

NEWS MEDIA LITERACY
AND SOCIAL MEDIA USAGE

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TABLE OF CONTENTS

| | |
|---|-----|
| ACKNOWLEDGEMENTS | ii |
| LIST OF ILLUSTRATIONS | v |
| LIST OF TABLES | vi |
| ABSTRACT | vii |
| Chapter | |
| 1. INTRODUCTION | 1 |
| Purpose..... | 2 |
| Explication of Concepts | 3 |
| 2. LITERATURE REVIEW | 5 |
| Media Literacy: Parent of News Media Literacy..... | 5 |
| Competing Theoretical Approaches in Media Literacy..... | 7 |
| News Media Literacy Emerges..... | 11 |
| Key Tools for Measuring News Media Literacy | 15 |
| News Media Literacy Limitations | 17 |
| Social Media | 18 |
| 3. METHOD | 21 |
| Overview..... | 21 |
| Hypotheses..... | 24 |
| Research Design | 27 |
| Measuring Social Media Usage | 31 |
| Research Approach | 34 |

| | |
|--|----|
| Samples | 35 |
| Survey Population | 36 |
| 4. RESULTS | 37 |
| Variables | 37 |
| Hypothesis 1 | 37 |
| Hypothesis 2 | 38 |
| Hypothesis 3 | 39 |
| Hypothesis 4 | 41 |
| 5. DISCUSSION | 48 |
| Overview | 48 |
| Hypotheses 1, 2, and 3 | 49 |
| Hypothesis 4 | 50 |
| Limitations and Further Research | 52 |
| Conclusion | 56 |
| REFERENCES | 58 |
| APPENDIX | |
| A. News Media Literacy Assessment Tool | 63 |
| B. News Media Source Preferences and Usage | 67 |
| C. Social Media Usage Measurement Tool | 69 |

LIST OF ILLUSTRATIONS

| Figure | Page |
|---|------|
| 1. Areas of Potential Conceptual Overlap between News Media Literacy and Social Media | 22 |

LIST OF TABLES

| Table | Page |
|--|------|
| 1. News Media Literacy Instrument Constructs with Response Coding..... | 29 |
| 2. News Source Selection and Usage Instrument with Response Coding..... | 30 |
| 3. Social Media Usage Instrument and Response Coding..... | 33 |
| 4. Demographic Questions with Response Coding | 34 |
| 5. Survey Sample Size and Overview | 36 |
| 6. Internal Reliability, Mean, and Standard Deviation for News Media Literacy Constructs..... | 37 |
| 7. Pearson Correlation Coefficients for Social Media Usage and News Media Literacy Measures | 40 |
| 8. Typical Weekday News Sources by Percentage | 41 |
| 9. Pearson Correlation Coefficients for Social Media Usage and News Source Selection and Usage, Part I: Source Preferences and News Need | 43 |
| 10. Point-Biserial Correlation Coefficients for Social Media Usage and News Source Selection and Usage, Part II: Typical Weekday News Sources | 45 |
| 11. Pearson Correlation Coefficients for Social Media Usage and News Source Selection and Usage, Part III: Typical Weekday News Source | 47 |

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ABSTRACT

This study measured levels of news media literacy and social media usage among 370 undergraduate journalism students at three institutions in two states. The research posited that high levels of social media usage would reflect high levels of news media literacy among the participants. No significant correlations were found between levels of social media usage and levels of news media literacy. Among the findings, participants with high Twitter participation exhibited lower emphasis on professional news sources and higher tendencies to seek news daily. Additional refinements are recommended for tools measuring news media literacy, social media usage, and news source preferences and usage.

Keywords: news media literacy, social media, online, television, radio, newspaper, Twitter, Facebook

CHAPTER 1 INTRODUCTION

The world in which we live is filled with media. Whether the consequences of that media are positive or negative often depends on our understanding at the moment. But we know that the media can influence our attitudes and behaviors, particularly when we assume that what we see accurately reflects the world (Harris & Sanborn, 2014). The media have gone beyond molding culture. Thoman and Jolls (2004) suggest that “Media no longer just shape our culture – they are our culture” (p. 18). As a result, media literacy is needed to ensure that citizens have the capabilities to make decisions and contributions demanded by a global economy and culture (Thoman & Jolls, 2004).

Creating a nation of informed citizens helps secure the foundation of the democracy in the United States. Given the variety of information sources and our media-saturated world, citizens have been required to sort through information to assess and understand its reliability (Christians, Glasser, McQuail, Nordenstreng & White, 2009; Gans, H.J., 2004; Gans, H. J., 2011). In today’s environment, that assessment comes under the name of media literacy. Just as a child learns how to read in order to translate letters into words, so do members of society learn to translate media messages into meaningful information. Literacy occurs when that translation is done properly and in a way that makes the information valuable to the user (Potter, 2014; Flemming, 2014).

Media literacy has several emerging disciplines. Among those is news media literacy. Some suggest that when citizens have a better understanding of how the media operate, those citizens also perceive media to have higher credibility (Kellner & Share, 2005). They understand that coverage of views, even those opposed to their own, is

necessary for a functioning democracy. Contemporary society is in the midst of a major shift in the way in which people get their news. A recent American Press Institute survey found that the vast majority of people between the ages of 18 and 34 get their news from social media (American Press Institute, 2015). As the mode of delivery system changes, news providers and the society as a whole need to understand how news media literacy may affect the choice of news channel and, conversely, how the news delivery mode impacts news media literacy. The health of the nation's democratic system may turn on those links.

This thesis examines the potential connections between news media literacy and social media usage. News media literacy is presented as a subfield of the larger category of media literacy. The thesis starts with the research that has been done to define social media and media literacy as fields of study and application. Once the fields have been defined, the thesis examines the foundations of media literacy and the emergence of news media literacy as a separate realm of study. Research within the fields of news media literacy and social media is examined and reviewed. The thesis poses four hypotheses designed to examine the potential links between social media usage and news media literacy.

Purpose

The purpose of this research is to investigate the relationship between news media literacy and social media use. This research searched for correlations between the ways in which young people assess the information they receive that is labeled as news and their habits or tendencies on social media networking sites. The key question is whether news media literacy is positively or negatively correlated with social media use. The intention

of this work is to connect the study of news media literacy with the growing use of digital media. The aim is to understand the potential connections and challenges that may be presented by growing digital technologies. In order to do this, we must first understand and define the key concepts, including media literacy and social media.

Explication of Concepts

Media literacy as a field has been extensively studied. Media literacy is defined in Steyer (2002) as the “ability to access, analyze, evaluate, and process media” (p. 195). More specific than media literacy is one of its subfields, news media literacy. The McCormick Foundation, which works with youth-oriented media literacy initiatives, as cited in Hu Dahl and Newkirk (2010), defines news literacy “as the ability to use critical thinking skills to judge the reliability of news reports and sources” (p. 48). Those critical thinking skills will also help them understand the underlying messages and motivations contained in media.

The second concept key to this research is social media. Social media have developed rapidly with the advent of digital technologies and growth in the Internet. At the turn of the 21st Century, web platforms and applications developed that had an emphasis on interactivity, where users could post material as well as consume it. In 2009, Facebook founder Mark Zuckerberg compared his social media network, which was then only 5 years old, to the population of the eighth largest nation in the world. Facebook has grown beyond that, challenging the populations of China and India. Social media easily surpassed email in terms of online activity (Rubenstein, 2011). Facebook participants use the social media platform to chronicle their lives through posted photographs and text, to

monitor the postings of their friends, acquaintances and others who they follow, and to keep up with new information on topics of their self selection.

Social media are defined as technologies based on the Internet that allow people to use digital networks to create and exchange content (Kaplan & Haenlein, 2010). Social media allow users to connect, communication and interact with each other and mutual friends (Correra, Hinsley, & de Zúñiga, 2010). Under Web 2.0, social media have exploded in both the numbers of users and the time spent with the platforms. Popular applications include Facebook, Twitter, YouTube, Instagram, and Snapchat. Each of these allows users the choice to actively participate in the distribution of materials or to merely consume information. The following section of this thesis examines the research literature surrounding news media literacy and social media.

CHAPTER 2 LITERATURE REVIEW

Media Literacy: Parent of News Media Literacy

News media literacy derives from media literacy, but with a special emphasis on the roles of the informed, savvy citizen and the journalist to safeguard democratic institutions. Many of the theories and constructs developed in the media literacy field over the decades have been amended for application in news media literacy. An understanding of media literacy provides frameworks for an analysis of news media literacy.

Throughout the 1980s, efforts were being made to focus and define media literacy (Hobbs, 1998). A basic definition of media literacy emerged in the early 1990s. Twenty-five leaders in the media literacy movement convened for two days in 1992 at the Aspen Institute Wye Center in Queenstown, Md., in an effort to shape a national framework for media literacy. Educators and government policy makers had been frustrated by the lack of clarity among organizations working under the field. The group settled on a basic definition of media literacy as “the ability of a citizen to access, analyze, and produce information for specific purposes” (Aufderheide, 1993, p. 6). The conference acknowledged that media instructors share the belief that three elements – the production process, the text and the audience/receiver – are necessary for understanding how reality is created through media. The key concepts were: “media are constructed, and construct reality; media have commercial implications; media have ideological and political implications; form and content are related in each medium, each of which has a unique

aesthetic, codes and conventions; receivers negotiate meaning in media' (Aufderheide, 1993, p. 10).

Later definitions built on this foundation to include more than the development of skills, but to also involve the emergence of knowledge structures and motivations. Christ and Potter (1998) oversaw a media literacy symposium in the late 1990s, while the effects of the Internet were only first being felt. The symposium reflected two orientations. One set of four authors focused media literacy efforts on children and adolescents. The remaining four scholars considered theoretical frameworks about what an individual needs to achieve media literacy. Even then, the definition of media literacy was unsettled. Christ and Potter noted that the biggest divergence within the field revolves around the idea of production of media contained in the original definition. A debate in the field suggests that the abilities to access and analyze media outweighed the individual's need or ability to produce media.

Potter (2004) put forth his cognitive theory of media literacy in an attempt to create a model for the effectiveness of media literacy efforts. Unless media literacy is well defined and understood, attempts to establish it may be counter productive, he suggests. Potter suggests that five basic knowledge structures combine with an individual's drives to establish levels of media literacy. "To provide a strong foundation for media literacy, people need strong knowledge structures in five areas: media content, media industries, media effects, real-world knowledge, and the self" (Potter, 2004, p. 94). Taken together, these characteristics allow the individual to develop and practice media literacy.

In addition to developing critical thinking skills, media literacy has been shown to have other social effects. Media literacy mitigates the concept known as the hostile media effect (Vraga, Tully, Akin, & Rojas, 2012). This effect occurs when a media consumer who holds a strong viewpoint on an issue encounters an article or information that challenges that viewpoint. Even though the information may be unbiased, it is still perceived as such. Vraga, Tully, Akin, and Rojas (2012) conclude that exposure to something as simple as a media literacy video, “Increases perceptions of story credibility and trust in the media overall” (p. 951).

But not all effects of media literacy have been shown to be positive. Ramasubramanian and Oliver (2007) concluded that viewing a media literacy video primed prejudices against African-Americans and Asian-Indians rather than suppress the prejudices. Their research also concluded that counter-stereotypical news stories, though, decreased prejudice toward Asian-Indians.

