

SCHIZOPHRENIA IN THE NEWS

by

ANNA RAE GWARJANSKI

SCOTT PARROTT, COMMITTEE CHAIR

KIMBERLY BISSELL

YONGHWAN KIM

A THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the Department of Journalism
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALABAMA

2016

Copyright Anna Rae Gwarjanski 2016
ALL RIGHTS RESERVED

ABSTRACT

This study compared coverage of schizophrenia in online traditional news sites and digital native news sites, or sites lacking a print counterpart. The articles studied were chosen by searching eight sites' online databases using the term “schizophrenia” for articles published between January 1 and December 31, 2015. Researchers coded 558 articles for the presence/absence of stereotypes concerning schizophrenia, the number and type of sources directly quoted, and the valence of source commentary and overall articles. Z-test analyses found that articles from traditional news sites stood greater chance of containing violent or criminal stereotypes about schizophrenia. Articles from traditional news sites stood greater chance of containing an overall negative valence than articles from digital native sites. Digital native sites were more likely to contain articles that were neutral. Articles stood better chance of being positive when they quoted personal sources, which included family, friends, and people with schizophrenia. Stories told from the first-person perspective of an individual with mental illness stood greater likelihood of having positive valence. Finally, personal sources stood greater likelihood of making positive comments about schizophrenia.

DEDICATION

This thesis is dedicated to everyone who helped me, guided me, and stood by me through this manuscript, as well as those who have ever suffered from a mental illness. It is my hope that increasing research on this topic will help eradicate the stigma that so permeates these illnesses.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Krippendorff's Alpha index of intercoder reliability
df	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
<	Less than
=	Equal to
z	Likelihood differences in proportions due to real population differences

ACKNOWLEDGMENTS

I am pleased to have this opportunity to thank the many colleagues, friends, and faculty members who have helped me with this research project. I am indebted particularly to Scott Parrott, my thesis chair, for sharing his research expertise and wisdom regarding mental illness research. His passion for research fueled mine. I would also like to thank both of my committee members, Kim Bissell and Yonghwan Kim, for their constructive input, inspiring questions, and support of both the thesis and my academic progress. I would also like to thank two undergraduate researchers, Brian Roberts and Elizabeth Elkin, whose services during the coding process were invaluable.

This research would not have been possible without the support of my friends, fellow graduate students and of course my family who never stopped encouraging me to persist through the sleepless nights. Finally, I would like to thank the University of Alabama communications college and staff for encouraging me and allowing me to continue into higher education.

CONTENTS

ABSTRACT	ii
DEDICATION	iii
LIST OF ABBREVIATIONS AND SYMBOLS	iv
ACKNOWLEDGMENTS	v
LIST OF TABLES	vii
1. INTRODUCTION	1
2. LITERATURE REVIEW	4
3. METHODOLOGY	17
Sample.....	17
Units of Analysis.....	17
Independent Variables.....	18
Dependent Variables.....	19
Coders and Reliability.....	20
4. RESULTS	22
Descriptive Statistics.....	23
Research Questions.....	24
5. DISCUSSION.....	29
Conclusion.....	35
REFERENCES	37
APPENDIX.....	42

LIST OF TABLES

1 Descriptive Statistics.....	23
2 Source Qualification	23
3 Source Qualification and Article Valence	25
4 Source Qualification and Quote Valence.....	27

CHAPTER 1

INTRODUCTION

On November 19, 1999, the *New York Daily News* devoted its entire front page to a headline saying “Get the Violent Crazy’s Off Our Streets.” This was in response to an incident in which a woman named Nicole Barrett was hit on the head with a brick. Despite the headline, the man arrested for the crime, Paris Drake, had no history of mental illness (McArdle, 2001). During this period, the *New York Daily News* had an average weekday circulation of 729,449 and ranked as the fifth largest metropolitan daily newspaper in the country (Reference for Business, 2015). That circulation meant a significant number of people took in the dramatized and inaccurate information contained in the story’s headline, potentially nurturing a false association linking mental illness and violence. Unfortunately, the sensationalist headline and the stigma it underscored is indicative of the past 30 years of the media’s coverage of mental illness.

Research shows the U.S. media, including newspapers, television shows, and movies, often portray people with mental illness in a negative light, perpetuating stereotypes that associate mental illness with violence and instability (Anderson, 2003; Corrigan et. al, 2005; Matas, 1985; McGinty et. al, 2014; Nairn, 2007; Nunnaly, 1961; Stuart, 2006; Wahl, 1995). Nevertheless, we know little about how online news outlets, a primary source of information for modern audiences, cover mental illness. The present thesis seeks to address the gap, investigating the framing of schizophrenia by the online news sites of traditional news outlets (e.g., *USA Today*, *New York Times*) and digital native outlets (e.g., *Gawker*, *Buzzfeed*).

In 2015, it is imperative that researchers continue to study the media's presentation of mental illness because inaccurate and stereotypical media content may contribute to the stigmatization of mental illness (Hinshaw, 2007; Salter & Byrne, 2000; Sieff, 2003; Wahl, 1995). Stigma may carry negative consequences for people with mental illness, leading to discrimination in employment, social, educational, and health settings (Tartakovsky, 2009; Thornton & Wahl, 1996; Wahl, 1995; Wahl, 2003). For this reason, mental disorders are considered a shameful affliction and therefore kept secret, leading to sufferers too embarrassed to get help (Corrigan, 2004). Indeed, one study reported that people found psychiatric hospital stays so embarrassing they would rather tell people they spent time in jail (Tartakovsky, 2009).

Research that supports the idea that media coverage of mental illness has been unsatisfactory and contributed to common stereotypes is solid and vast. However, the current rise in popularity of digital news has yet to be scrutinized in regard to its coverage of mental illness. Researchers know little about how "digital native" media outlets such as *Buzzfeed*, *Gawker*, and the *Huffington Post* cover mental illness, which is an important oversight considering that millions of people read these publications. Furthermore, previous research has examined mental illness in general, lumping together severe disorders such as schizophrenia with more socially accepted conditions such as depression, rather than focusing on media's treatment of specific illnesses.

The present study seeks to address these limitations through a quantitative analysis of content concerning schizophrenia that was posted on popular news websites in the United States during a full year. The thesis will examine publications that are solely digital—*Huffington Post*, *Buzzfeed*, *Vice*, and *Gawker*—and “traditional” publications that have both a print and digital version—*USA Today*, *New York Times*, *Washington Post*, and *Los Angeles Times*. Informed by

framing theory, the thesis will help us better understand the differences between traditional and new media treatments of the subject of schizophrenia.

CHAPTER 2

LITERATURE REVIEW

The thesis begins by reviewing the relevant literature concerning public attitudes toward mental illness, news media portrayals of mental illness, and a potential link between the two. Researchers have studied print and television journalism to learn how news media affect stereotypes of people with mental illness. Yet, little to no studies have been done on how the rise of digital news may be changing the portrayal of mental illness. This literature review will discuss previous studies concerning mental illness in the media and the potential effects that exposure to such content may have on audience members through framing. Then, it will show why the increasing popularity of online news outlets underscores the need for this line of inquiry.

Public Attitudes toward Mental Illness

Despite its prevalence among the population, mental illness remains stigmatized in the U.S. and abroad (Anderson, 2003; Corrigan et. al, 2005; Matas, 1985; Mcginty et. al, 2014; Nairn, 2007; Nunnaly, 1961; Sartorius, 2005; Stuart, 2006; Wahl, 1995). Common stereotypes portray people with mental illnesses as unpredictable, irrational, dangerous, bizarre, incompetent, and unkempt (Hinshaw, 2007; Salter & Byrne, 2000; Sieff, 2003; Wahl, 1995). People also stereotype mental illness as a moral failure or character blemish. These stereotypes have been shown to persist from early public attitude studies in the 1950s to the present (Thoits, 2011). A number of factors feed into bias against those with a mental illness along with media content. Bissell and Parrott (2013) noted four general factors that feed into social bias: media content, individual characteristics of the perceiver, social settings, and ideology. However, they concluded by saying that bias is an individualistic development (Bissell & Parrott, 2013). It is

difficult to infer what influenced what, public perception or the media; however, researchers do agree that bias in both media and the public is significant.

The stigma extends beyond the U.S. borders. An international survey of people with mental illness (Sartorius, 2005) gauged respondents' perceptions of mental illness in India, Canada, Japan, the United Kingdom and the United States. Respondents expressed fear that admitting their illnesses to employers would mean they would not be hired and feel excluded. Sartorius (2005) outlined ways to address a global program for human rights of those with mental illness, concluding that this international effort to derail stigma and discrimination was possible, and his study gave an overview on how to do so. The program detailed in the study had three guiding principles: to ask people with schizophrenia and their family members about their experience with stigma, to encourage community participation, and to establish this program as a lasting effort, at least two years (Sartorius, 2005).

