“MADNESS” IN THE MEDIA: HOW CAN PRINT JOURNALISTS BETTER REPORT ON MENTAL ILLNESSES?

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Stereotypes and stigmas of individuals with mental illnesses have proved to be a major roadblock preventing these individuals from seeking help. The news media, despite having a responsibility to accurately inform the public, has played a significant role in portraying individuals with mental illness as violent, unpredictable, dangerous, and unfit to live with the rest of “normal” society. This happens through the words journalists choose to use and the information they choose in included, and excluded, when reporting on mental health issues. This study attempts to establish a guideline that journalists can follow that will hopefully reduce the stigma of mental illness in the media, and eventually in society. This study used a 2 x 2 ANCOVA to test two independent variables (amount of labeling terms and amount of corrective information). The variables were manipulated by modifying a news article four times to produce articles with varying levels of labeling terms and corrective information. A control article was also be used. The articles were randomized and passed out to 220 undergraduate college students at the University of North Texas who completed a questionnaire, read their assigned article, and then completed a second questionnaire to determine the impact the article had on their attitudes about individuals with mental illnesses.

This study found that participants were able to tell the difference between articles with corrective information or labeling terms and those without. However, neither labeling terms, corrective information, nor their interaction had an impact on the participant’s attitudes toward individuals with mental illnesses.
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## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>THE PSYCHOLOGY OF STIGMA</td>
<td>3</td>
</tr>
<tr>
<td>MEDIA PORTRAYLS OF MENTAL ILLNESSES</td>
<td>13</td>
</tr>
<tr>
<td>RESEARCH QUESTIONS AND HYPOTHESIS</td>
<td>28</td>
</tr>
<tr>
<td>METHOD</td>
<td>31</td>
</tr>
<tr>
<td>Instruments</td>
<td>31</td>
</tr>
<tr>
<td>Procedure</td>
<td>37</td>
</tr>
<tr>
<td>Participants</td>
<td>39</td>
</tr>
<tr>
<td>RESULTS</td>
<td>41</td>
</tr>
<tr>
<td>Manipulation Checks</td>
<td>42</td>
</tr>
<tr>
<td>Benevolence</td>
<td>45</td>
</tr>
<tr>
<td>Community Mental Health Ideology</td>
<td>47</td>
</tr>
<tr>
<td>Social Restrictiveness</td>
<td>48</td>
</tr>
<tr>
<td>Authoritarianism</td>
<td>50</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>53</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>58</td>
</tr>
<tr>
<td>AVENUES FOR FUTHER RESEARCH</td>
<td>59</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>61</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>92</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dependent Variable Means and Reliability</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Manipulation Check</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>Benevolence Index</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>Dependent Variable: Benevolence</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>Community Mental Health Ideology Index</td>
<td>48</td>
</tr>
<tr>
<td>6</td>
<td>Dependent Variable: Community Mental Health Ideology</td>
<td>48</td>
</tr>
<tr>
<td>7</td>
<td>Social Restrictiveness Index</td>
<td>50</td>
</tr>
<tr>
<td>8</td>
<td>Dependent Variable: Social Restrictiveness</td>
<td>50</td>
</tr>
<tr>
<td>9</td>
<td>Authoritarianism Index</td>
<td>51</td>
</tr>
<tr>
<td>10</td>
<td>Dependent Variable: Authoritarianism</td>
<td>52</td>
</tr>
</tbody>
</table>
INTRODUCTION

The news media are often credited with helping the public and form opinions. While informing the public is one role of the press, there are times when media don’t present correct or complete information. This is the case when it comes to mental illness reporting. Often times, reporters themselves lack the knowledge needed to accurately report on mental illness and incorrect information perpetuates stereotypes about individuals with mental illnesses. The media misreport on mental illnesses in several ways, but the main two involve using inappropriate or wrong terminology and not providing explanations of the terms used. Misreporting on mental illness adds to the stigma toward individuals with mental illnesses and does a disservice to the readers and viewers who rely on the news media to provide them accurate information.

Several media theories have developed out of discussions regarding the role of the press in society. One in particular, social responsibility theory, provides the theoretical rationale for this research on how the media can do a better job reporting on mental illness.