Media literacy has no one single definition. But approaches generally include “enhancing critical thinking,” “analysis and evaluation,” and “conscious processing of mediated messages” (Maksl, Ahsley & Craft, 2015, p. 30). The variety within attempts to define media literacy contributes to the variety of theoretical approaches through which it can be considered. Those approaches are considered next.

Competing Theoretical Approaches in Media Literacy

Some members of the media literacy community label the different approaches to the field as either *protectionist* or *empowering* (Hobbs, 2005). Broadly stated, the *protectionist* approach looks for ways to mitigate the negative effects of media exposure. The *empowering* approach looks for ways to understand media through critical analysis

of the messages and media providers. The two approaches use competing theories as their basis for media literacy. The *protectionist* field is associated with media effects while the *empowering* field is associated with the critical/cultural approach.

Media effects theory is one of the most common approaches to the study of mass communication (Harris & Sanborn, 2014). Media effects can be considered *direct*, *conditional* or *cumulative*. *Direct* effects appear quickly after exposure and are thought to be consistent over a population. This model is considered the crudest of the theoretical approaches (Harris & Sanborn, 2014). *Conditional* effects can still be substantial in the individual but only appear under certain conditions and then in less potent levels than are suggested by the direct effects model. *Cumulative* effects occur as the result of repeated, additive exposures to a message (Harris & Sanborn, 2014). Cumulative effects are associated with cultivation theory and the construct of mainstreaming, which suggest that divergent perceptions of social reality can be homogenized into a convergent mainstream (Harris & Sanborn, 2014).

In contrast to media effects theory, the critical/cultural approach has broader application across academic disciplines. The critical/cultural paradigm appears in the criticism of literature, for example, where it has an expansive view of rhetorical analysis (Renegar, 2013). In communications theory, the critical/cultural approach includes an examination of the way that power operates in societies (Martinez Guillem, 2013). Critical/cultural theory represents an extension of Marxist critiques of society, expanded beyond economic phenomena to include other cultural elements. The purpose of the critique is to improve society. Martinez Guillem (2013) notes that the critical/cultural approach often presents “intellectual and political intervention in such processes as a way

to foster general social (good) changes” (p. 185). Thorson (2005) cites a journalism studies program based on a critical/cultural approach that focuses on how “journalistic content operates within social and power structures and within culture” (p. 21). Many practitioners in the world of media literacy employ the cultural/critical technique, which embraces both the content of a media message and the means by which the message is produced.

In 2004, W. James Potter published his *Theory of Media Literacy* in which he positioned media literacy inside the media effects paradigm. Potter’s analysis attempts to connect cognitive models of how humans attend, remember and learn to the cognitive dimensions of media effects. Potter outlines a series of six axioms, one of which states, “Any theory of media literacy must be at its core a theory about how people are affected by the media” (p. 66). Potter also postulates that the purpose of media literacy is to “empower individuals to shift control from the media to themselves” (Potter, 2004, p. 68). Those axioms, with its mandate that all media literacy theory relate back to how individuals are impacted, puts media literacy in the media effects camp.

The debate over which approach to use can be vividly seen in an academic point-counterpoint conducted by Hobbs and Potter over the last five years. Potter launched the exchange with “The State of Media Literacy,” a paper published in 2010 in the *Journal of Broadcasting and Electronic Media*. In that work, he suggests that media literacy diverges toward different sub-topics rather than converging on a set of best practices. Among the diverse sample set of definitions of media literacy, he includes a definition from Hobbs. That definition, taken from Hobbs (2001) was, “Literacy is the ability to access, analyze, evaluate and communicate messages in a variety of forms” (p. 7). Potter

acknowledges that some scholars approach the field with a critical/cultural approach while noting that others see it primarily as a set of pedagogical tools for elementary school teachers.

Despite the differences, Potter states that there are four themes on which all cultural literacy scholars should be able to agree:

The mass media have the potential to exert a wide range of potentially negative effects on individuals.

The purpose of media literacy is to help people protect themselves from the potentially negative effects.

Media literacy must be developed.

Media literacy is multi-dimensional (p. 681).

The first two of these themes coincide with Potter's viewpoint that media literacy should be studied from a media effects paradigm. He argues that the purpose of media literacy is to allow the individual to shift control from the media to themselves. On the other hand, the negative effects paradigm coincides with the protectionist viewpoint.

Hobbs replied in 2011 with a direct response titled "The State of Media Literacy: A Response to Potter." Hobbs suggested that Potter's review of the field had failed to include innovative work over the previous decade from fields such as communication, education and public health. Potter's characterization of the study as founded in the theory of media effects fails to capture the complexity of the field. Hobbs (2011a) noted:

By framing a definition of media literacy only in relation to the goal of reducing negative effects of exposure to mass media, Potter is pushing an agenda which, in fact, has a controversial status among scholars both in the United States and

around the world, where there is a robust ongoing debate about the relative value and limitations of both protectionist and empowerment perspectives in media literacy education (p. 422).

Hobbs suggests that the critical/cultural approach to the field better reflects the diversity of the scholarship. In the response, Hobbs (2011a) concludes, “Media literacy is not about teaching students what to think; rather, it emphasizes the process of helping people arrive at informed choices that are consistent with their own values through the active, reflective, collaborative, and self-actualizing practice of reception and production” (p. 427). For Hobbs, the approach to media literacy is to develop critical skills in understanding, critiquing and analyzing media.

Potter and Hobbs each make successive rejoinders on the topic over the remainder of the year (Potter, 2011; Hobbs, 2011b). While the two researchers attempted to clarify their positions in relation to the other, the fundamental split between a media effects paradigm and the critical/cultural approach remains. The media effects model, however, serves as a solid theoretical underpinning for key news media literacy work, as considered in the following section.

News Media Literacy Emerges

The news media literacy movement can be traced back to the work of journalism dean Howard Schneider, which started in 2005 at Stony Brook University in New York (Flemming, 2014). Schneider had watched as his newspaper, *Newsday*, was slowly dismantled. He sensed that the role of the watchdog journalist had eroded and changed. He understood that the answer to safeguarding the nation was not just better trained journalists. Schneider soon realized that too many journalism students at the university

were not prepared to go to work as reporters (Adler, 2014). Schneider believed that the modern journalism school needed to go beyond merely teaching journalism students. He expanded a news literacy class for the entire student body to teach the university's students to become "savvy and critical consumers of news and information" (Beyerstein, 2014, p. 45). Now, roughly a third of the students at the university take a class in media literacy (Alder, 2014). Flemming (2014) noted that, "It would be a generation of news consumers who would learn how to distinguish for themselves between news and propaganda, verification and mere assertion, evidence and inference, bias and fairness, and between media bias and audience bias" (p. 156). Flemming identified three outcomes of news literacy instruction: "Engagement, awareness of current affairs, and knowledge of press principles and practices" (p. 156). Flemming concludes that, "News literacy at Stony Brook strived to teach students how to (1) access news, (2) evaluate and analyze news, and (3) appreciate a specific genre of news" (p. 152).

News media literacy aims at helping citizens increase how they consume news and how they use that information to connect themselves to their communities. "News media literacy is oriented toward understanding how and why people engage with news media, how they make sense of what they consume, and how individuals are affected by their own news consumption" (Maksl, Ashley & Craft, 2015, p. 29). For professional journalists and the news industry, news media literacy can be seen as a way of sustaining news organizations by ensuring that the public's demand for news continues (Maksl, Ashley & Craft, 2015).

As important as news media literacy may be for the news industry, levels of news literacy are equally important to the fate of democratic institutions. An examination of the

role of journalism in a democracy shows the key underpinnings that journalism has in a nation that attempts self governance. The three basic tasks of journalism in a democracy, include observing and informing the public, participating in public life as an independent actor, and providing a channel or forum for opinion and voices (Christians, et. al, 2009). In its first task, journalism provides a service to the public by collecting and distilling information about government, business and society in general. In its second role, the journalistic entity inserts itself into the community life though its “critical comment, advice, advocacy and expression of opinion” (Christians, et. al, 2009, p. 116). Finally the news entity provides a channel for voice outside the media to reach various publics.

For these tasks to be met, the public must perceive the media as independent and competent. In addition, news organizations need effective information collection systems. Finally, journalism needs to be involved in democratic action and debate, using the free press actively in the context of a healthy public sphere (Christians, et. al., 2009). Given the roles of the news media in supporting democratic structures, news media literacy becomes all the more essential. News media literacy measures the connection between the information provided by the news industry and the information’s potential usage in the nation. The public’s ability to act on information is shaped by its ability to access and analyze the information. Measures of news media literacy assess the levels to which individuals think about their media experience as well as their basic knowledge about media content and media effects (Maksl, et. al, 2015). Under media effects theory, the individual uses his level of media literacy for protection. The individual goes beyond merely criticizing the media’s role in the democracy, as under the critical/cultural theory of media effects. Information is used to protect the democratic systems because the

individuals shift control from the media to themselves (Potter, 2004). In this way, news media literacy gauges the connection between the information provided by the news industry in a democracy and the ability of individuals to act on that information.

Within the greater world of media, news holds a special place. Research suggests that media literacy may be topic specific, making it appropriate to more narrowly focus on news media literacy as a core concept (Ashley, et al., 2013). The emergence of news media literacy from media literacy arises from the unique relationship between news and citizens in a democracy. The suggestion by Potter (2010) that media literacy diverges toward subtopics can also be seen as support for the move to establish news media literacy as a separate discipline.

The need for news media literacy today extends beyond blogs, political bias and which story leads the broadcast. Now news media literacy extends into native advertising, sponsored content and public relations-produced materials that look like journalism (Beyerstein, 2014). In addition, the federal creation of the Common Core standards has shifted elements of primary and high school education from rote memorization to increasingly sophisticated analysis. Media literacy programs which center around critical thinking may grow as a way to teach the skills demanded by the Common Core (Adler, 2014). But the likelihood of an expansion of news media literacy may revolve around the test questions used to assess the Common Core skills. Others in the media literacy field are reluctant to attach news media literacy to the curriculum, particularly in communities where the Common Core standards are considered controversial (Beyerstein, 2014).

Key Tools for Measuring News Media Literacy

Establishing tools to measure news media literacy is essential to the development of the academic field. Researchers and educators have long been interested in how to assess the effectiveness of media literacy. The study of news media literacy has expanded, adapting some of the tools of media literacy. Hobbs and Frost (2003) used a non-equivalent group designed test with 11th grade students. The students were divided into groups with similar demographics. One group of students conducted extensive media analysis of print, audio and visual texts, while the comparison group did not. The study concluded that media literacy instruction improved a student's ability to identify main ideas in written, audio and visual media (Hobbs & Frost, 2003).

One news media literacy scale is presented in Ashley, Maksl and Craft (2013). The authors based their scale on concepts used in American and British conceptualizations of media literacy. According to Ashley et al. (2013), those structures focused on the "perceived motivations of media producers, differing interpretations of media by audiences, and incongruities between reality and media's representation of it" (p. 10). Their work was based on a successful framework that had been used to develop a scale for smoking media literacy. The tool assesses authors and audiences, messages and meanings and representation and reality. The news media literacy assessment tool consisted of 15 questions answered on a seven-point Likert-type scale to indicate agreement or disagreement. The researchers noted limitations with the tool. The authors expressed concerns that the tool may measure commonly held attitudes about news media more than the respondent's actual knowledge of how the media system works (Ashley, et al., 2013).