Traditional Media Portrayals of Mental Illness

The mass media are a primary source of information and misinformation about mental illness (Wahl, 1995). Indeed, Wahl wrote that “people with mental illnesses constitute one of the few remaining groups, in this era of political correctness, to be subject to such consistently thoughtless labeling” (Wahl, 1995, p. 26). At its worst, news media prey on people with mental illness to dramatize stories and add a sensationalist edge in an attempt to increase profit (Anderson, 2003). When journalists reported on mental illnesses in the past, it was mostly in the context of public violence, reinforcing stereotypes associating mental illness with violence and instability. For example, one of the most prominent recent stories of this nature revolved around *Time* magazine and its coverage of Jared Loughner. On January 8, 2011, Loughner killed six people and wounded 13, including U.S. Rep. Gabrielle Giffords, in a mass shooting in Tucson,

Arizona. A writer for *Time* attributed Loughner's motive solely to his mental illness. The article, titled "Why Are the Mentally Ill Still Bearing Arms?," discussed the fight for gun control and its relation to public shootings. Nathan Thornburgh, the author, wrote that people with mental disorders should not be able to buy guns for fear that they will eventually succumb to their illness and commit a crime (Thornburgh, 2011). What the article did not discuss was that Loughner had been abusing alcohol and drugs for five years leading up to the attack, and that by all accounts he was suffering from what was a treatable psychotic disorder (Strauss et al., 2011).

By mostly discussing mental illnesses in the context of violence, media like television news and newspapers have framed violence as an integral part of a mental disease (Sieff, 2003). What many traditional news articles have omitted is that people who have psychiatric disorders are far more likely to be victims than perpetrators of crimes (Appleby et al., 2001). Researchers have developed multiple studies (see Wahl, 1995) showing that media articles and images have a profound impact on public perception, perpetuating stereotypes.

Researchers have noted a transition from the 1960s to present day portrayals of mental illness. In an early study of mental illness in the media, Nunnally (1961) reported that the general public was uninformed rather than misinformed. This was different than what more recent research has established, which is a lack of *truthful* information rather than a simple lack of information. The contrast between the conclusion of this article and what modern researchers have found suggests that media took a turn from not reporting enough on mental illness to publishing misleading articles.

Thirty years after Nunnally's work, Wahl (1995) investigated over a decade of content to analyze specific instances, both in news and entertainment media, where mental illness representation has been inaccurate. Inaccurate representations have rolled into bigger issues,

Wahl noted, such as a lack of treatment because of a fear to come forward, public misunderstanding of the insanity defense, employers fearing to hire those with a mental illness background, and other negative outcomes.

While media images of mental illness may be dramatic, sometimes they are more subtle, yet still as damaging (Tartakovsky, 2009). An example of these muted injuries is depicted in the way a local central Florida news station reported a woman who set her son's dog on fire. The segment concluded by tagging the end with insinuations of mental illness—the reporter finished the story by stating that the woman had recently been depressed. Whether that had something to do with the woman's actions, the reporter did not say. By connecting mental illness with horrific acts, even when they might not be related, news media leave audiences with a skewed perspective on mental illness (Tartakovsky, 2009).

In another recent study, Slopen and colleagues (2007) examined content published by 70 newspapers in the U.S. with circulations greater than 250,000, as well as the largest newspaper by state in order to get a nationally balanced report. They used three word stems, "mental," "psych," and "schizo," to acquire data on antisocial behavior, depression, ADD/ADHD, anxiety disorders, bipolar disorder, schizophrenia/psychosis, and eating disorders. The researchers found that in newspapers, 46 percent of articles pertaining to the key words referred to adults, 15.6 percent referred to children and adolescents, 2.4 percent referred to senior adults, and 28 percent of articles did not mention a specific age. Articles pertaining to children talked far less about mental illness and violent crime/dangerousness, more about treatment and recovery. The authors concluded that journalists reported more responsibly and compassionately when their story focused on children with mental illness. This study showed that journalists have the ability to develop informative, smart, and compassionate stories.

For example, one study showed that journalists as people are no more biased toward people with mental illnesses than the general public, but that their stories need more accurate information. Thirty years ago, researchers put together an analysis of multiple interviews, including those of 20 reporters, 20 psychiatrists, 20 medical outpatients with no psychiatric history, 40 psychiatric inpatients, and 4 psychiatric patients with personal experience with media coverage of their illness. A survey of these participants showed that the reporters were no less and no more biased against those with mental illness than the other groups. However, low scores across the board were given to media coverage of mental illness, and psychiatrists were the most critical. The reporters interviewed responded that “sensationalism sells” to the critiques. Fortunately, attitudinal predictors toward mental illness showed that education, more than age or media exposure, has the most influence on how someone will feel about mental illness. The authors contend that increasing accurate information in newspaper stories will likely lead to less stigmatization (Matas et al., 1985).

Since the 1980s, media coverage of mental illness has been shifting (Wahl et al., 2002). For example, one study examined 300 articles containing the words “mental illness” in six newspapers during two periods, 1989 and 1999. After analyzing the content from these two time periods, researchers found that while dangerousness was still the most common theme and negative articles were twice as abundant than positive ones, articles mentioning dangerousness and with negative tones had decreased (Wahl et al., 2002).

Another study agreed with Stuart and colleagues, admitting that while there is still much work to be done in journalism portrayals of mental illness, the prevalence of stories suggesting that mental illness patients are dangerous has been diminishing. Nairn and colleagues (2007) found that the media has been replacing stories centered around personal blame, instead focusing

on genetics and environmental stressors. They also said that while recovery options are beginning to be better talked about, which is essential since stigma can deter people with mental illness from seeking recovery (Nairn, 2007), reporters need to be encouraged to do it more (Corrigan et al., 2005). Although awareness is increasing, which has a correlation to less stigma, some researchers say that this awareness can act as an invitation for viewers to associate mental illness with the imagery the awareness intended to challenge (Holland, 2012).

Stuart (2006) has called for researchers to shift their attention, writing that enough professionals have accepted that discrimination hurts those with mental illness and that the media encourage discrimination more than they stop it. Rather than further research and cataloguing, Stuart said, professionals should be lobbying for press and public support as a means of improving public education. Now, the challenge is to learn how to use the media to increase acceptance of those with mental illness, and then convince the media to do so (Stuart, 2006). The proactive approach may help lessen the stigmatization of people with mental illness.

Stigmatization occurs when a group of people - such as people with schizophrenia - are “tagged and labeled, set apart, connected to undesirable characteristics, and broadly discriminated against as a result” (Stout et al., 2004). While research on television, newspaper, and magazine depictions of mental illness are gaining attention, research on advertising, radio, television talk shows, video games, and websites is virtually nonexistent. The present study seeks to improve our understanding by examining news media portrayals of mental illness in a modern setting. It answers the calls (Stout et al, 2004) for research looking at both content and impact.

Portrayals of Mental Illness in Entertainment Media

Digital native websites may combine entertainment and news content more so than traditional news outlets. Entertainment media, too, has been shown to contain stereotypes linking

mental illness and misinformation. For example, Wilson and colleagues (1999) studied children's television programs and took note of the language used and the features of the "odd" characters. They found, of the 128 episodes studied, 46.1% contained references to mental illness. The majority of these references were in the cartoon animation shows. The language was ambiguous and often negative: "crazy was employed widely both to judge actions, ideas, characters and objects as unreasonable, irrational, illogical or unacceptable, and to connote fun, wildness, spontaneity, passion and unpredictability" (pg. 441, Wilson et. al, 1999). Certain motions were also a characteristic of insanity, including shaking the head and rolling the eyes. Many times, references to mental illness had nothing to do with words, but with actions and appearances. The villains (six characters who were consistently identified as having a mental illness) engaged in irrational activities and were classified as "twisted," "sick," or "nuts." These descriptions were accompanied by a sense that the character was losing control. Facial features included widely spaced teeth, bad breath, thick brows, prominent noses, and unkempt hair (Wilson et. al, 1999).

Stereotypes can be reinforced for adults as well as children. *A Beautiful Mind*, which won multiple Oscars, is an example of one of the few films that accurately represents the suffering associated with mental illnesses like schizophrenia. In contrast, the action film *Terminator 2* opens with false information about schizophrenia and schizoaffective disorder. Heroine Sarah Connor's doctor diagnoses her with schizophrenia since he considers her belief that robots are trying to kill her a bizarre delusion. However, since she also was having symptoms of major depressive disorder, a schizoaffective diagnosis would have been more accurate. This movie was seen by an estimated 160 million people; therefore, 160 million people received misguided information (Kaufman, 2010).

Like news media, entertainment media specifically underline dangerous traits like violence when showing characters with a mental illness. One study found that in a general population of characters, characters with a mental illness were nearly 10 times more violent than characters without a mental illness. Furthermore, these characters were judged to have a negative impact on society and a negative quality of life (Diefenbach, 1997). Like news media, these distorted images that entertainment media provide promote stigma and discrimination toward people with mental illnesses as well as discourage people with mental illnesses from overall recovery (Stuart, 2006). Specifically referencing schizophrenia, another study found that the more people watched television, the poorer their knowledge about schizophrenia and obsessive-compulsive disorder (Kimmerle & Cress, 2013).