In 1957, Siebert, Peterson, and Schramm developed the first formal definition of social responsibility of the press. In their book, *Four Theories of the Press*, Siebert et al. (1957) state that the press has “an obligation to be socially responsible to see that all sides are fairly presented and that the public has enough information to decide” (p. 5).

The idea of a responsibility to report fairly is also embedded in many journalism ethics codes. The Society of Professional Journalists’ code of ethics advises journalists to “avoid stereotyping by race, gender, age, religion, ethnicity, geography, sexual orientation, disability, physical appearance or social status” ("SPJ Code of Ethics").
However, journalists sometimes fail to meet ethical codes and responsibilities to the public. Looming deadlines, editor pressures, and readership goals can all influence misreporting of the news. Sometimes, misreporting can be due to a lack of knowledge about the subject on the part of the reporter. When this is the case, it can often be minority groups whose stories are misrepresented. People with mental illnesses are one of the minority groups misrepresented by the news media. Because journalists report on a subject that they themselves don’t fully understand, the public can get distorted ideas from the media about mental illnesses.

The goal of this research is to provide print journalists with a framework of how to report on mental illnesses in a non-stereotyping, non-stigmatizing way. To do this, this research must first identify that ways in which mental illnesses are currently represented in the news media, and the impact these representations have. Then, this research with use a quantitative experiment to determine how word and information choices impact participant’s attitudes toward individuals with mental illnesses. Specifically, this study uses four news articles with varying levels of labeling terms and corrective information to address the hypotheses that a reader is more likely to form negative opinions of individuals with mental illnesses when they read an article that has a large number of labeling terms than an article without labeling terms and a reader is more likely to form negative opinion of individuals with mental illnesses when they read an article that lacks corrective information about mental illness than an article that includes this corrective information.
THE PSYCHOLOGY OF STIGMA

Human beings are exposed to a barrage of different images, people, and situations on a daily basis. If they were to process each different encounter separately, they wouldn’t have time to do much else with their day. Social psychologists have discovered that to deal with environmental stimuli, people construct broad categories, or schemas, each with its own set of definitions based on their prior experience or assumptions, and place each encounter or situation into one of those categories (Link & Phelan, 2001, p. 367). For example, people who have had a negative experience with pit bulls will probably perceive the pit bull at the dog park as dangerous and thus avoid it.

While schemas can make processing the world more manageable, individuals run the risk of oversimplifying situations or encounters. Using schemas to define individuals can result in the development of labels, stereotypes, prejudice, and discrimination. Taken together, these elements produce stigmas against a particular group or type of people.

A stigma is defined as “a social construction whereby a distinguishing mark of social disgrace is attached to others in order to identify and to devalue them,” and many have been in place against mental illnesses for centuries (Arboleda-Florez, 2002, p. 25). Around 1952, when the first steps were being made to create the *Diagnostic and Statistical Manual of Mental Disorders*, mental disorders were still being referred to as "idiocy/insanity" ("DSM: History," 2012). While it is no longer common practice to refer to individuals with mental illnesses as being idiots or insane, some people still hold beliefs that prevent those with mental disorders from getting or seeking treatment. In fact, even though a 2010 study of the attitudes toward mental illness found that 88.6% of adults in the United States agreed that “treatment can help
persons with mental illness lead normal lives,” only 57.3% agreed that “people are generally caring and sympathetic to persons with mental illness” (Centers for Disease Control and Prevention, 2010, p. 620).

Over the years, theoretical frameworks have developed concerning stigma. Goffman (1963) established one of the most cited definitions of stigma: “an attribute that is deeply discrediting and that reduces the bearer from a whole and unusual person to a tainted, discounted one” (p. 3). He also considered a stigma to be a relationship between a particular characteristic and the stereotypes surrounding that characteristic (Goffman, 1963, p. 4).

Similarly, Jones et al. (1984) concluded that a stigma is a “mark that defines him or her as deviant, flawed, limited, spoiled, or generally undesirable. . .The mark is potentially discrediting and commonly becomes so when it is linked through attributional processes to causal dispositions, and these dispositions are seen as deviant,” (pp. 6–7). Jones et al. (1984) also identified six dimensions of stigma: concealability, course, disruptiveness, aesthetics, origin, and peril (p. 24). These dimensions determine the extent to which a certain group is stigmatized. According to Link, Yang, Phelan, and Collins (2004), three of these dimensions lend themselves specifically to the mental-illness stigma (p. 512).