In 2015, the same group borrowed from media literacy theory to create an expanded news media literacy assessment (Maksl, Ashley & Craft, 2015). The authors concluded that Potter's cognitive model of media literacy could be successfully adapted to news media literacy. Potter (2004) explicated his cognitive theory of media literacy in an attempt to create a measure for the effectiveness of media literacy efforts. Unless media literacy is well defined and understood, attempts to establish it may be counterproductive, he suggests. Potter's five-part knowledge structure model combined with an individual's "collection of drives, needs and intellectual abilities (called the personal locus) do indeed form the basis for an individual's level of news media literacy and capacity for active, conscious processing of information" (Maksl, Ashley & Craft, 2015, p. 37).

Using their updated model, Maksl, Ashley and Craft (2015) employ a multi-part survey that assesses both knowledge and cognitive motivations. Using the tool, they found that teenagers with high levels of news media literacy were more motivated to consume news, had higher levels of skepticism toward news media and were more knowledgeable about current events. News media literacy did not vary by gender, but older participants showed higher levels than younger. Researchers found that white teens were more likely to have high news media literacy rates than non-whites. Teens whose parents had attended some college were likely to have higher media literacy rates. Experience with a youth media program among those surveyed had no effect on levels of news media literacy. Media literacy is not, however, without its limitations, as will be discussed below.

News Media Literacy Limitations

The limitations noted in news media literacy range from the methods in which it is taught to its short academic history. Flemming cites Hobbs as being very critical of news literacy, suggesting that it is primarily past-their-prime journalists sharing “war” stories with students (Flemming, 2014, p. 158). The instruction at Stony Brook is expensive, not grounded in an identifiable body of scholarly literature and difficult to replicate because of its emphasis on current news (Flemming, 2014).

As a result of her study of Stony Brook, Flemming suggests that news literacy be considered as “a specialized approach to media literacy and as journalism education’s equivalent to the college-level music appreciation course” (p. 159). Music appreciation students learn how to listen to and to understand music without necessarily learning how to play instruments. Similarly, news media literacy allows students to analyze and to understand news and its sources without becoming news gatherers themselves. A news media literate student will understand the reliability and construction of news without having had to perform the task themselves, just as a musical audience can critique a performance without mastering an instrument.

Others criticize news media literacy for its limited existing academic research. No national survey has tracked news media literacy programs yet (Adler, 2014). Such a study could highlight the successful and failed techniques used in teaching news media literacy, generate measures of changes in civic awareness in communities where news media literacy has taken root, and help practitioners assess whether the field delivers on its linkage between news media literacy and an alert and active citizenry. Taken as a whole, though, the specialized role of news in the democratic society warrants additional study,

particularly when undertaken through a media effects approach. While readers and viewers may state that the news is overly negative, that approach is actually the result of a desire to improve social and economic conditions through the examination and exposure of inequities and issues.

Social media

Social media have become dominant platforms for the delivery of news, particularly to young people in the United States. A wide variety of members of the millennial generation get their news feeds through social media, according to a survey commission by the American Press Institute (2015). The API study reported:

Fully 88 percent of those surveyed get news from Facebook at least occasionally, 83 percent from YouTube, and 50 percent from Instagram. Sizable minorities of Millennials also report getting news from Pinterest (36 percent), Twitter (33 percent), Reddit (23 percent), and Tumblr (21 percent). And while these numbers are smaller, they represent quite large percentages of those who use these social media platforms at all (American Press Institute, 2015).

More than half of those surveyed obtained news from Facebook at least daily and 44 percent obtained news from the site several times a day. Among the study's findings was that, "Millennials regularly follow a wide range of topics, and virtually everyone's information diet in this generation involves a mix of hard news, soft news, and more practical or news-you-can-use topics" (American Press Institute, 2015). The study verifies that social media has become a primary source of news for a key segment of the population.

Young people are increasingly relying on social networks for their information and communication needs. Daily communication habits had been migrated online, specifically toward social media systems. In a study of news consumption patterns, Mihailidis (2014) found that most young users consumed news exclusively in social networks and aggregated feeds. “While 59% of the population reported spending less than one hour per day consuming news and 34 percent spending 1-2 hours per day with news, 40% of those respondents reported reading/watching news online. Facebook (65%) and Twitter (33%) were the predominant outlets for consumption” (Mihailidis, 2014, p. 1063). Academic research has regularly selected the Facebook and Twitter platforms as the platforms from which to draw data for surveys and studies (Boulianne, 2015; Mihailidis, 2014; Warner, McGowen, & Hawthorne, 2012; Jenkins-Guarnieri, Wright, & Johnson, 2013). Facebook and Twitter are two of the most popular social media networks. (Davenport, Bergman, Bergman & Fearington, 2014).

In a fashion similar to that with news media literacy, social media can be seen as a tool for enhanced political engagement. The research is unclear, though, whether that capability is an extension of traditional activities or whether social media has expanded the engagement (Warner, McGowen & Hawthorne, 2012). A recent meta analysis of quantitative studies of how social media usage might affect a citizen’s participation in civic and political life suggested that there is an overall positive relationship between social media use and participation (Boulianne, 2015). The data also suggests that social media use has a minimal impact on an individual’s participation in election campaigns.

Studies of social media usage frequently relate satisfaction with social media’s use with an outside information need, similar to that seen in measures of media literacy

and news media literacy. For example, Lee et al. (2014) concluded that social media users in the United States seeking information on body image and self-esteem were less likely to be satisfied with the information than South Korean users seeking the same information.

A search of the academic literature on social media found no studies linking social media usage and news media literacy. At least one study researched the connection between media literacy campaigns on social media platforms and body image awareness, but the work did not focus on the connections between levels of social media usage and levels of media literacy (Meng & Bissell, 2009). Another study reported on how three media literacy courses were successfully used to increase awareness about privacy and security concerns among teenagers on social media sites (Vanderhoven, Schellen & Valcke, 2014). Both studies were used to assess the effectiveness of media literacy campaigns in regards to specific social problems. No directly related studies were readily apparent. Potential links and how they would be hypothetically tested are discussed in the next section of this thesis.

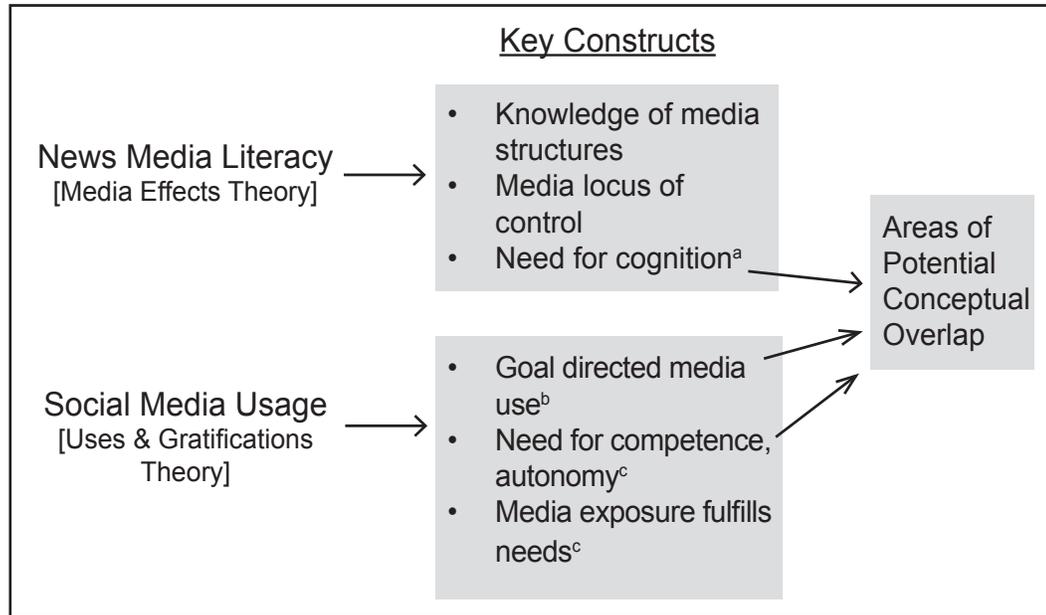
CHAPTER 3 METHOD

Overview

The news media literacy scale created by Maksl et al. (2015) suggests that news media literacy is cognitive, similar to the media literacy model proposed by Potter (2004). Potter's model suggests that media literacy consists of two basic elements – knowledge and motivation – assessed over five areas. When that model is extended to news media literacy, researchers can assess whether an individual can know about or understand the ways in which news is created, and whether the individual follows the news. But that individual's news literacy level is also influenced by intrinsic motives, such as a desire to be in control of news consumption and a desire to engage in thought. In the Maksl adaptation of Potter's model, individuals with high news media literacy scores have knowledge of media structures as well as motivations to think and be aware.

The paradigm of media effects suggests that exposure to media has impacts on individuals (Potter, 2014). The study of both news media literacy and social media can be considered from a media effects model. Media effects are one of the key elements in the measurement of news media literacy. For social media, a conceptual bridge may exist with media effects. The study of social media is often undertaken through a uses and gratifications framework. As Kaye noted in 2010, "Uses and gratifications sets forth several assumptions: (a) individuals seek out media, (b) media use is goal directed, (c) media exposure fulfills a variety of human needs, and (d) individuals seek out media that will gratify those needs" (p.195). This definition generally explains how and why

individuals use social media for news and entertainment and for connections to other individuals and broader communities. Under uses and gratifications theory, the audience



^aMaksl, Ashley & Craft, 2015. ^bKaye, 2010. ^cHarris & Sanborn, 2014.

Figure 1. Areas of Potential Conceptual Overlap between News Media Literacy and Social Media.

takes an active role in making choices and directing goals (Harris & Sanborn, 2014, p. 41). While many studies link uses and gratifications to entertainment or hedonic pleasure-seeking, the theory has been extended to nonhedonic motivations (Harris & Sanborn, 2014). Those nonhedonic motives can include personal expressiveness, competence, autonomy and self-development (Harris & Sanborn, 2014). These motives are similar to the ones incorporated in the media effects model produced by Maksl et al. (2015), particularly individuals' desire to be in control of their personal news consumption and their desire to engage in thought. People frequently check their social media pages and news feeds on several popular platforms such as Facebook and Twitter. They have a strong desire to make sure that they have the latest information on what's happening with

their connections. In addition to providing information about social networks, both of these platforms have also become key delivery modes for news.

The desire in social media use for autonomy and competence in thought is similar to the desire measured in the cognitive model of news media literacy. Both the models in Potter (2004) and Maksl et al. (2015) use a multi-factor matrix to assess media literacy and news media literacy, respectively. Those factors include the individual's knowledge structures in media content, media industries, media effects, real-world knowledge and knowledge of the self. But existing research does not probe the potential connections between levels of news media literacy and levels of social media usage. While some of the intrinsic motives behind the behavior appear similar, the direct connection between the two appears uncharted.

The cognitive approach to news media literacy, which stems from a media effects theoretical basis, suggests some overlap with the uses and gratifications model seen in social media. In uses and gratifications theory, an individual seeks media for a specific cognitive purpose. The desire for information, particularly news, seen in social media usage leads individuals to seek information. The desire for information sparks action to obtain information, whether through social media, online news media or legacy media, such as television, radio, and newspapers. How well individuals understand and use that information can be measured or assessed through the five levels of cognitive need measured in news media literacy. The inference is that high levels of social media usage are driven by some of the same motivational factors that drive an individual's news media usage and resulting level of news media literacy. This would suggest a potential positive correlation between social media usage and news media literacy.