A Link between Attitudes and Media Content: Framing

Although news media's power of audiences may have decreased in this information age, it still has much control over how audiences conceive issues. Framing theory says that the way media cover issues and events may guide the opinions of the consumers. There are two processes that determine how frames emerge and interplay with audiences: frame-building and frame-setting (Vreese, 2005). By discussing a topic a certain way (frame building), framing directly affects perception. Although the human brain creates its own autonomous thoughts, those thoughts can be manipulated without the brain even realizing its influences; media often influence public perception of issues because human choices are remarkably susceptible to the way an option is presented (de Martino, 2006). These perceptions influenced by framing can further manifest itself through shaping everyday processes (Vreese, 2005).

Framing represents one mechanism by which the media may shape public perceptions concerning mental illness, highlighting certain bits of information (e.g., violence/mental illness)

while ignoring others (e.g., recovery/mental illness). For example, a recent multi-year research project examined the framing of violent incidents by studying the mentions of gun violence versus mental illness in media. It found that in the 14 national news sources analyzed, across the board, “dangerous people” with serious mental illnesses were more likely than “dangerous weapons” to be mentioned as a cause of gun violence. The 15-year study, from 1997-2012, found that overall, fewer than 10 percent of news stories published after a violent incident mentioned key facts about serious mental illnesses. From these results, the authors concluded that this leads to a news audience that mostly sees mental illness through the frame of public violence (McGinty, et al., 2014).

Sieff (2003) wrote that the most common opinions concerning people with mental illness are that they are a danger to themselves or society, or that they are childlike and need extensive outside care. Although schizophrenia is the disease most often discussed in the context of dangerousness, research has shown that all mental illness has some sort of negative stigma (Sieff, 2003). Negative views of mental illness have implications for public policy as well (Wahl, 2003). The aura of “dangerousness” that many people with mental illness are depicted as having fueled resistance to community care, employer reluctance to hire those with psychiatric histories, and increased support of forced treatment. This last result led to “Kendra’s Law” after Andrew Goldstein, dubbed “The Subway Psycho,” pushed Kendra Webdale onto subway tracks in January 1999. Kendra’s Law allowed forced outpatient treatment for a psychiatrically disabled person who refused treatment (Wahl, 2003).

Because fear of people with mental illness is considered the primary reason for discrimination, studying which articles promote that fear should be of the utmost importance to mental health researchers (Wahl & Thornton, 1996). Past research (Wahl & Thornton, 1996) has

examined the direct effect of a news article tying a violent crime with mental illness on fears and stereotypes of people with mental illness. Wahl and Thornton (1996) examined whether exposure to an article headlined "Girl, 9, stabbed to death at fair: Mental patient charged," affected participants' subsequent attitudes concerning mental illness. The story, with its emotionally charged and attention-grabbing headline, was handed out to volunteer participants along with two other more mental-illness-friendly articles in a mixture of four different packages. The latter had expert information about the low rate of violence among those with mental illness and alerted readers to common media distortions about mental illness. The researchers found that the group that was only handed the target article and not the "prophylactic" articles about media distortion scored the lowest in tests on their benevolence toward people with mental illness, and they endorsed the fewest statements of all the groups indicating acceptance of those with mental illness. Since the groups that read prophylactic articles along with the target article scored higher on benevolence and acceptance, this study showed that a public education strategy including similar information to the prophylactic articles might reduce the impact of stigmatizing portrayals (Thornton & Wahl, 1996).

Because media have not been doing enough to neutralize stigma based on emotion and not facts, there is a "clear need" for mental health professionals to be proactive in lobbying for more mental health education. Even though homicides carried out by people identifying as mentally ill has decreased over the last 40 years, media representations of mental illness still emphasize violence and dangerousness as a defining characteristic. Therefore, researchers have called for more promotion of research that discounts the media's inflated representations (Cutcliffe & Hannigan, 2001). As one researcher noted, "of all the stigmatized conditions in current society, mental illness is near or at the top of the list, generating the kinds of stereotypes,

fear, and rejection that are reminiscent of long-standing attitudes toward leprosy” (Hinshaw, 2007).

The Present Study

The present study examines the portrayal of mental illness in a new forum, that of the Internet-based news outlet. Digital news has become a booming industry. In the last year, sites like *Buzzfeed*, *Gawker* and the *Huffington Post* have grown exponentially. *Buzzfeed* has over 170 full time editorial staff members, and the majority of those were hired in 2013. The 12-year-old *Gawker* now has 132 full-time editorial staff members, far more than the 49 it had in 2007 (Jurkowitz, 2014a). *The Huffington Post*, which began in 2005, has around 575 staff positions. It has also expanded internationally, with 15 separate editions planned at the end of 2014 (Jurkowitz, 2014a).

Meanwhile, the American Society of News Editors reported a loss of 16,200 full-time newspaper jobs from 2003 to 2012. Ad Age reported a decline of 38,000 magazine jobs (Jurkowitz, 2014b). In an age where journalism jobs are becoming scarcer, it is significant that these three digital news sources have been rapidly expanding. In the 20th century, newspapers, magazines, radio and television were the primary news sources for Americans. When asked what devices they used in the last week, television remained the most popular at almost 90 percent; however, a laptop or computer followed at around 70 percent (Rosenstiel, 2014). Fifty percent of Americans cite the Internet as their main source for national and international news (Marketing Charts Staff, 2014). That 50 percent still falls below television’s 69 percent, but, in comparison, in 2001, 74 percent of Americans cited television as their main source, and only 13 percent cited the Internet. This means that Internet news’ popularity has multiplied almost five times (Pew

Research Center, 2011). Therefore, it is important we better understand how these news sites are portraying mental illness.

In addition, the scientific studies described above are more than a few years old. Research states that it is possible for the media to play a role in reducing the negative stigmas it has perpetuated for so many years (Salter & Byrne, 2000), and that the Internet can play a significant role in that (Kim & Seo, 2010). As demonstrated by their increasing staff hires, websites like *Buzzfeed*, *Gawker* and the *Huffington Post* have vast readership, and those numbers are only increasing—*Buzzfeed* has over 2 million followers on Twitter, *Gawker* has 540,000 and the *Huffington Post* has 5.4 million. It is this study's hypothesis that a content analysis of articles recently published on these websites relating to schizophrenia may reveal a new, more sympathetic attitude toward mental illness.

As noted, researchers have well documented stereotypes linking mental illness and violence in traditional news content. Traditionally, news outlets have framed mental illness negatively by focusing on stereotypes and interviewing sources who have no real experience with the illness. However, we know little about how digital native sites cover the topic. Because the internet provides a forum more open to “citizen journalism,” not just professional journalists, greater diversity can be found online (Carpenter, 2010; Thurman 2008). Thus, it is not farfetched to think that digital articles might provide differing coverage of schizophrenia compared with print articles. Therefore, the thesis first asks the following:

RQ1: What is the relationship between *publication type* (traditional versus digital native) and the *prevalence of stereotypes* linking schizophrenia and violence in news articles published in 2015?
and,

RQ2: What is the relationship between *publication type* and the *valence of news articles* (positive, negative, neutral) about schizophrenia published in 2015?

The advent of the “citizen journalist” means that sources not used or focused on previously might now be used in stories pertaining to schizophrenia. One place print media especially falls short is using persons with mental illnesses as credible sources. One study found that only .8 percent of the articles analyzed met the criteria for a person with a mental illness being reported directly, showing a distinct lack of voice for a self-portrayal (Nairn & Coverdale, 2005). Also, source type can influence the overall valence of the portrayal of mental illness in the news—when those with mental illness, experts on mental illness, or politicians were interviewed, the majority of the time, people with mental illnesses were depicted in a neutral or positive way (Henson et al, 2009). Therefore, the thesis examines three characteristics of the sources used in the sampled news articles and their relationship to the valence of the news articles about schizophrenia: the qualifications of the source (in terms of employment background or relevant experience related to mental illness); whether the person writing the story is communicating from a first- or third-person perspective; and whether a source’s background is related to the valence of the comments he/she shares with news readers. The study addresses the following:

RQ3: What is the relationship between *source qualifications* and the *valence of news articles* about schizophrenia published in 2015?

RQ4: What is the relationship between *first- or third- person source use* and *article valence*?

RQ5: What is the relationship between *source qualifications* and the *valence of his/her commentary* offered?

