows?

    No   Yes

APPENDIX B

QUESTIONNAIRE WITH CODING

Age: _____ Computer #:_____

1 **2**

Gender (circle one): Male Female Major: _____

CREDIBILITY OF YOUR NEWS ITEM
Using the table below where 7= Very Important and 1 = Not At All Important, please place a check mark in the appropriate box when answering each question.

When you were assessing the credibility of the news information you found, how important was. . .

	7	6	5	4	3	2	1
The type of source (Ex.: newspaper website, personal blog, social networking website)?	☐ 7	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
Reputation of the source?	☐ 7	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
Organization of the information?	☐ 7	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
Presentation of the website (Ex: graphics, design)?	☐ 7	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
The depth of the news coverage?	☐ 7	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
Type of information (Ex: video, news story, blog entry, social media status update)?	☐ 7	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Based on the credible news information you found, how would you rate it on the following criteria? Please circle your answers.

1. Completeness of story:

Not At All Satisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

2. Visual appeal:

Not At All Satisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

3. Information presented in a logical manner:

Not At All Satisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

4. Reputation of the news source:

Not At All Satisfied	Not Satisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

5. The type of source I chose (newspaper website, blog, social media website, etc.) is typically a reliable choice for news information.

True	More True Than False	Neutral	More False Than True	False
5	4	3	2	1

6. The news information I found answered all or nearly all of the questions I had about this subject.

True	More True Than False	Neutral	More False Than True	False
5	4	3	2	1

7. The graphics, photos, video and/or page layout of the news item I selected were appealing to me.

True	More True Than False	Neutral	More False Than True	False
5	4	3	2	1

8. The type of source I chose (newspaper website, blog, social media website, etc.) is more believable than other types of sources on the web.

True	More True Than False	Neutral	More False Than True	False
5	4	3	2	1

9. The news information I found told the story in a way that was easy to understand.

False	More False Than True	Neutral	More True Than False	True
1	2	3	4	5

10. The type of information I chose (video, photo gallery, news story, etc.) is typically a reliable choice for news.

False	More False Than True	Neutral	More True Than False	True
1	2	3	4	5

11. I had heard of the news source I used or had previous experience relying on that news source for information.

False	More False Than True	Neutral	More True Than False	True
1	2	3	4	5

12. The type of information I chose (video, photo gallery, news story, etc.) is more believable than other news formats on the web.

False	More False Than True	Neutral	More True Than False	True
1	2	3	4	5

NEWS CONSUMING HABITS
Please circle your answers below.

13. In a given week, about how much time do you spend consuming news information on the web?

Less than one hour	Two to three hours	Three to five hours	More than five hours
1	2	3	4

14. In your daily life, how important is news information to you?

Very Important	Important	Moderately Important	Not Important	Not At All Important
5	4	3	2	1

15. Do you subscribe to news organization updates via Facebook or Twitter?

Yes   No
2   1

16. Do you share online news information with friends and family?

No   Yes
1   2

17. How do you typically access the Internet?

2 On a personal computer

1 In a computer lab

1 At work

2 On a mobile device

Other _____

18. How do user comments on a website affect its credibility rating?

3 It is more credible than other sites that do not offer comments.

1 It is less credible than other sites that do not offer comments.

2 It does not affect credibility ratings.

19. With 1 being the most and 4 being the least, rate the online news sources you use from most to least: Numbers supplied are scores.

_____Traditional news organization website

_____Web-only publication

_____Blog

_____Social networking websites

20. Are you more likely to use a news source if it offers interactive features, such as user comments and opportunities to contact the author?

Yes   No
2   1

21. Are you more likely to use a news source if it offers multimedia features, such as video and photo slideshows?

No   Yes
1   2

SCORING OF QUESTIONNAIRE RESPONSES

Credibility of News Item (CRED): A higher score equals a greater emphasis on credibility. This section comprises the chart (identified in parentheses below with "C" and a corresponding number) and questions 1 through 12. Total scores can range from 19 to 102.

The credibility section also includes six sub-scores:
TI = Type of Information (C6, Q10, Q12)
TS = Type of Source (C1, Q5, Q8)
R = Reputation (C2, Q4, Q11)
Org = Organization (C3, Q3, Q9)
P = Presentation (C4, Q2, Q7)
D = Depth (C5, Q1, Q6)

Each subscore range is 3 to 17.

News Consuming Habits (NCH): Questions 13 and 14. A higher score equals a greater importance of news in everyday life. Total scores can range from 2 to 9.

Interactive Media (IM): Questions 15, 16, 18, 20, 21. A higher score indicates more interactivity with Web use. Total scores range from 5 to 11.