Some may argue that the type of information obtained differs between social media and legacy media. Studies show that social media users often focus on entertainment and neglect news (Bastos, 2015). But behind the information gathering of either type of material remains the type of motivational factor used to construct news media literacy theory: the need for cognition. The idea, then, is to test the relationships between news media literacy and social media to see if a conceptual bridge exists through the concept of cognitive need employed in the formulation of news media literacy.

Extending media effects theory to social media seems a better fit than to attempt to extend uses and gratifications theory, which is often used in assessments of social media, to the field of news media literacy. While the social media user may revel in the entertainment provided in a platform such as Facebook, the individual seeking news content online would seem to be more concerned with competence in understanding the world. This motivation to gain competence coincides with the cognitive model of news media literacy. Other motivations associated with uses and gratifications, such as fulfilling needs through media exposure, seem less connected to the need for control and cognition associated with news media literacy. The effort to assess the differing worlds of social media and news media literacy seems better suited on a cognitive, media effects model than in the realm of uses and gratifications.

Hypotheses

Assessing levels of news media literacy requires selecting a tested tool. The news media literacy measurement tool created by Maksl et al. (2015) contains three constructs, each of which corresponds to elements from Potter's (2004) model of media literacy. Potter suggests that individuals have varying levels of competency within each of these

constructs, but that each measures a separate aspect of media literacy. By extension, Maksl et al. (2015) adapted the constructs in their media literacy tool. They suggest that each measures a different aspect of media literacy. The primary Potter-influenced constructs in Maksl et al. (2015) are: 1) Mindful Thought Processing, 2) Media Locus of Control, and 3) News Media Knowledge Structures. Mindful Thought Processing is the ability of the individual to execute or indulge in independent thought. Media Locus of Control assesses the individual's self-perceived role in gathering information and insuring that the information is correct. The News Media Knowledge Structures construct measures the individual's understanding of how news is made and distributed. In addition, the instrument in Maksl et al. (2015) measures news media use and basic demographics. Hypotheses may be developed from each of these constructs with the exclusion of demographics in connection to levels of social media usage.

Individuals with high levels of social media usage would be exposed to high levels of information. The mere exposure to or consumption of information would not necessarily raise an individual's news media literacy. The level of literacy may revolve around the individual's immediate social set or around communities of interest, such as film, video or electronic gaming. However, the migration of news to social media sites, such as Facebook and Twitter, and the links and posts on the pages of social media associates, delivers additional information directly to individuals. Individuals who are exposed to and consuming social media are also consuming news and may be adding to their knowledge of both media content and real world knowledge. The migration of news to social media in the form of personalized news feeds and wall posts by others exposes social media users to news. The volume of exposure, whether or not it is sought

intentionally, may raise their levels of media literacy and media structures (Potter, 2014). In addition to media content and real world knowledge, knowledge of media structures elevates both media literacy and news media literacy (Maksl et al., 2015; Potter, 2014). Given the abundance of news on social media and the way in which individuals may use that information for control, autonomy, and competence, I expect to see that higher levels of social media usage will correlate with higher levels of news media usage. Therefore, each of the three constructs used to assess news media literacy (Maksl et al., 2015) should be correlated to social media usage. I hypothesize:

H1: The higher the levels of Social Media Usage, the higher the levels of Mindful Thought Processing.

H2: The higher the levels of Social Media Usage, the higher the levels of Media Locus of Control.

H3: The higher the levels of Social Media Usage, the higher the levels of News Media Knowledge Structures.

To round out the study, other measures in addition to the news media literacy constructs may be used to correlate with social media usage. Existing research suggests that individuals use social media primarily for entertainment and that higher entertainment use is associated with lower news use (Bastos, 2015). The literature also suggests that not all social media is equal in the high-entertainment-low-news relationship. Twitter, in particular, has been shown to correlate with higher levels of news consumption when compared to other social media platforms (Pentina, Basmanova, & Zhang, 2016). As news usage changes, individual news source preferences, including how information was gathered and how it was delivered, can be expected to change as

well. Those using social media at higher rates would be expected to consume news in different ways from those with lower social media usage. Rather than rely on traditional news sources such as television, radio and newspaper, individuals with high levels of social media usage would use non-traditional sources, including social media platforms.

The final hypothesis would be:

H4: The higher the levels of Social Media Usage, the higher the preference for non-traditional news media sources.

To test these hypotheses, this project combined elements of previously tested survey tools that have been used independently to measure news media literacy, social media usage, and news media usage and sources.

Research Design

Measuring news media literacy.

Researchers and educators have long been interested in how to assess the effectiveness of efforts to increase media literacy. The study of news media literacy has expanded, adapting some of the tools of the more general media literacy. Hobbs and Frost (2003) used a non-equivalent group designed test with 11th grade students.

Demographically matched sets of students were compared. The study concluded that media literacy instruction improved a student's ability to identify main ideas in written, audio and visual media (Hobbs & Frost, 2003).

One news media literacy scale is presented in Ashley et al. (2013). The authors based their scale on concepts used in American and British conceptualizations of media literacy. Their work was based on a successful framework that had been used to develop

a scale for literacy of the potential effects of smoking. The adapted tool assesses authors and audiences, messages and meanings, and representation and reality.

The authors refined their instrument two years later (Maksl et al., 2015). Based on Potter's (2004) cognitive theory of media literacy, the revised measure was tested against motivations in consuming news information, news skepticism, media use and current events. The test involved a study incorporating phone interviews of 500 teenagers in a metropolitan area of the United States. After completing the study, the authors recommended testing the tool on older and younger populations.

Assessment tool.

The News Media Literacy instrument consists of sets of questions to measure three separate constructs: 1) Need for Cognition, 2) Media Locus of Control, and 3) News Media Knowledge Structures. The instrument uses five questions to assess Need for Cognition, six questions to assess Media Locus of Control, and 15 questions on News Media Knowledge Structures. The answer formats range from five-point Likert style scales to multiple choice (See Table 1). The text of the assessment is also contained in Appendix A. This research proposal used the Maksl et al. (2015) instrument to measure news media literacy. Basic demographic factors used in that study were also gathered. The tool's three constructs – Need for Cognition, Locus of Media Control, and News Media Knowledge Structures – were used, respectively, in testing H1, H2 and H3. A separate News Source Selection and Usage instrument, which was used in part by Maksl et al. (2015), was employed to test H4. The News Source Selection and Usage instrument is shown in Table 2.

Table 1. News Media Literacy Instrument Constructs with Response Coding

| <u>Constructs</u> | <u>Statements</u> |
|---------------------------------|--|
| Need for Cognition | Average responses to the statements: “I don’t like to have to do a lot of thinking” (reverse coded), “I try to avoid situations that require thinking in depth about something” (reverse coded), “I prefer to do something that challenges my thinking abilities rather than something that requires little thought,” “I prefer complex to simple problems,” “Thinking hard and for a long time about something gives me little satisfaction” (reverse coded).* |
| Media Locus of Control | Average responses to the statements: “If I am misinformed by the news media, it is my own behavior that determines how soon I will learn credible information,” “I am in control of the information I get from the news media,” “When I am misinformed by the news media, I am to blame,” “The main thing that affects my knowledge about the world is what I myself do,” “If I pay attention to different sources of news, I can avoid being misinformed,” “If I take the right actions, I can stay informed.”* |
| News Media Knowledge Structures | Sum of correct answers to the multiple choice questions: “Most media outlets in the United States are: a.) For-profit business (correct); b.) Owned by the government; c.) Non-profit businesses; d.) Don’t know.”** See additional 14 questions in Appendix A. |

*Responses coded 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree.

**Responses coded 0 = incorrect, 1 = correct.

Table 2. News Source Selection and Usage Instrument with Response Coding

| <u>Question Title</u> | <u>Statement</u> |
|--------------------------------------|---|
| Importance of News Sources | “The source of news is very important to me.”* |
| Prefer Professional News Sources | “I prefer news stories produced and selected by professional journalists.”* |
| Need News Every Day | “I need to get the news every day.”* |
| Typical Weekday News Online | “On a typical weekday, do you get any news online through the Internet, or not?”** |
| Typical Weekday News Online Time | If yes, about how much time do you spend getting news online on a typical weekday?*** |
| Typical Weekday News Television | “On a typical weekday, do you watch the news or any news programs on television, or not?”** |
| Typical Weekday News Television Time | “If yes, about how much time do you spend watching the news or any news programs on television on a typical weekday?*** |
| Typical Weekday News Radio | “On a typical weekday, do you listen to the news or any news programs on radio, or not?”** |
| Typical Weekday News Radio Time | “If yes, about how much time do you spend reading a daily print newspaper on a typical weekday?*** |
| Typical Weekday News Newspaper | “On a typical weekday, do you read a daily newspaper, or not?”** |
| Typical Weekday News Newspaper Time | “If yes, about how much time do you spend reading a daily print newspaper on a typical weekday?*** |

*Response coded 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree.

**Response coded 0 = No, 1 = yes. If response is “yes,” survey delivers question on time spent with source. If response is “no,” survey delivers question about following news source.

***Response coded 1 = less than 10 minutes, 2 = 10-30 minutes, 3 = 31-60 minutes, 4 = 1-2 hours, 5 = 2-3 hours, 6 = more than three hours.

Measuring Social Media Usage

Social media usage is defined by Jenkins-Guarnieri, Wright, and Johnson (2013) as “the degree to which social media is integrated into the social behavior and daily routines of users, and the importance of and emotional connection to this use” (p. 39). Researchers have used a variety of tools with varying degrees of sophistication to assess the levels of an individual’s integration with social media. Measuring social media use has traditionally been done with self-reported measures. Jenkins-Guarnieri et al. (2013) produced a 10-item scale with a 6-point Likert scale to assess integration and emotional connection.

Social media can be assessed through an individual’s involvement with specific social media systems. Facebook and Twitter are two of the most popular social media networks. Several studies have singled them out as the standards to be measured when assessing social media usage (Davenport et al., 2014; Peterson & Johnston, 2015). Facebook is the world’s largest social network system with more than 1 billion users. Twitter, which was launched the year after Facebook, has more than 600 million members (Peterson & Johnston, 2015). In addition, previous research has found that social media use, such as Facebook and Twitter, may have a potential benefit in a democratic society by expanding an individual’s discussion networks and facilitating civic engagement (Kim et al., 2013).

The Lee et al. (2014) study cited above employed a quantitative analysis of social media usage, asking users to use Likert-style scales to assess social media use frequency and topics. Kim et al. (2013) used a 10-point Likert-style scale to determine how often individuals used the Internet to access social networking sites, including Facebook, and

how often they used Twitter to get news. The scale ranked 1 as “never” and 10 as “very often.” In a study of social media usage and participation in flash mobs, Seo, Houston, Knight, Kennedy and English (2014) asked respondents to rate their average time spent per day and week on social networks on a five-point Likert-style scale. In addition, the study requested demographic data, including gender, education, ethnicity, and socio-economic status.