CHAPTER 3

METHOD

Sample

To examine these research questions, a quantitative content analysis was conducted in which coders rated articles about schizophrenia pulled from four traditional news media websites (*USA Today*, *New York Times*, *Los Angeles Times*, *Washington Post*) and four digital native news media websites (*Gawker*, *Buzzfeed*, *Vice*, *Huffington Post*). For the content analysis, an index of articles was compiled by searching each site's archives using the term "schizophrenia" from January 1, 2015, to December 31, 2015. The search produced 558 articles across sites, not including articles written by the Associated Press. Articles written by the Associated Press were discarded because duplicate articles appeared across sites, and the lead coder decided that could skew results since the type site (digital native versus traditional) served as a primary independent variable. Articles from 2015 were coded because the author wanted to understand the depiction of schizophrenia in the digital age. Past literature has dependably accounted for mental illness coverage in the era of print news; therefore, the present study analyzed articles from 2015 to get the most specific and recent data from the current digital age.

Units of Analysis

The units of analysis were individual news articles and sources who were directly quoted. While news websites are multimedia, containing video, audio, and the written word, this study focused on text, including headlines and written stories. Sources were defined as people directly quoted in the article. Coders described sources directly quoted in relation to their occupation or relationship with mental illness, and the valence of their commentary.

Independent Variables: Publication Type, Source Perspective, Source Qualifications

The independent variables were news publication (traditional versus digital native), source perspective (first- or third-person) and source qualifications (based on employment or experience with schizophrenia). For the purposes of the study, traditional news media websites were defined as news media that began in print newspapers, but now have a digital component as well. Digital native news media are outlets that produce news solely online or whose news operation began online. The four traditional news sites coded were *USA Today*, *New York Times*, *Washington Post*, and *Los Angeles Times*. The digital native news sites were *Huffington Post*, *Buzzfeed*, *Vice*, and *Gawker*. Both the traditional and digital native news sites were chosen because of their readership. *USA Today*, *New York Times*, *Washington Post*, and *Los Angeles Times* were all chosen because they are daily national newspapers that also have an online component (Edmonds et al, 2013). In circulation size, these newspapers rank among the top 10 largest dailies in the United States. *The Huffington Post*, *Buzzfeed*, *Vice*, and *Gawker* were chosen because they are in the top five of the most popular online news sites that produce original content and are not focused on sports (PEW Research, 2015). These publications reach millions of readers each day worldwide, suggesting their messages concerning schizophrenia could exert significant influence over the public's perceptions of the mental illness.

The second independent variable was source perspective. For this study, a source is defined as someone directly quoted in a news article, and their perspective is whether the article was written in a first- or third-person narrative and whether they had schizophrenia. In coding source commentary, researchers only studied direct quotes. While journalists certainly paraphrase sources, the use of a direct quote increases the degree to which sources are noticeable for readers. Also, journalists generally quote sources directly when they consider the sources –

and their comments – important. Researchers have noted that journalists could improve news coverage of mental illness by directly quoting people who experience it and by allowing them to speak for themselves (Nairn & Coverdale, 2005). Nevertheless, research shows that journalists often interview third parties, such as doctors and law enforcement officers, when covering stories related to mental illness. For this study, coders chronicled the number of sources used in the story and listed each source’s employment and/or qualifications. Coders categorized these employments and qualification as a person with schizophrenia, medical personnel, family of a person with schizophrenia, friend of a person with schizophrenia, other acquaintance to person with schizophrenia (roommate, coworker, and etcetera), law enforcement, judicial personnel, or other.

Dependent Variables: Stereotypes and Valence

The dependent variables are the presence/absence of stereotypes concerning schizophrenia, and the general valence of news articles about schizophrenia. For this study, stereotypes were defined as a description of mental illness not based in fact. Since the prevailing stereotype links schizophrenia with violence and criminality, coders documented whether each news article contained (or did not contain) reference to an individual with schizophrenia committing violence or crime, or falling victim to violence or crime.

For the second dependent variable, coders rated each article and source commentary for overall valence (positive, negative, or neutral). Valence was based on the presence/absence of stereotypes as well as the subject matter of the story. For example, an article in which a man with schizophrenia is standing trial for murder would be considered to have negative valence, because it offers readers a stereotypical picture of schizophrenia that reflects poorly on people with schizophrenia. An article about a treatment breakthrough for schizophrenia would be considered

to have positive valence. Finally, an article simply mentioning facts about schizophrenia would be considered to have neutral valence. Coders also took into consideration whether the article mentioned anything positive about someone with schizophrenia. This included complimentary statements concerning a person's intelligence or personality. Conversely, a negatively valenced article included descriptions of a person with schizophrenia being morally deficient, unclean, hearing voices, being anti-social, violent, or disruptive. An article with a neutral valence would have either have no stereotypes about a person with schizophrenia or an equal amount of positive and negative stereotypes. Researchers also coded each direct quote. Valence of specific commentary was rated the same way as overall commentary; it was coded as positive, negative, or neutral as well. The coding protocol appears in Appendix A.

Coders and Reliability

Coders were the author (a graduate journalism student) and her advisor (a faculty member in mass communication). In training, coders discussed the protocol and had any questions answered. They then coded a selection of articles concerning schizophrenia that were pulled from the websites during 2014 (and therefore outside the study's sample). Once they rated the stories, the coders shared their answers and discussed any issues or questions that emerged. Once general agreement was reached and the primary investigator believed the coders had a firm understanding of the protocol, an official reliability analysis was conducted by having coders independently rate 12 articles from each news website during the relevant time period. As noted, a census of articles was completed. These articles were numbered. The primary investigator used a random number generator to select articles from each publication to code. The number seven was randomly selected between numbers one through 20, so every seventh article in each publication was coded, a dozen in all for each website. Since *Gawker* published 11 total articles

in 2015 relating to schizophrenia, it was an exception. Altogether, 95 articles out of 558 total articles (17%) were independently rated by each coder to determine inter-coder reliability. Krippendorff's Alpha was used to determine inter-coder reliability because it is considered a robust measure of inter-rater agreement particularly in mass communications content analyses (Riffe et al., 2008). An acceptable calculation for Krippendorff's Alpha was considered .8. Krippendorff's Alpha was acceptable for all but one item, valence of source commentary ($\alpha = .55$). This will be discussed further below. Reliability was as follows: Publication name ($\alpha = .97$); Publication type ($\alpha = 1.00$); first- or third-person perspective ($\alpha = 1.00$); article quotes an individual with mental illness ($\alpha = .86$); the author has mental illness ($\alpha = 1.00$); a character with mental illness perpetrates violence or crime ($\alpha = .80$); a character with mental illness falls victim to violence or crime ($\alpha = .89$); number of sources quoted ($\alpha = .74$); source qualification in relation to schizophrenia ($\alpha = .84$); and finally, overall article valence ($\alpha = .96$). To address the low reliability coefficient for valence of source commentary, coders met and discussed operational definitions concerning the valence of each source's commentary. During the first discussion, coders discovered that the problem lay in defining what constituted "neutral" valence. After reviewing what constituted a positive, negative, or neutral quote and redefining the operational definitions for better clarity, the primary investigator randomly selected 10 articles. Coders independently rated the valence of the first comment made by a source in each of the 10 articles. This first round of coding produced a simple agreement of 90 percent. Another 10 articles were randomly selected from the publications, and the two coders again rated each of these articles for source commentary valence. This round produced a simple agreement of 80 percent. Coders discussed operational definitions once more, then again randomly selected 10 articles for independent coding. For this final time, coders achieved 90 percent.

CHAPTER 4

RESULTS

Descriptive Statistics

There were two units of analyses for this study, news articles and sources. In terms of news articles, coders rated 558 articles. Traditional news outlets produced more articles about schizophrenia overall than the digital native news sites. *The Washington Post* had the most articles ($n=138$) followed by the *New York Times* ($n=120$) and the *Los Angeles Times* ($n=96$). *USA Today* had 60 articles. Among the digital native news sites, *Vice* had the most articles ($n=65$), followed by the *Huffington Post* ($n=47$), *Buzzfeed* ($n=20$), and finally *Gawker* ($n=11$). All said, 414 articles about schizophrenia (about 74 percent) came from traditional news sites. Twenty-five percent came from digital native news sites. Most articles ($n=452$) adopted a third-person narrative, as expected based on the traditions of journalism in the United States, in which reporters are trained to adopt a detached, neutral, third-person perspective. Nineteen percent of the articles ($n=106$) discussed schizophrenia from a first-person narrative.

One of the primary goals of this study was to examine the presence or absence of stereotypes, and whether news sources afford people with schizophrenia the opportunity to speak for themselves (Nairn & Coverdale, 2005). Coders determined whether articles described a person with schizophrenia using negative, positive, or neutral terms. Forty-seven percent of articles ($n=262$) used *negative* terms, while 53 percent ($n=296$) did not. Twenty-nine percent of articles described a person with schizophrenia using *positive* terms ($n=161$), while 71 percent ($n=397$) did not. Fifty-four percent of articles used neutral terms to describe a person with schizophrenia ($n=303$), while 45 percent ($n=252$) did not. The majority of news articles (78 percent, $n=435$) did *not* quote a person with mental illness. The overwhelming majority of

articles (96 percent, $n=536$) were *not* written by a person with mental illness. When it comes to stereotypes, 49 percent of articles ($n=274$) included a person with mental illness perpetrating a crime or violence. Meanwhile, 30 percent of articles ($n=169$) had a person with mental illness fall victim to crime or violence. The implications of these findings are discussed later in the thesis.