First, concealability refers to “how obvious or detectable the characteristic is to others” (Link et al., 2004, p. 512). Mental illnesses often carry no obvious physical symptoms. The lack of physical characteristics makes it possible for individuals to hide their condition. However, the lack of physical symptoms can also make others less likely to believe that something is wrong with those individuals. In other words, physical signs “may yield false positives, so the absence of these signs will often lead to false negatives” (Corrigan, 2005, p. 14).
Second, disruptiveness also relates strongly to individuals with mental illnesses because it concerns the level to which an attribute interrupts interpersonal interactions. For example, “interaction with people with mental illness is sometimes experienced as disruptive by others because of a fear of unexpected behavior by individuals with mental disorders” (Link et al., 2004, p. 512).

Third, origin refers to “how the condition came into being. In particular, perceived responsibility for the condition carries great influence in whether others will respond with unfavorable views and/or punishment toward the identified offender” (Link et al., 2004, p. 512). This concept relates to mental illnesses because just as people may hold others responsible for their physical well-being, they also think they should have control over their mental well-being. This could result in less sympathy toward those with mental illnesses because they are seen as responsible for their condition (Scheff, 1975, pp. 80–81).

It is difficult to point to one specific cause for stigmas regarding mental illnesses. However, those stigmas may be formed because behaviors associated with mental illnesses deemed socially unacceptable or deviant. A 2003 study found that mental health is frequently understood as a tendency to adhere to societal norms (Dixit, 2005, p. 4).

Mental illness is often associated with two main types of deviance—cultural deviance and emotional deviance. Cultural deviance occurs when an act or behavior is considered unhealthy, unclean, or perverted. This is determined by how much the behavior deviates from the norms about what is healthy, clean, or normal for a particular culture (Pritchard & Hughes, 1997, p. 52).
Emotional deviance occurs when a person’s emotions don’t match what is culturally acceptable for a given situation. For example, if a person were to laugh during a serious exam or get angry when presented a present, his or her behavior would be considered emotionally deviant. People are concerned with the emotions of others because “emotions, in this culture at least, are thought of as uncontrollable forces that seize helpless individuals” (Thoits, 1985, p. 225). Therefore, observations of socially inappropriate feelings or reactions play a role in the recognition and labeling of mental illness. This role is especially important when the stereotype of individuals with mental illnesses being unpredictable and dangerous is taken into consideration.

In fact, the social constructionist view sees no separation between mental illnesses and the cultural models that define what is normal or abnormal (Horwitz, 2002, p. 6). In other words,

Terms such as “inappropriate,” “dysfunctional,” “irrational,” or “unreasonable” that are used to define various mental illnesses do not refer to aspects of natural entities themselves, but are cultural definitions placed on behaviors that in other terms and places may seem normal, functional, rational, and reasonable. (Horwitz, 2002, p. 6)

These cultural definitions are often found in the form of labels. According to labeling theory, the label “deviant” leads society to treat the labeled person as such, which can begin a process of a self-fulfilling prophecy (Staats, 1978, pp. 10–11). Fear and revulsion are common reactions to the label of mentally ill. These reactions can cause people to distance themselves from those labeled as such. Once the labeled individuals become exposed to these reactions, they may “exhibit continued deviant behavior (secondary deviance), fitting the label and stabilizing the mental illness” (Corrigan & Kleinlein, 2005, p. 15; Scheff, 1984, p. 72). Despite the ongoing debate over labeling theory regarding whether the behavior changes to fit the label or
the label comes from the behavior, the majority of research shows that stigmatization and labeling do in fact worsen the lives of individuals experiencing mental illness (Link & Cullen, 1986, p. 290; Mechanic, McAlpine, Rosenfield, & Davis, 1994, p. 156).

Traditional and pre-modern ideas of mental health add validity to the conclusions of labeling theory. In several non-Western cultures, “people got sick, not because of a breach of hygienic regulations, but because they had transgressed a social norm or a taboo that separated the sacred from the profane” (Turner, 2001, p. 10). Although medical professionals and researchers now view mental illness as “biomedical diseases of the brain that are comparable to other physical illnesses,” public perception is still not quite in line with scientific evidence (Horwitz, 2002, p. 5). For example, the social constructionist view sees no separation between the cultural definitions and guidelines that define them as such. Therefore, mental illnesses could be different depending on the specific culture to which they belong (Horwitz, 2002, pp. 6–7).