Similarly, in a study of the relationship between cognitive social capital and social media usage, Peterson and Johnston (2015) focused on Facebook and Twitter usage to test individual perceptions of using social capital. Using previous studies, Peterson and Johnston (2015) defined intensity of social media usage in terms of the number of friends or followers a person has on Facebook or Twitter and the amount of time the individual spent on a site. The study used six questions to assess an individual’s social media usage. This thesis used four of the six Peterson and Johnston (2015) social media usage questions to establish a scale of social media usage within respondents. The two questions that were eliminated assessed feelings toward Facebook and Twitter using inordinate factors that were not scaled, or considered relevant or necessary to this thesis. One additional question was added, measuring the individual’s Overall Social Media Usage. The Social Media Usage instrument and its rating scales are shown in Table 3. The data gathered with the Social Media Usage instrument was used to rank individuals in terms of their social media usage. Those ratings will be compared against the components of the News Media Literacy instrument outlined above to complete the testing of H1 through H4.

Table 3. Social Media Usage Instrument and Response Coding

| <u>Question Title</u> | <u>Statement</u> |
|-----------------------------|--|
| Overall Social Media Usage | “Please rate your level of social media usage.”* |
| Number of Facebook Friends | “About how many Facebook friends do you have?”** |
| Time Spent on Facebook | “In the past week, on average, how much time per day have you spent on Facebook?”*** |
| Number of Twitter Followers | “About how many Twitter followers do you have?”** |
| Time Spent on Twitter | “In the past week, on average, how much time per day have you spent on Twitter?”*** |

*Response coded 5 = very high, 4 = high, 3 = average, 2 = low, 1 = very low to none.

**Response coded 0 = I do not participate in Facebook (Twitter); 1 = 10 or less; 2 = 11-50; 3 = 51 – 100; 4 = 101 – 200; 5 = 201 – 300; 6 = 301 = 400; 9 = More than 400.

***Response coded 1 = less than 10 minutes, 2 = 10-30 minutes, 3 = 31-60 minutes, 4 = 1-2 hours, 5 = 2-3 hours, 6 = more than three hours.

In addition to the tools measuring news media literacy and social media usage, the thesis’ survey collected basic demographic information. Demographics included age, gender, ethnicity, high school journalism experience, and highest parental education level (See Table 4).

Table 4. Demographic Questions with Response Coding

| <u>Question Title</u> | <u>Statement</u> |
|----------------------------------|---|
| Age | “What is your age?” |
| Gender | “What is your gender?”* |
| Ethnicity | “What is your ethnicity?” ** |
| Journalism Experience | “Have you ever been involved with media or journalism education programs (such as working for a high school journalism publication)?*** |
| Highest Parental Education Level | “What is the highest level of school your mother or father has completed?”**** |

*Response coded 1 = male, 2 = female, 3 = other.

**Response coded 1 = white, 2 = black or African American, 3 = Latino/Hispanic, 4 = Asian/Pacific Islander. 5 = American Indian/Alaskan native, 6 = multiracial, 7 = other.

***Response coded 0 = no, 1 = yes.

****Response coded 1 = less than high school, 2 = high school graduate/GED, 3 = some college, but no degree, 4 = vocational/technical/associate/community college degree, 5 = four-year college degree, 5 = post college/advanced degree such as masters or doctoral degree, 7 = don’t know/not sure.

Research Approach

The study integrated the three assessments mentioned above and surveyed three student populations, using the University’s of Missouri’s hosted survey tool. A draft survey was created and pretested on a group of 17 students. Based on their feedback, the survey’s effectiveness was assessed and adjusted. The test survey highlighted an omission in the original instrument tool to measure levels of social media usage. In the questions that asked about the individual’s number of Facebook friends or Twitter followers, the answers lacked the option of zero for those who did not participate in that social media platform. Potential answers of “I do not participate in Facebook” and “I do not participate in Twitter” were added to the scales as shown in Appendix C. The added response was coded as zero. In addition, the original nine-point scale for the numbers of Facebook friends and Twitter followers was condensed to a seven-point scale by

consolidating categories. The changes were designed to eliminate excess variables and to strengthen the remaining ones.

Samples

To test the four hypotheses, the survey, which was titled “News Media Literacy and Social Media”, was submitted to undergraduate students from a large Midwestern university, a large West Coast university, and a two-year community college on the West Coast during the Spring 2016 semester.

Survey participants were conveniently selected through the Journalism departments at the universities. The community college students included those enrolled in classes offered by the Journalism Program and who identified as journalism majors. Convenience samples were sought from each institution, making use of existing groups of students within the population. Convenience samples are easy to access and inexpensive but unlikely to be representative of broad populations (Lang, 1996). The online surveys provided economy of design and rapid turnaround in the data collection (Creswell, 2014). Both of the measurement tools used in this proposal have previously employed Internet-based surveys. The surveys were cross-sectional with data collected simultaneously over a 14-day period at each campus. Survey participants were told that the survey deals with the use of the Internet and their understanding of news media. A modest incentive, the offer of a \$100 gift card to a randomly selected participant, was used to encourage participation at each campus. Institutional Review Board approval was obtained at each campus.

Survey Population

A total of 436 surveys were submitted. Of those, 66 were eliminated for being incomplete, leaving a total N = 370 (See Table 5). For the final group of 370, 75 percent female and 25 percent male were represented. The ages ranged from 17 to 68 with a mean age of 22.4 and a median of 21.0. A total of 61.4 percent identified as white; 3.8 percent, black; 20.0 percent, Latino; 7.0 percent, Asian; and 9.9 percent multiracial and other. A total of 76.5 percent reported having taken a journalism class in high school. A total of 60.8 percent reported their highest parental education as a bachelor's degree or above.

Table 5. Survey Sample Size and Overview

| <u>Campus</u> | <u>Total</u> | <u>Incomplete</u> | <u>Complete</u> |
|------------------------------|--------------|-------------------|-----------------|
| Midwestern university | 254 | 35 | 219 |
| West Coast university | 106 | 25 | 81 |
| West Coast community college | 76 | 6 | 70 |
| Totals | 436 | 66 | 370 |

CHAPTER 4 RESULTS

Variables

In this project's analysis, the three measures of news media literacy employed: Need for Cognition, Media Locus of Control, and News Media Knowledge Structures. The internal reliability of those three News Media Literacy constructs was tested using Cronbach's Alpha. Each construct was found to be internally reliable. The mean and standard deviation were also calculated for each construct. (See Table 6).

Table 6. Internal Reliability, Mean, and Standard Deviation for News Media Literacy Constructs

| <u>Constructs</u> | <u>Internal Reliability</u> | | <u>Mean</u> | <u>Std. Dev.</u> |
|-----------------------------------|-----------------------------|------------------------|-------------|------------------|
| | <u>Cronbach's Alpha</u> | <u>Number of Items</u> | | |
| Need for Cognition* | .760 | 5 | 3.80 | .766 |
| Locus of Media Control* | .621 | 6 | 3.63 | .570 |
| News Media Knowledge Structures** | .741 | 15 | 11.97 | 2.73 |

*Responses coded 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree.

**Responses coded 0 = incorrect, 1 = correct.

Hypothesis 1

The first hypothesis suggested that the higher the levels of Social Media Usage, the higher the levels of Need for Cognition. Following the protocol used by Maksl, Ashley and Craft (2015) in developing the news media literacy scale, a mean score was calculated from the five Need for Cognition questions for each participant. A Pearson's correlation was calculated examining the relationship between the participant's Overall

Social Media Usage and their mean Need for Cognition scores. A non-significant negative correlation was found ($r = -.046, p > .05$). In other words, they were not correlated. Additional Pearson's correlations were calculated examining the relationship between the participant's Facebook-specific usage and their Need for Cognition scores. The Facebook-specific usage measures ranked the Number of Facebook Friends and Time Spent on Facebook. A non-significant negative correlation was found between the Number of Facebook Friends and the Need for Cognition ($r = -.064, p > .05$). A non-significant negative correlation was found between the Time Spent on Facebook and the Need for Cognition ($r = -.101, p > .05$). Pearson's correlations were also calculated to examine the relationship between the participant's Twitter-specific usage and their Need for Cognition scores. The Twitter-specific usage measures ranked the number of Twitter followers and time spent on Twitter. A non-significant negative correlation was found between the Number of Twitter Followers and the Need for Cognition ($r = -.047, p > .05$). A non-significant positive correlation was found between the Time Spent on Twitter and the Need for Cognition ($r = .028, p > .05$) (Even though the correlation was non-significant, the positive relationship will be considered in the discussion of H4.) (See Table 6). No measure of Social Media Usage showed a significant correlation to Need for Cognition. Hypothesis 1 was not supported.

Hypothesis 2

The second hypothesis suggested that the higher the levels of Social Media Usage, the higher the levels of Media Locus of Control. As was done with Need for Cognition, each individual's mean score was calculated for the six questions used to measure Media Locus of Control. A series of Pearson's correlations was calculated

examining the relationships between the participant's Social Media Usage levels and their mean Media Locus of Control. A non-significant positive correlation was found between Overall Social Media Usage and the Media Locus of Control ($r = .069, p > .05$). A non-significant negative correlation was found between the Number of Facebook Friends and Media Locus of Control ($r = -.085, p > .05$). A non-significant negative correlation was found between the Time Spent on Facebook and the Media Locus of Control ($r = -.041, p > .05$). A non-significant negative correlation was found between the Number of Twitter Followers and the Media Locus of Control ($r = -.093, p > .05$). A non-significant positive correlation was found between the Time Spent on Twitter and the Media Locus of Control ($r = .089, p > .05$) (Again, this non-significant positive relationship will be considered in the discussion of H4). (See Table 6). No measure of Social Media Usage appears related to Media Locus of Control. Hypothesis 2 was not supported.

Hypothesis 3

The third hypothesis suggested that the higher the levels of Social Media Usage, the higher the levels of News Media Knowledge Structures. A score was calculated for the 15 multiple-choice questions in the News Media Knowledge Structures construct. Each question had one correct answer. The scores were rated "correct" = 1 and "incorrect" = 0. The overall mean score for the index was 11.97 with a standard deviation of 2.73. A series of Pearson's correlations were calculated examining the relationships between the participant's Social Media Usage measures and their News Media Knowledge Structures score. A non-significant negative correlation was found between Overall Social Media Usage and the News Media Knowledge Structures ($r = -.056, p >$

.05). A non-significant positive correlation was found between the Number of Facebook Friends and News Media Knowledge Structures ($r = -.069, p > .05$). A non-significant positive correlation was found between the Time Spent on Facebook and the News Media Knowledge Structures ($r = .043, p > .05$). A non-significant positive correlation was found between the Number of Twitter Followers and the News Media Knowledge Structures ($r = .027, p > .05$). A non-significant negative correlation was found between the Time Spent on Twitter and the News Media Knowledge Structures ($r = -.076, p > .05$) (The non-significant correlations involving Twitter will be discussed later). (See Table 6). No measure of social media usage appeared related to the knowledge of news media structures. Hypothesis 3 was not supported.