Table 1

Characteristics of news articles analyzed in study ($n=558$)

<u>Characteristic</u>	<u>Present</u>	<u>Absent</u>
Described person with schizophrenia with negative terms	262 (47%)	296 (53%)
Described person with schizophrenia with positive terms	161 (29%)	397 (71%)
Quote a person with mental illness	123 (22%)	435 (78%)
Written by a person with mental illness	22 (4%)	536 (96%)
Person with mental illness perpetrates a crime	274 (49%)	284 (51%)
Person with mental illness falls victim to a crime	169 (30%)	389 (70%)

Another important part of this study involved sources and their qualifications relating to mental illness. Twenty-seven percent of articles ($n=150$) directly quoted no sources. Meanwhile, 46 percent quoted between one and three sources ($n=258$). Coders classified each source's qualifications in terms of employment and relation to schizophrenia. This is reflected in Table 2.

Table 2

Source qualification and number of times quoted

<u>Source Qualification</u>	<u>Number of Sources Quoted</u>
Researcher	291
Judicial	175
Family	143
Law Enforcement	143
Person with Schizophrenia	116
Other Acquaintance	81
Friend	44

Research Questions

The study had five research questions, and each involved a comparison of proportions related to the publication type and story sourcing. Therefore, a series of z-tests of proportions was conducted to examine the research questions. Z-tests indicate the likelihood that differences in proportions (or percentages) are due to real population differences rather than sampling error (Riffe et al., 2008). Proportions are used to define how much of a condition (e.g., news articles) demonstrate a particular characteristic (e.g., stereotypes). Comparing differences and proportions reveals which condition is more likely to portray that characteristic. The first research question examined the relationship between publication type (traditional versus digital native news sites) and the prevalence of stereotypes. First, the primary investigator examined the proportion of digital native and traditional news sources that linked schizophrenia with violent or criminal behavior. Fifty-five percent of the traditional news articles (229 out of 414) connected schizophrenia with violent or criminal behavior. Conversely, 31 percent of digital native news articles (44 out of 142) linked schizophrenia with violent or criminal behavior. A z-test of proportions showed that articles from traditional news sites stood greater chance of containing violent or criminal stereotypes about schizophrenia, $z = 5.23$, $p < .001$. Meanwhile, 30 percent of traditional news articles (135 out of 414) linked schizophrenia with criminal or violent victimization, while 24 percent of digital native articles did so (34 out of 142). Nevertheless, the difference in proportions was not statistically significant, $z = 1.42$.

The second research question examined the relationship between publication type and the overall valence of news articles relating to schizophrenia. Seventeen percent (72 out of 414) of traditional news articles had a positive overall valence compared to 37 percent (52 out of 142) of digital native news articles. The difference in proportions was not statistically significant ($z =$

.78). Nonetheless, a statistically significant difference emerged between the proportion of negatively valenced articles in traditional and digital native news sources. Forty-eight percent of traditional articles were negatively valenced ($n = 198$), while 20 percent ($n = 29$) of digital native articles were negatively valenced, $z = 2.32, p < .01$. Finally, a significant difference emerged between the proportion of digital native and traditional articles that were neutral in valence. Forty-four percent ($n = 62$) of digital native articles had a neutral valence compared to the 35 percent ($n = 144$) of traditional articles, $z = 1.88, p < .05$.

The third research question examined the relationship between source qualifications and valence of news articles published relating to schizophrenia. First, coders documented the presence of particular sources in news articles, including (a) people with schizophrenia, (b) medical personnel, (c) researchers, (d) law enforcement, (e) family members of a person with schizophrenia (f), friends of a person with schizophrenia, and (g) judicial employees. Next, coders documented whether the articles in which each source appeared were positive, negative, or neutral in valence. Descriptive results are reflected in Table 2.

Table 3

Source Qualifications and Article Valence

<u>Source</u>	<u>Article Valence (% of total across row)</u>			
	<u>Positive</u>	<u>Negative</u>	<u>Neutral</u>	<u>Total</u>
Schizophrenia	42 (36%)	55 (47%)	19 (16%)	116 (100%)
Medical Personnel	32 (30%)	41(39%)	33 (31%)	106 (100%)
Researchers	88 (30%)	39 (13%)	164 (56%)	291 (100%)
Law Enforcement	5 (3%)	98 (69%)	40 (28%)	143 (100%)
Family	28 (20%)	70 (49%)	45 (31%)	143 (100%)
Friends	12 (27%)	20 (45%)	12 (27%)	44 (100%)
Other Acquaintance	23 (28%)	34 (42%)	24 (30%)	81 (100%)
Judicial	10 (6%)	133 (76%)	32 (18%)	175 (100%)

To simplify data analysis, the primary investigator then created two categories of sources. The first, dubbed *personal*, included people with schizophrenia, family members of people with schizophrenia, and friends. These were people who were primarily coded as having some sort of personal relationship to schizophrenia. The second group, *impersonal*, included medical personnel, judicial personnel, law enforcement officers, and researchers. The primary investigator felt this would be appropriate because sources in the *personal* group had direct experience with mental illness, while *impersonal* did not. Furthermore, researchers (Nairn & Coverdale, 2005) have noted that news outlets frequently interview third parties such as police officers rather than people who are directly experiencing mental illness, which critics contend is one reason for stigma. Therefore, in the end, a z-test compared the proportion of *personal* sources who appeared in positive, negative, and neutral articles to that of *impersonal* sources. In regard to negative articles, 48 percent of articles quoting personal sources were negative ($n = 145$ of 303) compared to 43 percent of articles quoting impersonal sources ($n = 311$ of 715). No significant difference in proportions emerged ($z = 1.46$). Nevertheless, articles stood better chance of being positive when they quoted personal sources. Twenty-seven percent of articles quoting personal sources were positive ($n = 82$), compared to 19 percent of articles quoting impersonal sources ($n = 135$), $z = 2.72$, $p < .001$. Finally, 38 percent of articles quoting impersonal sources had an overall valence of neutral ($n = 269$) in comparison to the 25 percent of articles that quoted personal sources ($n = 76$), $z = 4.22$, $p < .001$.

Research question four examined the relationship between story authorship (first- or third-person) and article valence. Stories told from a first-person perspective stood greater likelihood of having positive valence. Forty-three percent of articles told from a first-person perspective (46 out of 106) had a positive valence, compared to the 17 percent of articles told

from a third-person perspective (77 out of 452), $z = 5.08, p < .001$. Conversely, articles told using a third-person perspective stood greater likelihood of being negatively valenced. Forty-seven percent of articles told from a third-person perspective (212 out of 452) had an overall negative valence, compared to 12 percent of articles told from a first-person perspective (13 out of 106), $z = 8.89, p < .001$. Finally, 44 percent of articles told from a first-person perspective (47 out of 106) had an overall neutral valence, compared to 35 percent of third-person articles (158 out of 452), $z = 1.69, p < .05$.

The final research question investigated the relationship between source qualifications and the valence of their comments. Comments made by each classification of source (e.g., person with schizophrenia, law enforcement officer) were coded as positive, negative, or neutral. The primary investigator determined what proportion of comments by each type of source were positive, negative, or neutral. These results are reflected in Table 3.

Table 4

Source Qualifications and Quote Valence

<u>Source</u>	<u>Quote Valence (% of total across row)</u>			
	<u>Positive</u>	<u>Negative</u>	<u>Neutral</u>	<u>Total</u>
Schizophrenia	36 (31%)	50 (43%)	29 (25%)	115 (100%)
Medical	18 (17%)	22 (21%)	65 (62%)	105 (100%)
Researchers	56 (19%)	39 (13%)	194 (67%)	289 (100%)
Family	56 (40%)	34 (24%)	51 (36%)	141 (100%)
Friends	24 (55%)	8 (18%)	12 (27%)	44 (100%)
Other Acquaintance	18 (22%)	25 (31%)	28 (47%)	71 (100%)
Law Enforcement	7 (5%)	53 (38%)	81 (57%)	141 (100%)
Judicial	13 (8%)	72 (42%)	85 (50%)	170 (100%)

Once again, sources were broken down into two groups, *personal* and *impersonal* for statistical comparison. A z-test of proportions showed that personal sources stood greater likelihood of making positive comments about schizophrenia, $z = 8.42, p < .001$. Thirty-nine percent of

personal sources' commentary was positively valenced (116 out of 300) compared to 13 percent of impersonal sources (94 out of 705). No significant difference in proportions emerged for negatively valenced commentary, $z = 1.27$. Thirty-one percent of comments made by personal sources were negative (92 out of 300) compared to 27 percent of comments made by impersonal sources (188 out of 705). Impersonal sources stood a significantly greater chance of offering neutral commentary than personal sources, $z = 8.93$, $p < .001$. Sixty percent of sources' comments were neutral (425 out of 705) compared to 31 percent of comments made by personal sources (92 out of 300).