Over time, people are exposed to the stereotypes of mental illness depicted in the media, and eventually those stereotypes become internalized. If the same individuals lack direct contact or experience to challenge these stereotypes, they will continue to believe that the relationship between mental illness and violence is causal (Scheff, 1984, p. 79). In fact, media consumers report that they tend to believe what they see and hear in the media regarding mental illness. They also assume that the information they receive on psychiatric disorders is accurate, even checked by a professional or expert before it is published (Wahl, 1995, pp. 4–8). It is important to note, however, that an individual’s knowledge of certain stereotypes doesn’t necessarily lead to their agreeing with or acting upon those stereotypes.
These portrayals of mental illness can be dangerous to not only the general population of news consumers, but also to individuals with mental illnesses. One negative outcome is that individuals with psychiatric disorders begin to self-label, which can result in self-stigma. Much like public stigma, which is the reaction that the general population exhibits to people with mental illnesses, self-stigma is also comprised of stereotypes, prejudice, and discrimination (Corrigan & Watson, 2002, p. 38).

The likelihood of an individual developing self-stigma has been tied to the degree to which the individual considers him or herself a member of a stigmatized group and whether he or she agrees with the stigmas associated with that group. In other words, if individuals with mental illnesses don’t define themselves by their mental illness or consider themselves to be a part of the general population of individuals with mental illnesses, they will not feel as though stigmas of mental illness apply to them. For example, while many individuals with mental illnesses are aware of the stereotypes of mental illness, that doesn’t mean that they agree with them or consider them valid (Hayward & Bright, 1997). In addition, “people who do not seem to identify with the group will appear relatively indifferent to self-stigma” (Corrigan & Watson, 2002, p. 40).

On the other hand, individuals who develop self-stigmas agree with the public stigmas about the group with which they identify. Individuals with mental illnesses may agree that they are weak, violent, or unable to take care of themselves, which can result in diminished self-esteem or self-efficacy (Corrigan & Watson, 2002, p. 36).
Individuals who not only disagree with stereotypes of their group but also believe that the stereotypes are the result of unjust social practices are more likely to repel negative attitudes about themselves.

Research has shown that negative portrayals of their illness in the media will prevent individuals from seeking help or treatment (Gard, 2001, p. 25). The Carter Center estimated that around 90% of individuals with mental illness can be helped by prescription medication, but only about 30% seek treatment. When an individual with a psychiatric disorder doesn’t seek help, the consequences can be damaging. In 1994, Pennsylvania Supreme Court Justice Rolf Larsen went on trial for illegally obtaining prescription drugs such as Valium and Prozac. As Larsen’s defense revealed, he had his employees get his prescriptions in their names to keep his condition confidential “because of the stigma attached to mental illness and that disguising his illness was required to preserve his career” (March, 1999, p. 73).

Stigmas also come in the form of public stigmas, which are the “results of a naïve public endorsing the stereotypes of mental illness” (Corrigan, 2005, p. 12). When stigmas reach key power groups such as landlords, employers, and members of the criminal justice system, the effect on individuals with mental illnesses can be devastating. Key power groups can especially affect individuals who have been in a psychiatric hospital. Because key power figures are likely to stereotype those individuals with mental illnesses, they may unnecessarily keep them in a hospital environment or let them become homeless in an effort to keep them out of their communities. Even those with less severe mental illnesses can be discriminated against. There is evidence that discrimination impacts almost every aspect of their life such as social
interactions, work opportunities, housing and even access to health care (Penn & Wykes, 2003, p. 203).

Social-cognitive models help explain this process using the following example: “That person talking to himself on the park bench must be crazy.” These signals yield stereotypes about persons with mental illness: “Crazy people are dangerous.” Stereotypes lead to behavioral reactions or discrimination: “I’m not going to allow dangerous people like that move into my neighborhood.” (Corrigan, 2005, p. 13)

When individuals with mental illnesses are denied access to housing and employment, it can further the cycle of their diagnosis. Being a productive member of society and living independently are very important to people’s self-esteem, and those with mental illness are no different. Wahl (1995) quoted a recovering patient as saying, “for most of us, the workplace is the primary source of ego strength. . .Without a job, we lack meaning. We become parasites on society by chance rather than choice. Worst of all, we have no self-worth” (pp. 104–105).