Table 7. Pearson Correlation Coefficients for Social Media Usage and News Media Literacy Measures

| <u>Social Media Usage</u> | <u>News Media Literacy Measures</u> | | |
|--|-------------------------------------|-------------------------------|--------------------------------------|
| | <u>Need for Cognition</u> | <u>Media Locus of Control</u> | <u>Knowledge of Media Structures</u> |
| Overall Social Media Usage N = 370 | -.046 | .069 | -.056 |
| Number of Facebook Friends N = 370 | -.064 | -.085 | .069 |
| Time spent on Facebook N = 349 | -.101 | -.041 | .043 |
| Number of Twitter Followers N = 370 | -.047 | -.093 | .027 |
| Time spent on Twitter N = 316 | .028 | .089 | -.076 |

^a $p < .05$

^b $p < .01$

Hypothesis 4

The fourth hypothesis suggests that the higher the levels of social media usage, the higher the individual's preference for non-traditional news media sources. News preference was measured using the News Source Selection and Usage tool (See Table 2), which consists of a series of questions used in several previous online media surveys, including Maksl et al. (2015). The measure assesses the participant's understanding of the quality of news sources and their news consumption patterns. The questions assess daily news consumption patterns via four delivery methods: online, television, radio, and newspaper. More than 98 percent of participants sought news online on a typical weekday compared to only 18.1 percent who sought news through newspapers (See Table 5). To assess the potential connections between social media usage and the news media usage ratings, Pearson correlations and a point-biserial correlation were run between the variables.

Table 8. Typical Weekday News Sources by Percentage

| | Online | Television | Radio | Newspaper |
|-----|--------|------------|-------|-----------|
| Yes | 98.4 | 36.2 | 29.7 | 18.1 |
| No | 1.6 | 63.8 | 70.3 | 81.9 |

Measuring importance of news sources.

No significant positive or negative relationships were detected between Overall Social Media Usage and Importance of News Sources and Prefer Professional News Sources. However, a significant negative correlation was found between Time Spent on Twitter and Prefer Professional News Sources ($r = -.121, p < .05$). Those who spend more time on Twitter place less emphasis on professional news sources. A significant positive

correlation was found between Overall Social Media Usage and Get News Every Day ($r = .141, p < .01$), indicating that individuals with high levels of social media use also have a need and practice for daily news consumption. A significant positive correlation was also found between the Number of Twitter Followers and Get News Every Day ($r = .156, p < .01$), indicating that those who post frequently with lots of followers also have a high need to seek news daily (See Table 9). The correlations suggest that those who participate in Twitter use the platform for news in greater levels than those who participate in Facebook. Previous studies have suggested similar findings (Pentina, Basmanova, & Zhang, 2016). The findings should be tempered, however, by the high number of correlations being considered here, which increase the possibility that the significant correlations are appearing by chance. However, given that the sample consists of journalism students who would be presumed to have relatively consistent levels of news media literacy, the significant relationships may hold. Statistical challenges emerging from the sample will be considered in the following chapter.

Table 9. Pearson Correlation Coefficients for Social Media Usage and News Source Selection and Usage, Part I: Source Preferences and News Need

| <u>Social Media Usage</u> | <u>News Source Selection and Usage, Part I: Source Preferences and News Need</u> | | |
|--|--|---|----------------------------|
| | <u>Importance of News Sources</u> | <u>Prefer Professional News Sources</u> | <u>Need News Every Day</u> |
| Overall Social Media Usage N = 370 | .004 | -.012 | .141 ^b |
| Number of Facebook Friends N = 370 | -.039 | .030 | .019 |
| Time spent on Facebook N = 349 | .003 | -.008 | .018 |
| Number of Twitter Followers N = 370 | -.036 | .051 | .156 ^b |
| Time spent on Twitter N = 316 | -.005 | -.121 ^a | .080 |

^a $p < .05$

^b $p < .01$

Measuring typical weekday news sources.

Point-biserial correlations run between the social media usage measures and typical weekday news sources highlighted four significant relationships. A significant correlation was found between Overall Social Media Usage and Typical Weekday News Source: Online ($r = .124, p < .05$). Those who use social media heavily also like to get their news online. A significant negative correlation was found between Number of Facebook Friends and Typical Weekday News Source: Television ($r = -.108, p < .05$), indicating that those with high numbers of Facebook friends consume lower levels of television news. That tendency is reinforced in the significant negative correlation

between Number of Facebook Friends and Typical Weekday News Source: Radio ($r = -.203, p < .01$). Individuals with large numbers of Facebook friends have low typical weekday use of radio. Another significant negative correlation was found between Number of Twitter Followers and Typical Weekday News Source: Radio ($r = -.126, p < .05$), indicating that those with high Twitter followers also have low typical weekday use of radio (See Table 10). The findings suggest that those with high levels of social media use do not access news on traditional platforms, which could indicate that they access news through Twitter. Again, the findings should be tempered, however, by the high number of correlations being considered here, which increase the possibility that the significant correlations are appearing by chance. The same sample challenges noted in the previous section will be considered in the following chapter.

Table 10. Point-Biserial Correlation Coefficients for Social Media Usage and News Source Selection and Usage, Part II: Typical Weekday News Sources

| <u>Social Media Usage</u> | <u>News Source Selection and Usage, Part II: Typical Weekday News Sources</u> | | | |
|--|---|--------------------|--------------------|------------------|
| | <u>Online</u> | <u>Television</u> | <u>Radio</u> | <u>Newspaper</u> |
| Overall Social Media Usage N = 370 | .124 ^a | .038 | -.096 | -.056 |
| Number of Facebook Friends N = 370 | -.011 | -.108 ^a | -.203 ^b | -.084 |
| Time spent on Facebook N = 349 | .010 | -.094 | -.037 | -.027 |
| Number of Twitter Followers N = 370 | .071 | .018 | -.126 ^a | .010 |
| Time spend on Twitter N = 316 | .063 | .020 | -.052 | .009 |

^ap < .05

^bp < .01

Measuring typical time spent with news sources.

Pearson’s correlations run between the social media usage measures and the amount of time spent daily with typical weekday news sources highlighted five significant positive relationships. Each of the strong correlations existed between social media usage variables and the amount of time spent online, as may be expected given social media’s presence only online. A significant positive correlation was found between Overall Social Media Usage and Typical Weekday News Time: Online ($r = .202, p < .01$), which would be expected given that social media exists only online. Additional significant correlations reinforce that given. A significant positive correlation was found between Time Spent on Facebook and Typical Weekday News Time: Online ($r = .231, p$

< .01). A significant positive correlation was found between Number of Twitter Followers and Typical Weekday News Time: Online ($r = .189, p < .01$).

A significant positive correlation was found between Time Spent on Twitter and Typical Weekday News Time: Online ($r = .404, p < .01$). People on Twitter are seeking news online. These relationships also reflect that fact that social media requires time online and it takes more time to develop friends and followers.

Finally, a significant positive correlation was found between Time Spent on Facebook and Typical Weekday News Time: Television ($r = .179, p < .05$), indicating that those who spend time on Facebook also spend time watching television news (See Table 11) or possibly do it concurrently. Again, the findings should be tempered, however, by the high number of correlations being considered here, which increase the possibility that the significant correlations are appearing by chance. The differences between Facebook and Twitter users and news sources will be considered in the discussion. The data shows support for Hypothesis 4.

Table 11. Pearson Correlation Coefficients for Social Media Usage and News Source Selection and Usage, Part III - Typical Weekday News Source

| <u>Social Media Usage</u> | <u>News Source Selection and Usage, Part III - Typical Weekday News Time</u> | | | |
|-----------------------------|--|-------------------|--------------|------------------|
| | <u>Online</u> | <u>Television</u> | <u>Radio</u> | <u>Newspaper</u> |
| Overall Social Media Usage | .202 ^b | .059 | .059 | .236 |
| N* = | 364 | 134 | 110 | 67 |
| Number of Facebook Friends | .063 | -.020 | .029 | .060 |
| N* = | 364 | 134 | 110 | 67 |
| Time spent on Facebook | .231 ^b | .179 ^a | .175 | .161 |
| N* = | 343 | 121 | 99 | 63 |
| Number of Twitter Followers | .189 ^b | .045 | -.062 | .143 |
| N* = | 364 | 134 | 110 | 67 |
| Time spent on Twitter | .440 ^b | .169 | .176 | .166 |
| N* = | 311 | 115 | 91 | 57 |

^ap < .05

^bp < .01

*N varies among news media sources because question was delivered only to participants who answered “Yes” to using a source for news on a typical weekday

CHAPTER 5 DISCUSSION

Overview

This study sought to test the relationships between an individual's news media literacy and the individual's levels of social media usage. The study used an existing, tested news media literacy tool which was derived from Potter's cognitive model of media literacy (2004). The social media usage scales were derived from reviewed and published work (Maksl et. al., 2005, Peterson and Johnson, 2015). An established index of news media usage was also incorporated into the study design and execution. Overall, the study failed to find significant relationships between levels of news media literacy and levels of social media usage. Some relationships were found between levels of social media usage and levels of news media usage, warranting additional study. But the question of how and whether social media usage influences an individual's news media literacy, as the terms are currently defined, remains unanswered.

As an academic field, media literacy has grown in acceptance and influence, propagating many offshoots, among them news media literacy. Given the essential role that media and journalism play in a democratic society, the study of news media literacy is critical. The participants, all journalism students from three educational institutions, were also very high, however, in their levels of social media usage. More than 70 percent of the participants ranked their social media usage as either high or very high. All but 6 of the 370 participants listed daily online activity as a source for news.

Hypotheses 1, 2, and 3

The news media literacy tool produced by Maksl et al. (2015) has three distinct measures: need for cognition, locus of media control and knowledge of news media structures. Each of those measures failed to show any significance against five measures of social media usage. In the analysis for Hypothesis 1, weak correlations that lacked significance were found between the need for cognition and overall social media usage, the amounts of daily Facebook and Twitter time and the numbers of Facebook friends and Twitter followers. Similar weak correlations that lacked significance were found in Hypothesis 2, which analyzed locus of media control and the social media measures, and Hypothesis 3 which focused on knowledge of media structures and the social media measures. The three news media literacy measures appeared at first reading to be unrelated to social media usage. But the non-significant positive correlations between Twitter users and Need for Cognition and Locus of Media control suggest a potential relationship. The sample relied exclusively on journalism students who would be expected to have higher levels of news media literacy than the general population. The sample's consistency may have diluted the potential significance of these positive indications. A larger or more inclusive instrument that incorporated other popular social media, such as Snapchat and Instagram, may have yielded different results. Issues with the sample will be discussed further in the limitations section below.

The conclusion from Hypothesis 1, 2, and 3 suggest that social media usage is distinct from news media literacy. This conclusion may be reinforced by the differing theoretical basis between the two concepts. Media literacy has traditionally been studied using either a cultural/critical model or a media effects theoretical model. The branch of

news media literacy that produced the survey tool used in this study derives from a media effects model. Social media usage, on the other hand, has been traditionally studied using a uses and gratifications model. The attempt to bridge media effects and uses and gratifications appears to have used tools that assess segments of a participant's world in different fashions. Different theoretical approaches may have joined tools that measure behavior from incompatible starting points.

On the other hand, the lack of support for the first three hypotheses may also suggest that news consumption through social media occurs at lower levels than originally considered. While the social media tool used in this survey measured social media participation, it was not specifically designed to measure levels of news consumed on social media. A tool designed to measure levels of news consumed during social media activities should be developed and employed in future studies. News feeds on Facebook and the use of Twitter by major news organizations, such as the New York Times, Associated Press, and CNN, have become increasingly prominent, suggesting potential areas for further study between social media consumption, news consumption, and news media literacy.