CHAPTER 5

DISCUSSION

This study examined stereotypes, sources, perspectives, and valence of articles pertaining to schizophrenia published in 2015. The major goal of the study was to study whether the rise of digital news has changed the way schizophrenia is covered by the press. Past literature shows that audiences, via the media, have seen mental illness through a violent or criminal frame. Existing research suggests that there is a relationship between traditional news media coverage of schizophrenia and the stigmatization of the illness and people who suffer it, but the author knows of no research that has studied the increasing popularity of digital news and its portrayal of schizophrenia. This study serves as a first step. The major finding of the study was that there may indeed be a changing relationship between news platform and schizophrenia coverage. This is important because it shows journalism is moving in a more informed direction in articles about schizophrenia, and based on the readership of digital native news sites and framing theory, these well-informed articles could help reduce stigma.

Perhaps the most important finding lies in the examination of the first research question. This question, which studied the relationship between publication type and portrayal of stereotypes about schizophrenia, was actually the catalyst for this entire thesis and what originally piqued the lead investigator's interest. It found that 55 percent of the traditional news articles connected schizophrenia with violent or criminal behavior, whereas 31 percent of digital native news articles linked schizophrenia with violent or criminal behavior. This is in line with past research cited in the literature review. Considering that very few people with schizophrenia are violent toward others and are actually far more likely to fall victim to a crime than to perpetrate one, this is an example of the type of biased reporting that leads to stigma. It is

important because it shows that the majority of traditional news articles are indeed framing schizophrenia through violence, which suggests that audiences are receiving information about schizophrenia through the lens of violence. However, the reduction of connections between schizophrenia and violence in the digital native articles is encouraging, because it suggests the media could be shrinking that connection.

In a contribution to the existing literature, this study found that news articles from digital native websites were less likely to be negatively valenced and more likely to be neutrally valenced than traditional news articles. As noted in the literature review, traditional news articles in the past were notorious among researchers for biased and misinformed coverage of mental illnesses. This suggests that new media sites are indeed providing more positive coverage of people with schizophrenia. While traditional news outlets focused on major criminal trials (such as the court proceedings for James Holmes, a man with schizophrenia who shot patrons at a movie theater in Aurora, Colorado), articles published on digital native sites provided a broader lens through which audiences could see schizophrenia. For example, they published first-person essays about living with schizophrenia, a story about a mother's relationship with her son with schizophrenia, an essay by a famous writer whose childhood friend suffered schizophrenia, and other articles that provided audience members a different portrait of the illness.

This different portrait, or frame, is important. In mass communication studies, framing theory states that the lens through which audiences receive news about their surroundings influences the way they process information in the environment (Goffman, 1974). Thus, more neutrally and positively valenced articles are an encouraging trend in the fight against stigma because they may provide readers more nuanced understanding of schizophrenia. Although digital native news sources have been framing news in a more neutral manner, negatively

valenced articles were not statistically significant across traditional and digital native news sources. This means that while the amount of positive and neutral articles has improved, amounts of negative articles have remained stagnant. Based on framing theory, the above findings underscore the need for even more neutrality in the news in covering schizophrenia.

Nevertheless, negative findings did emerge. Despite the fact all the articles in this study concerned schizophrenia, the majority of articles published on both traditional and digital news sites in 2015 failed to tell the story from the perspective of an individual with schizophrenia or even interview an individual with schizophrenia. Research suggests that allowing an individual with mental illness to speak “directly” with audience members may reduce stigmatization through contact. Reporters should strive to include the perspective of people affected by mental illness in stories whenever possible. This is underscored by the fact that 36 percent of articles that quoted people with schizophrenia were positive – the highest proportion among any of the source categories.

On the whole, the articles analyzed here still largely spread stereotypes associating schizophrenia with violence and crime, whether through victimization or perpetration. This is problematic. Bissell and Parrott (2013) suggest that the media is most powerful in nurturing prejudice when an individual lacks first-person experience with mental illness and other stigmatized conditions. A person who lacks personal experience with mental illness and turns to these eight media outlets for newsstands has, on the whole, a strong chance of learning an association between violence and schizophrenia.

In another important finding, the study showed that researchers were the most often quoted sources in news articles on these eight websites, followed by judicial employees and, tied for third, family members of people with schizophrenia and law enforcement. It is problematic

that law enforcement and judicial officers were quoted more often than people with schizophrenia, given the fact they stood greatest chance among sources of appearing in negatively valenced articles; nevertheless, it is promising that articles often quoted family members of people with schizophrenia. In a surprising finding, a majority of the quotes by people with schizophrenia were negatively valenced (43 percent). However, this result could be explained by the copious amount of articles covering the James Holmes trial and the quotes reporters used from the trial. Almost all of the quotes reporters chose to use from Holmes were similar to “I knew it was legally wrong,” or calling his victims “not real people” (Holley, 2015). Both of these quotes and similar commentary were considered to have a negative valence.

This study found that a minority of articles were written from a first-person point of view (19 percent), while even fewer articles were written by a person with a mental illness (four percent). Indeed, the majority of articles pertaining to schizophrenia never even quoted a person with schizophrenia (78 percent). This is parallel with Nairn and Coverdale’s study (2005), which found that only .8 percent of their study’s articles met the criteria for a person with a mental illness being reported directly. This lack of voice, both in 2005 and 2015, is a problem because readers only see mental illness, particularly schizophrenia, through others’ eyes, and the most accurate details come from people who have actually experienced it--for example, 47 percent of articles told from a third-person view had a negative valence (the majority of third-person articles), while 44 percent of articles told from a first-person view had a neutral valence (the majority of first-person articles).

Although most of the first-person articles were published in digital native news sources, the *Los Angeles Times* in particular told more than a few positively valenced first-person articles. In 2015, a reporter named Steve Lopez wrote regularly about the inhabitants of Skid Row. He

described the people who lived there in a dignified way, like Nathaniel Ayers, a former Juilliard student whose struggles with schizophrenia left him on the streets. Lopez didn't ignore the problems in places like Skid Row--he said most of the people who live there are sick and addicted--but he also quoted people who called them resilient and creative (Lopez, 2015). Lopez's writings set a good example for what articles on mental illness should look like--not ignoring the pain and suffering, but also not ignoring the fortitude.

There are practical implications to be taken from this research. Twenty-seven percent of the articles in the sample directly quoted zero sources. The operational definition of a source was a person whose commentary was in direct quotations, so this does not mean that the articles with zero sources really did not have any sources, but the lack of direct quotations is still a problem. Journalists are taught to use direct quotations for vital comments. Also, journalists are taught that multiple sources make a story more structurally sound. Therefore, using more sources with a direct experience with schizophrenia (see the "personal" categorization in the Results section) would strengthen stories relating to schizophrenia. With news moving online, there are less spacing and word count restrictions. This gives journalists more responsibility in regard to not staying in the stereotypical box reminiscent of past schizophrenia coverage.

Although, as mentioned, past research shows that people with mental illnesses are less likely to commit crimes and more likely to be victims of crimes, there are instances where violence occurs and a person with schizophrenia is at the helm. It would be remiss of reporters to avoid these stories, but the primary researcher feels it should be necessary for reporters, when covering stories where someone with schizophrenia commits a crime, to include statistics about how rare that situation actually is. Because schizophrenia is a misunderstood disease, it would also be helpful for publications to give a basic overview of what the disease typically entails.

Again, since digital native news sites do not have the inch restrictions of traditional news, they are especially called to provide these facts.

This study had its limitations. Studying articles and their sources was more complicated than anticipated. Many of articles quoted one to three sources, which is the standard for journalism pieces; however, the majority of articles had zero direct quotations. Nonetheless, this does not mean the reporter interviewed zero people, but that the reporter did not include any direct, verbal quotations. Verbal is specified because many articles quoted statements to the press or court records, and these types of quotes were not deemed constructive to the present study. Source use was examined in research questions three and five.

Of the coded sources, the only source left uninvestigated were those rated as “other.” The reason for this is that, although “other” was the largest category, it was incredibly broad. Based on what coders manually wrote in for them, the “other” category included sources ranging from “people with mental illness not otherwise specified” to “government official” to “victim’s family member,” among others. The lead investigator felt that this large group could inaccurately sway results. Another limitation to this study was that only articles originally published in 2015 were coded. This was due to time constraints, but because the articles stretched across an entire year, the researcher believes this research depicts normal coverage of people with schizophrenia and is thus functional in determining the dynamic depictions of schizophrenia in the news. However, in 2015, there were four months of enormous coverage for the James Holmes trial. Thus, that was a large part of the sample. However, because the amount of gun violence episodes in 2015 was only slightly higher than 2014 (53,143 episodes in 2015 compared to 51,817 episodes in 2014), the researcher believes 2015 could still be considered a typical year in coverage of violent instances (Gun Violence Archive, 2016).