While stigmas in the workplace or the neighborhood can be destructive for people with mental illnesses, stigmas within the criminal justice system can be even more damaging. According to Teplin (1984), individuals with serious mental illnesses are more likely than others to be arrested by the police (p. 796). In addition, those who have mental illnesses tend to spend more time incarcerated than those who don’t (Steadman, McCarty, & Morrisey, 1989, pp. 7–8). Being imprisoned rather than given treatment can do more harm than good for individuals with mental illnesses. Seeing individuals with mental illnesses treated harshly by the criminal justice system can further the public stigma of them being violent or dangerous. In fact, a 1991 Louis Harris poll found that “mental illness was the disability with which the smallest proportion of respondents (19%) reported feeling comfortable (Wahl, 1995, p. 94). Another study found that
even ex-convicts were rated more favorably than those with mental illness (Tringo, 1970, pp. 295–306).

The impacts of stigma often extend past the individuals with mental illnesses themselves to their family, friends, and even care providers. Stigmas and stereotypes can often lead to family members actively attempting to conceal the diagnosis. A study by Phelan et al. (1998) also found that about a quarter of a sample of 156 parents and spouses of people with mental illness have occasionally experienced others trying to avoid them because of the mental illness of a relative (pp. 120–121).

Treatment providers also experience stigma attached to mental illnesses. Some authors have even expressed concern that these stigmas have made students less likely to go into psychiatry and other mental health areas. They have also stated that mental health services receive less funding than other areas of medical study because of the stigma of mental illnesses (Corrigan & Kleinlein, 2005, p. 23). In fact, in the late 1980s, federal funding for muscular dystrophy was estimated at $1,000 per patient while it was only about $14 per patient for schizophrenia (Torrey, 1988, p. 110).

Stigmas of mental illness also impact the public. These stigmas promote misinformation and potentially take away an important group of people from society because the public begins to fear them and push them to the outskirts of society. Not only do stereotypes continue to make people feel scared of those with mental illnesses, they increase personal fear of experiencing a mental disorder. This fear can lead to people denying their own feelings and problems because they feel that it would make them look “weak” and like “those people” (Corrigan & Kleinlein, 2005, p. 25). Philo et al. (1996) pointed out that during the course of the
Glasgow Media Group study, mental-health professionals noted how people would often mask their symptoms for years with drugs or alcohol because they would “rather be seen as a ‘drunken bampot’ than risk being defined as mentally ill” (p. 109). The fact that individuals with mental illness don’t want to speak out about their situation maintains the cycle of stigma. In fact, psychiatrist Enoch Calloway observed that while he has treated a lot of productive people, such as doctors, lawyers, and scientists, they all expressed a desire to keep their illness a secret (Calloway, 1990, p. 7). However, it would probably help decrease stigmas of mental illness if individuals who have managed their illness and gone on to lead fulfilling lives were to speak out and reveal their diagnosis.

Stereotypes also make it difficult for people of a particular culture to maintain their ethical assumptions. According to Corrigan and Kleinlein (2005) many societies believe that individuals “should have a fair opportunity to prove themselves on the basis of their actions and accomplishments” but that “stereotypes like those experienced by persons with mental illness challenge this fundamental belief” (p. 24).
MEDIA PORTRAYLS OF MENTAL ILLNESSES

The fact that public perception does not always follow scientific evidence leads to the conclusion that commonsense or everyday ideas about mental illnesses may have little to do with medical and scientific knowledge. According to the social representation approach, this is because “our knowledge about the world is acquired through social and interaction processes” and that “notions of health and healthy behavior are largely conceived through talking and interacting with others” (Dixit, 2005, p. 5; Guerin, 1992, p. 1426). George Gerbner concluded that our “social reality”—our ideas about the world and its members—are influenced by those persistent and consistent patterns and “we come to see the world and other people as they are portrayed in the mass media” (Wahl, 1995, p. 91). Dixit (2005) found in a qualitative study involving undergraduate engineering students that

Mental illness as social deviance and as having an element of violation appears to be the core idea of the social representation of mental illness. The social definition of mental illness is perhaps rooted in the social value that normative is health. Behaviour in accordance with social norms is thus considered to be normal. Any kind of social deviance, ranging from malicious thinking to terrorism, was perceived as a sign of mental illness by the subjects. (p. 5)