Hypothesis 4

The need for additional study on the nexus of social media and news consumption is reinforced by the support found here for Hypothesis 4, which suggests that high levels of social media usage would correspond to high levels of the individual's preference for non-traditional news media sources. While no strong correlations were found between the two factors, several distinctions of note appeared between participants who used Twitter and who used Facebook. The data supports the conclusion that those with heavy Twitter

usage use it more for news than those who use Facebook. Twitter users, for example, demonstrated a statistically significant tendency to place a lower emphasis on traditional offline news sources, such as newspapers, radio and television. Twitter's role in the social media world has been to allow participants to push messages directly to their audiences with links to news and information produced by traditional news sources, as well as that produced by blogs, fan sites, politicians, celebrities and individuals. This occurs without mediation by traditional news or journalism sources. Politicians, celebrities, businesspeople and individuals use their Twitter feeds to communicate with their followers, potentially dozens of times a day. A lower emphasis on professional news sources among those with high numbers of Twitter followers indicates that news no longer must be delivered through traditional offline sources. Individuals with high numbers of Twitter followers also showed a significant high need for daily news consumption, reinforcing the value that while news is important, the offline sources no longer are. Radio as a source of news, in particular, was significantly lower with both Twitter and Facebook users with high numbers of friends.

An inconsistency emerged in the data between Facebook users and time watching television. In one finding, Facebook users with high numbers of friends had lower daily television consumption rates. This could describe a distinction between those individuals who post and develop lots of friends and those who lurk and watch television for entertainment while they scroll. In a separate analysis, Facebook users who spent longer time on the social media site had higher television consumption rates. The data does not offer an explanation of why one Facebook subset would spend more time watching television than the other. One potential explanation is that social media users focus on

entertainment to the exclusion of news, as has been shown in earlier research (Bastos, 2015). Other potential reasons may include a lack of precision in the survey instrument or a similar passive state of mind embraced with Facebook participation and television consumption or concurrent use. The inconsistency warrants additional study. The findings should also be tempered, however, by consideration of the high number of non-significant correlations, which raise concerns that the significant correlations are occurring by chance. Expanding the sample collection methods to seek greater educational and age ranges, as will be discussed in the study limitations section below, may change the correlations.

The inconclusive results in Hypothesis 4 may also be the result of the news media usage questions themselves, particularly in relation to news media literacy. The tool's news source questions offer four alternatives – online, television, radio and newspaper. The tool suggests a distinction between news source and method of delivery. While virtually all of the participants in this survey went online daily to gather news, they were not asked to distinguish between an online news source based at a news organization, such as the New York Times, or at a website, such as BuzzFeed News, or blogs, fan sites, or even other social media including Reddit, Instagram or Snapchat. This shortcoming in the measurement tool will be discussed further in the limitations section below.

Limitations and Further Research

Demographic factors, sample size.

Among the limitations in this research is the way in which demographic factors affect social media usage. Access to the Internet varies based on factors such as income, education, location and age (Haight, Quan-Haase & Corbett, 2014). A broader sample

size taken from statistically significant national survey may provide more variation in the sample. This study consisted of a convenience sample of journalism students, which limits generalization to the larger population. The use of journalism students for the sample may significantly reduce the variation of news media literacy when compared to the general population. Journalism students would by their nature be expected to have high degrees of interest in news and, by extension, higher levels of education and literacy. This limit may have substantially contributed to the lack of significance in the findings here. A sample that included a more representative cross-section of the population would be expected to include individuals with a lower presumed interest in news and, consequently, more varied levels of news media literacy.

The sample here also skewed young with a mean age = 22.4. Social media usage is highest among youth as shown by this sample's finding that all but 9 of the participants engaged in regular social media usage. A wider demographic sample would potentially provide greater range in results from the key instruments of Social Media Usage, News Media Literacy, and News Source Preference and Usage. Less homogeneity in the sample population would create the potential for greater range in the data. That range would be expected to produce greater significant to the relationships to the correlations between the findings. Another approach would be to focus research on a specific demographic category, such as income. Data that could be sorted by income or ethnicity may give additional insight into challenges for the development of news media literacy by class, occupation and age. The limits of this population, however, make it difficult to absolutely rule out potential significance.

Instruments.

Limitations were also found in the tools used to assess news media literacy and news media usage. The news media literacy assessment tool consists of three elements, two scales and an index, which cannot be easily distilled into a simple scale. Instead, the tool has been used to create high and low groups of news media literacy. A scale would have a clearer, more distinct correlation with other variables. The tool's authors are aware of this limitation and have started internal discussions about whether a scale should be created and how it would be done (A. Maksl, personal communication, March 29, 2016). The news media literacy measurement takes its foundations from Potter's work in media literacy, which also consists of distinct segmented measures. These measures emerge through the conceptual basis of media literacy.

Developing a news media literacy scale will take additional theoretical exploration. The three constructs in the scale used in this thesis – Need for Cognition, Media Locus of Control, and Knowledge of Media Structures – each contribute an aspect of news media literacy. The question is how these constructs might be integrated. Other assessment tools commonly used in education, such as the SAT or the GRE, are designed to measure aptitude or potential for achievement. They do this through questions, some of which measure comprehension, others of which measure reasoning abilities, and so on. Those different elements are distilled into single scores. Granted, there are critics of the testing regimens who question what the tests actually measure. That would be expected of a news media literacy assessment, too. But development and field testing may help researchers produce a tool that would provide potential singular assessment value.

A simplified tool would also be useful in attempts to assess the effectiveness of news media literacy. Some news media literacy critics have described the field as dominated by news media workers telling war stories (Flemming, 2014). The field of news media literacy is limited, in part, by its academic newness, so there is a limited tradition of study and criticism. As efforts to enhance news media literacy grow, so will the ability to test the concepts used by educators in those classrooms. In the classroom, an educator employs specific student learning outcomes to construct the curriculum. Materials are designed to help students meet those outcomes, and assessments are used to measure how well the class integrated the concepts and skills. Part of the challenge with the existing news media literacy measure is in the curriculum needed to develop the knowledge and skills being measured.

Consider the first construct in the news media literacy tool: Need for Cognition. Helping individuals learn how to think often takes a backseat in education to having those individuals memorize a handful of facts. Developing curriculum that stimulates the Need for Cognition isn't discipline specific, so it may seem to fall outside of the fundamental academic fields. But the ability to critically think is essential to news media literacy. The news media literacy measurement tool will become more effective when the educational curriculum better helps individuals develop their critical skills. The tool itself needs refinement, but that must happen in an atmosphere in which concepts such as cognition and media control are taught as essential skills.

Revisions would also strengthen the news media usage tool used in this study. The existing tool conflates the nuances of news delivery and news source. The heart of the tool asks participants to identify their daily sources for news: choosing online,

television, radio, and newspaper. In this survey, 98 percent of the respondents used online sources for daily news delivery. But that category identifies only the delivery method and not the foundational source of the information. As noted above, the respondent may be online obtaining information from the New York Times, a reputable news source, or BuzzFeed, a website with some original news production, but which is also known for its cute cat videos. Both would fall under the category of online information delivery within this measurement. And both, incorrectly, exclude the foundational news sources. As a former newsman who oversaw the creation of a mid-sized daily newspaper's website, I witnessed first-hand the migration of users from print to online. The more important question regarding news usage, particularly the online segment, is whether that online information accessed through Twitter originates from a legitimate or traditional news organization, or whether it came from a blog, a partisan think tank, a political site, or a newly developed news source. Further studies of news media literacy must distinguish between sources and delivery systems.

Additionally, the social media usage instrument needs to distinguish between Twitter sources. A Twitter user who follows the New York Times, CNN, Politico, and the Associated Press, etc., on Twitter gets more news than those who follow the Kardashians and is more likely to be news media literate. The instrument should also index new, emerging popular social media, since many undergraduates now skip Facebook for Snapchat or Instagram.

Conclusion

Media literacy gives citizens the tools to effectively analyze and understand the messages that surround us. As increasing numbers of citizens turn to social media for

news, the connection between that news delivery system and news media literacy will also grow increasingly important. Previous research has found that social media use, such as Facebook and Twitter, may have a potential benefit in a democratic society by expanding an individual's access to information and discussion networks and, thereby, facilitating civic engagement (Kim et al., 2013). News media literacy focuses on the analysis of information and how that information is produced. The understanding of process has replaced the memorization of facts. Knowledge skills, such as those promoted through news media literacy, are increasingly important in an era when traditional gatekeepers of information may or may not be present.

Also important to this era is an understanding of how these two elements – news media literacy and social media usage relate. As society faces a citizenry that increasingly uses and relies on social media for news, we will need to determine how this method of information delivery shapes news and the participant's understanding of news. While this study was inconclusive in exploring and explaining that connection, future research may help us understand the nexus. The sources of our news remain important to us because of their potential to shape messages and opinions that may, in turn, shape society and government. In our future, it will be critical not just to access or be exposed to news, but to also understand it.

REFERENCES

- Adler, B. (2014). A movement's moment: Common Core opens the door for news literacy to expand in the classroom. *Columbia Journalism Review*, 52(5), 48-49.
- Ashley, S., Maksl, A., & Craft, S. (2013). Developing a news media literacy scale. *Journalism & Mass Communication Educator*, 68(1), 7-21.
- Aufderheide, P. (Ed.). (1993). *Media literacy: A report on the national leadership conference on media literacy*. Aspen, CO: Aspen Institute.
- Bastos, M. T. (2015). Shares, Pins, and Tweets. *Journalism Studies*, 16(3), 305-325.
- Beyerstein, L. (2014). Can news literacy grow up?. *Columbia Journalism Review*, 53(3), 45-49.
- Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information, Communication & Society*, 18(5), 524-538.
- Christ, W. G., & Potter, W. J. (1998). Media literacy, media education, and the academy. *Journal Of Communication*, 48(1), 5.
- Christians, C., Glasser T., McQuail, D., Nordenstreng, K., & White, R. (2009). *Normative theories of the media: Journalism in democratic societies*. Urbana, IL: University of Illinois Press.
- Cresswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Davenport, S. W., Bergman, S. M., Bergman, J. Z., & Fearington, M. E. (2014). Twitter versus Facebook: Exploring the role of narcissism in the motives and usage of different social media platforms. *Computers In Human Behavior*, 32212-220.

- Fleming, J. (2014). Media literacy, news literacy, or news appreciation? A case study of the news literacy program at Stony Brook University. *Journalism & Mass Communication Educator*, 69(2), 146-165.
- Gans, H. J. (2004). Journalism, Journalism Education, and Democracy. *Journalism & Mass Communication Educator*, 59(1), 10-16.
- Harris, J.H., & Sanborn, F.W. (2014). *A cognitive psychology of mass communication* (6th ed.). New York, N.Y.: Routledge.
- Hobbs, R. (1998). The seven great debates in the media literacy movement. *Journal Of Communication*, 48(1), 16.
- Hobbs, R. (2001). Improving reading comprehension by using media literacy activities. *Voices from the Middle*, 8(4), 44-50.
- Hobbs, R. (2005). The state of media literacy education. *Journal Of Communication*, 55(4), 865-871.
- Hobbs, R. (2011a). The state of media literacy: A response to Potter. *Journal Of Broadcasting & Electronic Media*, 55(3), 419-430.
- Hobbs, R. (2011b). The state of media literacy: A rejoinder. *Journal Of Broadcasting & Electronic Media*, 55(4), 601-604.
- Hobbs, R., & Frost, R. (2003). Measuring the acquisition of media-literacy skills. *Reading Research Quarterly*, 38(3), 330-355.
- Hu Dahl, I., & Newkirk, C. (2010). Understanding news literacy: A youth media perspective. *Youth Media Reporter*, 448-50.