Despite these limitations, this study is important because stigma against schizophrenia is real and prevalent, stereotypes perpetuate that stigma, and the news media perpetuate those stereotypes. Studies have chronicled traditional media's portrayal of people with mental illness, but before this study, few if any researchers analyzed changing news platforms and their relationship to specific mental illnesses. Now that research has shown that different news platforms do indeed cover schizophrenia differently, reporters can look at what digital news is doing well and apply it to traditional news. Regardless, if digital news continues to cover schizophrenia in the way this study has shown it does, its increasingly vast readership should insure that stigma against people with schizophrenia will decrease.

Because of the above limitations, continuing research is imperative. This study was a content analysis. Another content analysis could be useful across broader time spans. Additional research could also include an experiment where researchers could test exposure to positive or negative portrayals of schizophrenia in the news. Research has shown that media does influence perceptions of mental illness, but a real-world experiment looking specifically at schizophrenia would be interesting.

Conclusion

Articles relating to schizophrenia rated 100 percent neutral across traditional and digital native news platforms would be ideal. However, based on reporter bias as well as audience interest, news will continue to connect violence and mental illness. Therefore, 100 percent neutrality across the board is unrealistic; what researchers should hope for instead is a balance of negative, neutral, and positive articles. The present study is important because it shows that evolving media is changing for the better in neutralizing coverage of schizophrenia. This study

contributes to current stereotypes of mental illness as well as how sourcing and article point of view relate to that, hopefully giving reporters ways in which they can improve.

REFERENCES

- Appleby, L., Mortensen, P., Dunn, G., Hiroeh, U. (2001). Death by homicide, suicide, and other unnatural causes in people with mental illness: a population-based study. *The Lancet*, 358, 2110-2112.
- Anderson, M. (2003). 'One flew over the psychiatric unit': mental illness and the media. *Journal of Psychiatric and Mental Health Nursing*, 297-306. Retrieved March 2, 2015, from <http://www.ncbi.nlm.nih.gov/pubmed/12755914>
- Bissell, K., & Parrott, S. (2013). Prejudice: The Role of the Media in the Development of Social Bias. *Journalism & Communication Monographs*, 15(4), 219-270. Retrieved November 1, 2015.
- Caputo, N.M., & Rouner, D. (2011). Narrative processing of entertainment media and mental illness stigma. *Health communication*, 26(7), 595-604.
- Carpenter, S. (2010). A study of content diversity in online citizen journalism and online newspaper articles. *New Media & Society*, 12(7), 1064-1084. Retrieved November 14, 2015, from <http://nms.sagepub.com/content/12/7/1064.short>
- Caumont, A. (2013, October 16). 12 trends shaping digital news. Retrieved February 19, 2015, from <http://www.pewresearch.org/fact-tank/2013/10/16/12-trends-shaping-digital-news/>
- Corrigan, P., Watson, A., Gracia, G., Slopen, N., Rasinki, K., Hall, L. (2005). Newspaper Stories as Measures of Structural Stigma. *Psychiatric Services*, 551-556. Retrieved March 2, 2015, from <http://www.ncbi.nlm.nih.gov/pubmed/15872163>
- Cutcliffe, J., & Hannigan, B. (2001). Mass media, 'monsters' and mental health clients: The need for increased lobbying. *Journal of Psychiatric and Mental Health Nursing*, 315-321. Retrieved March 4, 2015, from <http://www.ncbi.nlm.nih.gov/pubmed/11882144>
- De Martino, B. (2006). Frames, Biases, And Rational Decision-Making In The Human Brain. *Science*, 684-687. Retrieved September 14, 2014.
- Diefenbach, D.L. (1997). The portrayal of mental illness on prime-time television. *Journal of Community Psychology*, 25(3), 289-302.
- Digital: Top 50 Digital Native News Sites (2015). (2015, April 28). Retrieved September 30, 2015, from <http://www.journalism.org/media-indicators/digital-top-50-digital-native-news-sites-2015/>

- Edmonds, R., Guskin, E., Mitchell, A., & Jurkowitz, M. (2013, May 7). Newspapers: By the Numbers. Retrieved September 30, 2015, from <http://www.stateofthedia.org/2013/newspapers-stabilizing-but-still-threatened/newspapers-by-the-numbers/>
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. New York: Harper & Row.
- Greenslade, R. (2012, January 25). Mail Online goes top of the world. Retrieved September 30, 2015, from <http://www.theguardian.com/media/greenslade/2012/jan/25/dailymail-internet>
- Guns in the US: The statistics behind the violence. (2016, January 5). Retrieved February 29, 2016, from <http://www.bbc.com/news/world-us-canada-34996604>
- Gun Violence Archive. (2016, March 24). Past Summary Ledgers. Retrieved March 24, 2016, from <http://www.gunviolencearchive.org/past-tolls>
- Henson, C., Chapman, S., Mcleod, L., Johnson, N., Mcgeechan, K., & Hickie, I. (2009). More us than them: Positive depictions of mental illness on Australian television news. *Aust NZ J Psychiatry Australian and New Zealand Journal of Psychiatry*, 554-560.
- Hinshaw, S. (2007). *The Mark of Shame: Stigma of mental illness and an agenda for change*. New York City, New York: Oxford University Press.
- Holland, K. (2012). The unintended consequences of campaigns designed to challenge stigmatising representations of mental illness in the media. *Social Semiotics*, 22(3), 217-236. Retrieved November 9, 2014, from <http://www.tandfonline.com/doi/full/10.1080/10350330.2011.648398>
- Holley, P. (2015, June 3). What James Holmes's diary says about the Aurora theater shooter's sanity. Retrieved February 1, 2016, from <https://www.washingtonpost.com/news/morning-mix/wp/2015/06/03/what-james-holmess-diary-says-about-the-aurora-theater-shooters-sanity/>
- Jurkowitz, M. (2014a, March 25). How Big Is the Digital News World? Retrieved February 19, 2015, from <http://www.journalism.org/2014/03/26/how-big-is-the-digital-news-world/>
- Jurkowitz, M. (2014b, March 25). The Growth in Digital Reporting. Retrieved February 19, 2015, from <http://www.journalism.org/2014/03/26/the-growth-in-digital-reporting/>
- Kaufman, C. (2010). *Other Psychotic Disorders*. In *The writer's guide to psychology: How to write accurately about psychological disorders, clinical treatment, and human behavior*. Fresno, Calif.: Quill Driver Books.
- Kim, Y., & Seo, J. (2010). Effects of Mental Illness Education Using Movies on Perceptions and Attitudes of Middle and High School Teachers toward Mental Illness. *Journal of Korean*

Academy of Psychiatric and Mental Health Nursing J Korean Acad Psychiatr Ment Health Nurs, 19(4), 382.

Kimmerle, J., & Cress, U. (2013). The effects of TV and film exposure on knowledge about and attitudes toward mental disorders. *Journal of Community Psychology*, 41(8), 931-943.

Lopez, S. (2015, December 9). Back on skid row with Nathaniel Ayers: A chorus of hallelujahs for 'Messiah' Retrieved February 01, 2016, from <http://www.latimes.com/local/california/la-me-1209-lopez-homeless-messiah-20151208-column.html>

Marketing Charts Staff. (2014, January 31). US Tablet Ownership Update, January 2014. Retrieved February 19, 2015, from <http://www.marketingcharts.com/online/us-tablet-ownership-update-january-2014-39508/>

Matas, M., El-Guebaly, N., Peterkin, A., Green, M., & Harper, D. (1985). Mental illness and the media: An assessment of attitudes and communication. *Canadian Journal of Psychiatry*. Retrieved March 2, 2015, from <http://www.ncbi.nlm.nih.gov/pubmed/3971275>

Matsa, K., Olmstead, K., Mitchell, A., & Rosenstiel, T. (2012, February 12). Online-only Outlets. Retrieved February 19, 2015, from <http://www.journalism.org/2012/02/13/onlineonly-outlets>

McArdle, A. (2001). *Zero Tolerance: Quality of life and the new police brutality in New York City* (p. 63). New York: New York University Press.

McGinty, E., Webster, D., Jarlenski, M., & Barry, C. (2014). News Media Framing of Serious Mental Illness and Gun Violence in the United States, 1997-2012. *American Journal of Public Health*, 104(3), 407-413.

Mitchell, A., Rosenstiel, T., Santhanam, L., & Christian, L. (2012, September 30). Future of Mobile News. Retrieved February 19, 2015, from <http://www.journalism.org/2012/10/01/future-mobile-news/>

Mitchell, A., Rosenstiel, T., & Christian, L. (2012, January 1). Mobile Devices and News Consumption: Some Good Signs for Journalism. Retrieved February 19, 2015, from <http://www.stateofthedia.org/2012/mobile-devices-and-news-consumption-some-good-signs-for-journalism/>

Nairn, R. (2007). Media portrayals of mental illness, or is it madness? A review. *Australian Psychologist*, 138

Nairn, R., & Coverdale, J. (2005). People never see us living well: An appraisal of the personal stories about mental illness in a prospective print media sample. *Aust N Z J Psychiatry Australian and New Zealand Journal of Psychiatry*, 281-287.