But how do individuals get their ideas for what is considered normal and healthy? One main way is through the media. A multitude of theories, such as cultivation theory and social learning theory, discuss the ways in which the media influence public thought and opinion. For example, social constructionist theory posits that the media are part of how people construct meaning (Scheufele, 1999, p. 106). A 1991 study examined the attitudes of adolescents toward individuals with mental illnesses. The study also sought to examine the source of their attitudes. According to the study, more than 54% ranked the mass media as the first or second most important source of their opinions and attitudes (Lopez, 1991, p. 275). Lopez (1991) also
found that contact with those with mental illnesses did not improve tolerance of them but that exposure to mental illnesses through formal coursework did positively affect attitudes. In addition, a 1996 study found that providing corrective information regarding mental illnesses made a difference in the attitudes participants expressed toward people with mental illnesses when they read the corrective information prior to being exposed to an article depicting a violent murder committed by a mentally ill person (Thornton & Wahl, 1996, p. 21). A 1999 study of undergraduate students at a large, Midwestern university found that those who received information from primarily electronic media were less tolerant towards individuals with mental illnesses (Granello, Pauley, & Carmichael, 1999, p.103).

Based on theories such as social constructionist theory and other previous research, the media are considered one of the major sources of information about mental illnesses. Modern society play an important role in this process because the media are often the only way people connect with and gain information about other groups of people. As Hartley (1996) said,

In modern, complex, fragmented societies, no one can hope to know the other members of their community directly. The only real contact with others is, paradoxically, symbolic, and rendered in the form of stories, both factual and fictional, in the electronic and print media. (p. 207)

This can be a problem because the majority of media representations of mental illnesses “are underpinned by traditional, lay understandings of madness. Those traditional portrayals represent persons living with a mental illness as other than or apart from normal people whom they threaten” (Nairn, 2007, p. 140). Wahl (1995) also concludes that “overall, the mass media do a poor job of depicting mental illness, with misinformation frequently communicated,
unfavorable stereotypes of people with mental illnesses predominating, and psychiatric terms
used in inaccurate and offensive ways” (pp. 12–13).

In the print media specifically, research has found that individuals with mental illnesses
are often portrayed as dangerous (Allen & Nairn, 1997, p. 375). Wahl’s (1992) review of
literature shows that the media present “a consistent depiction of mentally ill people as violent
and dangerous” (p. 346). Not only do the majority of people believe that individuals with
mental illnesses are violent, but they also assume that when an individual with a mental illness
is violent, it is a direct result of his or her disorder rather than take any outside factor into
consideration. For example, if an individual with a history of depression were to commit an act
of violence, others would automatically attribute his or her actions to the depression (even
though violence is not listed in the symptomology of depression) rather than consider the
possibility that they were a violent person or had a grudge against the victims. These
misconceptions survive despite findings that “best estimates show that only 4% of violence can
be attributed to persons with mental illness” and that as a group, the mentally ill pose little
threat of violence (Fazel & Grann, 2006, p. 1397; Friedman & Michels, 2013, p. 455).

The majority of news articles written about mental health appear after an event in
which the mental illness of an individual was presumed to be or was in fact a factor. For
example, a few days after the April 1999 shootings at Columbine High School, a headline in The
Washington Post read: “Killer Reportedly Took Luvox Antidepressant.” In addition, after the
2007 shooting at Virginia Tech, a survey of students at Central Connecticut State University
revealed that mental illness was rated as the most possible causal factor of the incident (Fallahi,
Austad, Fallon, & Leishman, 2007, p. 124). Mental illness and a lack of treatment were also identified by the students as being responsible for the shooting (Fallahi et al., 2007, p. 125).

The news media does present, whether intentionally or unintentionally, a distorted view of risks to personal safety after a tragic event such as a shooting or mass murder. Studies have shown a relationship between watching television news coverage of distressing events and an increase in fear of vicarious traumatization (Lengua, Long, Smith, & Meltzoff, 2005, p. 632; Pfefferbaum et al., 2000, p. 360). Research found that 46% of stories about individuals with mental illnesses involved violence (Ward, 1997). The effects of these negative stories are compounded by the rarity of positive portrayals of mental illnesses in the mass media (Day & Page, 1986). For example, there are far fewer stories about the accomplishments of individuals with mental illnesses than there are stories concerning their negative attributes.