- Jenkins-Guarnieri, M. A., Wright, S. L., & Johnson, B. (2013). Development and validation of a social media use integration scale. *Psychology Of Popular Media Culture, 2*(1), 38-50.
- Kaye, B. K. (2010). Going to the Blogs: Toward the Development of a Uses and Gratifications Measurement Scale for Blogs. *Atlantic Journal Of Communication, 18*(4), 194-210.
- Kim, Y., Hsu, S., & de Zúñiga, H. G. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality traits. *Journal Of Communication, 63*(3), 498-516.
- Lang, A. (1996). The logic of inferential statistics with experimental data from nonprobability samples: Inspired by Cooper, Dupagne, Potter, and Sparks. *Journal Of Broadcasting & Electronic Media, 40*(3), 422-430.
- Pentina, I., Basmanova, O., & Zhang, L. (2016). A cross-national study of Twitter users' motivations and continuance intentions. *Journal Of Marketing Communications, 22*(1), 36-55.
- Maksl, A., Ashley, S., & Craft, S. (2015). Measuring news media literacy. *Journal of Media Literacy Education, 6*(3), 29-45.
- Martínez Guillem, S. (2013). Rethinking power relations in critical/cultural studies: A dialectical (re)proposal. *Review Of Communication, 13*(3), 184-204.
- Mihailidis, P. (2014). The civic-social media disconnect: exploring perceptions of social media for engagement in the daily life of college students. *Information, Communication & Society, 17*(9), 1059-1071.

- Petersen, C., & Johnston, K. A. (2015). The Impact of Social Media Usage on the Cognitive Social Capital of University Students. *Informing Science, 1*(8), 1-30.
- Potter, W. J. (2004). *Theory of media literacy: A cognitive approach*. Thousand Oaks, CA; Sage Publications, Inc.
- Potter, W. J. (2010). The state of media literacy. *Journal Of Broadcasting & Electronic Media, 54*(4), 675-696.
- Potter, W. J. (2011). Potter's response to Hobbs. *Journal Of Broadcasting & Electronic Media, 55*(4), 596-600.
- Potter, W. J. (2014). *Media literacy* (7th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Ramasubramanian, S., & Oliver, M. B. (2007). Activating and suppressing hostile and benevolent racism: Evidence for comparative media stereotyping. *Media Psychology, 9*(3), 623-646.
- Renegar, V. R. (2013). Critical/cultural scholarship and the responsibility for building theory: Enduring criticism revisited. *Western Journal Of Communication, 77*(5), 509-513.
- Steyer, J. P. (2002). *The other parenta: The inside story of media's effect on our children*. New York: Atria Books.
- Thorson, E. (2005). Reconceptualizing the influence of the news industry on journalism graduate education. *Journalism & Mass Communication Educator, 60*(1), 17-22.
- Vraga, E. K., Tully, M., Akin, H., & Rojas, H. (2012). Modifying perceptions of hostility and credibility of news coverage of an environmental controversy through media literacy. *Journalism, 13*(7), 942-959.

Warner, B. R., McGowen, S. T., & Hawthorne, J. (2012). Limbaugh's social media nightmare: Facebook and Twitter as spaces for political action. *Journal Of Radio & Audio Media*, 19(2), 257-275.

APPENDIX A: NEWS MEDIA LITERACY ASSESSMENT TOOL

News media literacy assessment tool from Maksl, Ashley and Craft (2015).

Questions about Automatic vs. Mindful Thought Processing

On a scale of 1 to 5 where 1 is strongly agree and 5 is strongly disagree, please tell me how much you agree or disagree with this statement.

1. I don't like to have to do a lot of thinking. (reverse-coded)

2. I try to avoid situations that require thinking in depth about something.

(reverse-coded)

3. I prefer to do something that challenges my thinking abilities rather than something that requires little thought

4. I prefer complex to simple problems.

5. Thinking hard and for a long time about something gives me little satisfaction.

(reverse-coded)

Questions about Media Locus of Control

On a scale of 1 to 5 where 1 is strongly agree and 5 is strongly disagree, please tell me how much you agree or disagree with this statement.

1. If I am misinformed by the news media, it is my own behavior that determines how soon I will learn credible information.

2. I am in control of the information I get from the news media.

3. When I am misinformed by the news media, I am to blame.

4. The main thing that affects my knowledge about the world is what I myself do.

5. If I pay attention to different sources of news, I can avoid being misinformed.

6. If I take the right actions, I can stay informed.

Questions about News Media Knowledge Structures

1. Most media outlets in the United States are: a.) For-profit business (correct); b.) Owned by the government; c.) Non-profit businesses; d.) Don't know

2. If you wanted to get a job as a news reporter in the US, you would need to get a license from... a.) The Federal Communications Commission; b.) The Federal Trade Commission; c.) Society of Professional Journalists; d.) News reporters are not required to be licensed (correct); e.) Don't know

3. In 1983, around 50 companies owned most of the media outlets Americans consumed. How many companies own most of the media we consume today? a.) 100; b.) 50; c.) 25; d.) 5 (correct); e.) Don't know

4. Which of the following cable news networks is generally thought to have a politically conservative bias? a.) CNN; b.) Fox News (correct); c.) MSNBC; d.) MTV News; e.) Don't know

5. Which of the following news outlets does NOT depend primarily on advertising for financial support? a.) CNN; b.) PBS (correct); c.) The New York Times; d.) Newsweek magazine; e.) Don't know

6. When it comes to reporting the news, the main difference between a website like Google News and a website like CNN.com is that: a.) Google does not have reporters who gather information, while CNN does (correct); b.) Google focuses on national news, while CNN focuses on local news; c.) Google has more editors than CNN does; d.) Google charges more money for news than CNN does; e.) Don't know

7. Who has the most influence on what gets aired on the local TV news? a.) Individual reporters; b.) The anchor, the person reading the news; c.) The cameraman; d.) The producer/editor (correct); e.) Don't know

8. The amount of racial/ethnic minority coverage in the news: a.) Accurately reflects the proportion of minorities in the U.S. population; b.) Under-represents reflects the proportion of minorities in the U.S. population (correct); c.) Over-represents reflects the proportion of minorities in the U.S. population; d.) Don't know

9. Coverage of election campaigns in the news usually centers on: a.) Who's winning (correct); b.) In-depth analysis of where candidates stand on the issues; c.) The candidates' educational backgrounds; d.) Don't know

10. One common criticism of the news is that it is not objective. What do people who make that criticism typically mean by it? a.) The reporter gives only the facts about the story; b.) The reporter puts his or her opinion in the story (correct); c.) The reporter's story relies too much on the opinions of people who are neutral; d.) The reporter doesn't make the purpose of the story clear; e.) Don't know

11. Writing a press release is typically the job of: a.) A reporter for CNN.com; b.) A spokesperson for Coca-Cola (correct); c.) A lawyer for Yahoo!; d.) A producer for NBC Nightly News; e.) Don't know

12. Most people think the news has: a.) A greater effect on themselves than other people; b.) A greater effect on other people than themselves (correct); c.) The same effect on themselves as others; d.) Does not have any effects on anyone; e.) Don't know

13. People who watch a lot of television news often tend to think the world is: a.) More violent and dangerous than it actually is (correct); b.) Less violent and dangerous than it actually is; c.) Just as violent and dangerous as it actually is; d.) Don't know

14. If a topic gets a lot of coverage in the news, people who pay attention to the news are: a.) More likely to think the topic is important (correct); b.) Less likely to think the topic is important; c.) Neither more nor less likely to think the topic is important; d.) Don't know

15. Most news outlets depend on advertising to make money. What is a possible effect of this? a.) News could encourage people to buy things they don't need; b.) News could emphasize things that aren't really important; c.) All of the above (correct); d.) None of the above. There are no effects; e.) Don't know

Demographics

Age

Gender: Male; Female

Ethnicity: White; African American; Latino/Hispanic; Asian/Pacific Islander; American Indian; Multiracial; Other

Have you ever been involved with media or journalism education programs (such as working for a high school journalism publication)?

What is the highest level of school your mother/father has completed? Less than high school; High school/GED; Some college but no degree; Vocational/Technical/Associate/Community college degree; Four-year college degree; Post-college/advanced degree such as master's or doctoral degree; Don't Know/Not Sure.

APPENDIX B: NEWS MEDIA SOURCE PREFERENCES AND USAGE

On a scale of 1 to 5 where 1 is strongly agree and 5 is strongly disagree, please tell me how much you agree or disagree with this statement.

1. The source of news is very important to me.
2. I prefer new stories produced and selected by professional journalists.
3. I need to get the news every day.

On a typical weekday, do you get any news online through the Internet, or not?

If yes, about how much time do you spend getting news online on a typical weekday?

1 = less than 10 minutes; 2 = 10-30 minutes; 3 = 31-60 minutes; 4 = 1-2 hours; 5 = 2-3 hours; 6 = more than 3 hours.

On a typical weekday, do you watch the news or any news programs on television, or not?

If yes, about how much time do you spend watching the news or any news programs on television on a typical weekday?

1 = less than 10 minutes; 2 = 10-30 minutes; 3 = 31-60 minutes; 4 = 1-2 hours; 5 = 2-3 hours; 6 = more than 3 hours.

On a typical weekday, do you listen to the news or any news programs on radio, or not?

If yes, about how much time do you spend listening to the news or any news programs on the radio on a typical weekday?

1 = less than 10 minutes; 2 = 10-30 minutes; 3 = 31-60 minutes; 4 = 1-2 hours; 5 = 2-3 hours; 6 = more than 3 hours.

On a typical weekday, do you read a daily newspaper, or not?

If yes, about how much time do you spend reading a daily print newspaper on a typical weekday?

1 = less than 10 minutes; 2 = 10-30 minutes; 3 = 31-60 minutes; 4 = 1-2 hours; 5 = 2-3 hours; 6 = more than 3 hours.

APPENDIX C: SOCIAL MEDIA USAGE

Scale for measuring social media usage, adapted from Peterson and Johnston (2015).

Overall Social Media Usage

Q1: Please rate your level of social media usage.

5 = very high; 4 = high; 3 = average; 2 = low; 1 = very low to none.

Number of Facebook Friends

Q2: About how many Facebook friends do you have?

0 = I do not participate in Facebook; 1 = 10 or less; 2 = 11-50; 3 = 51 – 100; 4 = 101 – 200; 5 = 201 – 300; 6 = 301 = 400; 9 = More than 400.

Time Spent on Facebook

Q3: In the past week, on average, how much time per day have you spent on Facebook?

1 = less than 10 minutes; 2 = 10-30 minutes; 3 = 31-60 minutes; 4 = 1-2 hours; 5 = 2-3 hours; 6 = more than 3 hours.

Number of Twitter Followers

Q5: About how many Twitter followers do you have?

0 = I do not participate in Twitter; 1 = 10 or less; 2 = 11-50; 3 = 51 – 100; 4 = 101 – 200; 5 = 201 – 300; 6 = 301 = 400; 7 = More than 400.

Time spent on Twitter

Q6: In the past week, on average, how much time per day have you spent on Twitter?

1 = less than 10 minutes; 2 = 10-30 minutes; 3 = 31-60 minutes; 4 = 1-2 hours; 5
= 2-3 hours; 6 = more than 3 hours.