- New York Daily News - Company Profile, Information, Business Description, History, Background Information on New York Daily News. (n.d.). Retrieved September 16, 2015, from <http://www.referenceforbusiness.com/history2/90/New-York-Daily-News.html>
- Nunnally, J. (1961). *Popular Conceptions of Mental Health: Their development and change*. New York: Holt, Rinehart and Winston.
- Pew Research Center's Journalism Project Staff. (2011, November 13). *Sharing and Gathering Information*. Retrieved February 19, 2015, from <http://www.journalism.org/2011/11/14/sharing-and-gathering-information/>
- Riffe, D., & Lacy, S. (2005). *Sampling*. In *Analyzing media messages: Using quantitative content analysis in research* (2nd ed.). Mahwah, N.J.: Lawrence Erlbaum.
- Rosenstiel, T. (2014, March 17). *The Personal News Cycle: How Americans choose to get news*. Retrieved February 19, 2015, from <http://www.americanpressinstitute.org/publications/reports/survey-research/personal-news-cycle/>
- Salter, M., & Byrne, P. (2000). *The stigma of mental illness: How you can use the media to reduce it*. *Psychiatric Bulletin*, 281-283. Retrieved 2011, from <http://pb.rcpsych.org/content/24/8/281>
- Sartorius, N. (2005). *Reducing the Stigma of Mental Illness: A Report from a Global Association*. Cambridge: Cambridge University Press.
- Sieff, E. (2003). *Media frames of mental illnesses: The potential impact of negative frames*. *Journal of Mental Health*, 259-269.
- Slopen, N., Watson, A., Gracia, G., & Corrigan, P. (2007). *Age Analysis of Newspaper Coverage of Mental Illness*. *Journal of Health Communication: International Perspectives*, 3-15.
- Stout, P., Villegas, J., & Jennings, N. (2004). *Images of Mental Illness in the Media: Identifying Gaps in the Research*. *Schizophrenia Bulletin*, 543-561. Retrieved March 2, 2015, from <http://www.psychcontent.com/content/p02501242011362m/>
- Strauss, G., Eisler, P., Gillum, J., & Welch, W. (2011, January 11). *Friends, co-workers: Shooting suspect had curious, dark change*. Retrieved 2011, from http://usatoday30.usatoday.com/news/washington/2011-01-11-1Ashooting11_CV_N.htm
- Stuart, H. (2006). *Media Portrayal of Mental Illness and Its Treatments*. *CNS Drugs*, 99-106. Retrieved March 2, 2015, from <http://link.springer.com/article/10.2165/00023210-200620020-00002>

- Tartakovsky, M. (2009). Media's Damaging Depictions of Mental Illness. Psych Central. Retrieved on March 5, 2015, from <http://psychcentral.com/lib/medias-damaging-depictions-of-mental-illness/0002220>
- Thoits, P. (2011). Resisting the Stigma of Mental Illness. *Social Psychology Quarterly*, 74(1), 6-28. Retrieved October 9, 2015, from <http://www.jstor.org.libdata.lib.ua.edu/stable/41303967?Search=yes&resultItemClick=true&searchText=mental&searchText=illness&searchText=stereotypes&searchUri=/action/doBasicSearch?Query=mental+illness+stereotypes&prq=public+attitud>
- Thornburgh, N. (2011, January 10). After Tucson: Why Are the Mentally Ill Still Bearing Arms? Retrieved 2011, from <http://content.time.com/time/nation/article/0,8599,2041448,00.html>
- Thornton, J., & Wahl, O. (1996). Impact of a newspaper article on attitudes toward mental illness. *Journal of Community Psychology*, 17-25. Retrieved March 2, 2015, from http://www.researchgate.net/publication/232494710_Impact_of_a_newspaper_article_on_attitudes_toward_mental_illness
- Thurman, N. (2008). Forums for citizen journalists? Adoption of user generated content initiatives by online news media. *New Media & Society*, 10(1), 139-157. Retrieved November 14, 2015, from <http://nms.sagepub.com/content/10/1/139.short>
- Vreese, C. (2005). News Framing: Theory And Typology. *Information Design Journal*, 51-62.
- Wahl, O. (1995). *Media madness: public images of mental illness*. New Brunswick, NJ: Rutgers University Press.
- Wahl, O. (2003). News Media Portrayal of Mental Illness: Implications for Public Policy. *American Behavioral Scientist*, 1594-1600.
- Wahl, O., Woods, A., & Richards, R. (2002). Newspaper Coverage of Mental Illness: Is It Changing? *Psychiatric Rehabilitation Skills*, 9-31. Retrieved March 2, 2015, from <http://www.tandfonline.com/doi/abs/10.1080/10973430208408417#preview>
- Wilson, C., Nairn, R., Coverdale, J., & Panapa, A. (2000). How mental illness is portrayed in children's television: A prospective study. *The British Journal of Psychiatry*, 440-443. Retrieved 2011, from <http://bjp.rcpsych.org/content/176/5/440.full>
- Wilson, C., Nairn, R., Coverdale, J., & Panapa, A. (1999). Mental illness depictions in prime-time drama: Identifying the discursive resources. *Aust NZ J Psychiatry Australian and New Zealand Journal of Psychiatry*, 232-239. Retrieved August 4, 2013, from <http://www.ncbi.nlm.nih.gov/pubmed/10336221>

APPENDIX

Appendix A: Coding Protocol

1. What is the name of the publication? (Select the publication you are coding)
 - a. Huffington Post
 - b. BuzzFeed
 - c. Vice
 - d. Gawker
 - e. USA Today
 - f. New York Times
 - g. Washington Post
 - h. Los Angeles Times
2. Is the publication considered a digital native or traditional media? (*Huffington Post*, *Buzzfeed*, *Vice*, *Gawker* all represent digital native media; *USA Today*, *NY Times*, *Washington Post*, *LA Times* all represent traditional media).
3. Article Headline (Please write the headline for the article)
4. Publication Date (Please write the date of publication for the article)
5. Coder name (Select your name)
 - a. Gwarjanski
 - b. Parrott
6. What is the general topic of the story? (Please write a brief description of the story topic. For example, it might be "shooting involving suspect with schizophrenia" or "feature story about living with schizophrenia" or "story about friend who has schizophrenia")
7. Is the story told in the first- or third-person?
8. Does the story describe a person with schizophrenia using negative terms? (By negative, we mean "not desirable" or "unfavorable." Descriptions of symptoms, antisocial behavior, dangerousness, or of having a moral deficiency are all considered negative.)
9. Does the story describe a person with schizophrenia using positive terms? (By positive, we mean "desirable." This might include complimentary statements concerning a person's intelligence, personality, attitude, and etcetera. The statement should be specifically about the person-- not treatments, breakthroughs in science, etc.)
10. Does the story describe a person with schizophrenia using neutral terms? (By neutral, we mean no specific valence can be detected. This could mean that the commentary is simply stating medical facts about schizophrenia or that the description has an equal amount of positive and negative valence, canceling out each other.)

11. Does the story interview someone who has a mental illness? (The fact the person has a mental illness must be clearly identified in the story. For this study, to be classified as an interview, the story requires direct quotations from the person.)
12. Does a person with mental illness perpetrate crime or violence in the story? (Crime involves any action against the law. Violence includes perpetrating any action such as slapping, kicking, hitting, shooting, etcetera against oneself or another person.)
13. Does a person with mental illness fall victim to crime/violence? (Does a person with a mental have a crime committed against them, or does someone commit any act of violence toward the person with a mental illness? For this study, suicide is considered falling victim to violence.)
14. How many sources are directly, verbally quoted in the story? (A source is interviewed when it is clear the author of the article spoke to a person and that person is identified and either paraphrased or directly quoted.)
15. What is the valence of the source's commentary?
 - a. Positive
 - b. Negative
 - c. Neutral
16. What is the topic of the source's commentary? (This is an open-ended question. The researcher will later categorize the coded answers based on the most common responses.)
17. Describe each source in terms of employment/qualification.
 - a. Person with schizophrenia
 - b. Medical personnel (including doctors, psychiatrists, psychologists, etc.)
 - c. Researcher (professors, journalists, etc.)
 - d. Family of person with schizophrenia
 - e. Friend of person with schizophrenia
 - f. Other acquaintance to person with schizophrenia (roommate, co-worker, social workers, etc.)
 - g. Law Enforcement (police officers, prison guards, etc.)
 - h. Judicial (attorney, prosecutor, judge)
 - i. Other. If you mark other, please explain _____
18. What is the overall valence of the article? (In other words, does the article appear to be, overall, negative? Positive? Negative articles would focus on crime, lack of health care for people with schizophrenia, etc. Positive articles would provide readers insight into the illness, perhaps tell a story of redemption following illness, etc.)
 - a. Positive
 - b. Negative
 - c. Neutral