The media portrayals of mental illnesses can influence the way individuals with mental illnesses are regarded in almost every aspect of society. Snow (1983) argues that:

It is no exaggeration to say that we live presently in a media culture. It means that nearly every institution—including religion, government, criminal justice, health care, education, and even the family—is influenced by the mass communication process. It seems that the character of the American culture and individual action is being developed more and more through media experience. (p. 9)

If one of the main purposes of the news media is to inform, why do they continue to provide inaccurate information about individuals with mental illnesses? One possible reason is the very practice of news reporting. While most media outlets claim to avoid bias, the very act of choosing which stories to report and publish shows a publication’s or reporter’s preferences. “Media operate in a competitive market and production practices emphasize being interesting and accessible to potential audiences, encouraging writers to heighten the drama of a story”
(Nairn, 2007, p. 139). In other words, the mass media operate for profit. Statistically, stories involving a dramatic or unusual phenomenon draw the most attention from audiences. Mental illness as a topic seems to fit this newsworthiness criterion. Fleming and Manvell (1985) comment that

> Madness appears as a condition that stands in opposition to reason and insanity. It provokes fundamental questions about our place in, and understanding of, the world. It makes us look more closely at our definitions of the nature of things and at our expectations of what should follow. Madness therefore has profound implications for our interpretation of ourselves and of our environment and eventually leads us to question who we are and what we are. (p. 17)

In addition, audiences also tend to have a desire to read things that provide them with excitement and even fear. This tendency is reflected by the disproportionate amount of newspaper space taken up by crime news. As noted in Wahl (1995), nothing sells newspapers like an unpredictable, violent killer who has inflicted pain and suffering to the friends and relatives of the victim, who are of high moral character themselves (p. 111). Wahl (1995) echoed these findings in his own words, stating that “in terms of profits, mental illness produces. Phenomena that are dramatic and puzzling have always been attractive to audiences. Mental illness is such a phenomenon” (p. 110).

> Media outlets also feel compelled to make the characters in their stories or newscasts both larger than life and easily identifiable. To achieve both, mass media must use exaggerated stereotypes because they are both compelling, and easily recognizable by the public (Snow, 1983, pp. 139–141). The most used stereotypes of mental illness have these qualities. “They are extremely dangerous, outstandingly different, and/or excessively ridiculous. They are, in other words, entertaining and profitable” (Wahl, 1995, p. 112).
Audiences may expect embellished characters in their news media because that is what is found in their entertainment. Research has shown that the attention span of audiences continues to decrease. Newman (2010) states that “makers of television, cinema, and web content are members of the society in which short-attention-span discourse circulates. They internalize this discourse and, in turn, it explains their techniques” (p. 582). As attention spans decrease, the pressure for the media to attract and maintain its audience increases. This can put the news media in a difficult place between education and entertainment. News outlets feel the pressure to produce stories with narrative pace. While narrative concerns seem to be restricted to fictional media, the decisions of non-fiction and documentary producers are also affected by the audience’s need for narrative pace and structure. A series of interviews with media producers between 1993 and 1995 by the Glasgow Media Group found that even documentary producers “are looking for some drama” and they, too, “need a dramatic moment” (Henderson, 2007, p. 116).

This need for drama is key when it comes to explaining why portrayals of mental illness in the media tend to be extreme and negative. Henderson (2007) points out that “the makers of television, with their dependency on dramatic visual moments, will happily feature people in crises, but when these people recover from their illness, production teams struggle to make ‘good television’ out of normality” (p. 117). The irony of this view is that media producers are attempting to appease their audiences but are ultimately doing the audiences a disservice because they are not presenting the whole picture on which the audiences can base their judgments.
Audience reactions may play another role in how media outlets portray individuals with mental illnesses. Psychologically, audiences may need reassurance that those with mental illnesses are not like them; they are not “normal.” It is discomforting for them to think that mental illness could affect them or their loved ones because they see mental illnesses as frightening, unpredictable conditions. However, mental illness can occur in one out of every five people, and education, loving parents, or a stable income may not be enough to spare a person from developing a mental illness (Wahl, 1995, p. 124). To deal with those threatening facts, people tend to label those with mental illnesses as “others” or “outsiders,” so that they don’t have to worry about becoming like them. In an effort to provide audiences with the reassurance they want, media professionals provide depictions of individuals with mental illnesses as different from the audience in their physical appearance, their actions, and even the way they speak.

In Disease and Representation, Sander Gilman (1988) states that

The banality of mental illness comes in conflict with our need to have the mad be identifiable, different from ourselves. Our shock is always that they are really just like us. This moment, when we say, “they are just like us,” is most upsetting. We no longer know where lies the line that divides our normal, reliable world, a world that minimizes our fear, from the world in which lurks the fearful, the terrifying, the aggressive. We want—no, we need—the “mad” to be different, so we create out of the stuff of their reality myths that make them different. (p. 11)

Not only do people want to feel as though bad things only happen to others, and those who do bad things or have problems are also others, but they also have a psychological need to have explanations and solutions when bad events occur. They need someone to blame, and they need to be provided a solution so that it will never happen again. In the cases involving individuals with mental illnesses, the violence is explained away by the madness of the
individual (Levin, 2011, p. 16). Although other, often more complex factors contribute to the crime rate in the United States, it is “far easier to accept the simple explanation that violence is merely a by-produce of an individual’s deteriorated mental condition” (Wahl, 1995, p. 127).

Along the same lines, solutions become more difficult to implement when we are forced to look at societal reasons for violence rather than simply eliminate an individual or type of individuals. It is much easier to make a person or group a scapegoat than use time and resources to dig deeper into the problem. Digging deeper would mean an admission of guilt. It would imply that something is wrong with society, of which we are members and contributors, and as such, we are responsible for both the problem and the solution. This responsibility goes directly against the assurance and comfort that othering provides (Levin, 2011, p. 16).

The media ensure that individuals with mental illnesses are regarded as different and unlike most “normal” people. Those with mental illnesses are expected by society to look and act differently enough that they can be spotted based solely on outward appearance. In fact, when producers of the 1975 film *One Flew Over the Cuckoo’s Nest* were looking for extras to portray mental patients, they decided that actual mental patients from Oregon State Hospital were not going to work because they “did not look distinct enough to depict mental patients on the screen” (Wahl, 1995, p. 38).

These individuals are portrayed not only as physically different, but also as different from most people in fundamental ways. A 1982 Media Watch Study revealed that primetime TV characters portrayed as having a mental illness were identified primarily by their diagnosis. Also, “three-fourths of them had no family connections; they were either unmarried or of unspecified marital status. Almost half had no clear occupation” (Wahl & Roth, 1982, p. 600).
Othering individuals with mental illnesses deprives audiences of their chance to relate to or feel empathy toward them.

Not only do people refuse to accept blame or feel that they have to help provide a solution, but they also try to avoid feeling guilty for not acting soon or preventing the problem. People don’t want to feel as though their responses to the needs of individuals with mental illnesses were inadequate. Historically, those with psychiatric disorders have been shunned, feared, and discriminated against. Mass media portrayals of individuals with mental illnesses as dangerous and violent helps justify the past and present wrongs (Gerbner, 1980).

It was previously stated that profits and readership factor into why the media portray mental illnesses as they do. This statement must assume that media professionals are fully aware of inaccuracies and stereotypes they are reporting and thus perpetuating. However, it must be pointed out that in some circumstances, media personnel are often ignorant about the facts of mental illness. In other words, “there is likely much that media professionals do not know about mental illness, just as there are many aspects of media operations about which mental health professionals are ignorant” (Wahl, 1995, p.113). For example, when reporters are writing about a local incident in which a person with depression killed two other people, he or she may not have the background knowledge to understand that the person’s depression may or may not have been the cause of the incident. Without this understanding on the part of the reporter, the headline would most likely read something along the lines of “Depressed Man Kills Two.” In this way, the cycle of misinformation about mental illnesses would continue.
The connotation of certain words can offer another explanation of how the media have influenced public perception of mental illnesses. Wahl (1995) discusses the impact that words can have as follows:

Words have power. They have the power to hurt or soothe, to honor or insult, to inform or misinform. Words reflect and shape prevailing attitudes, attitudes that in turn shape social behavior. Words both mirror and influence the ways we treat people and the ways they view themselves. (p. 14)

In 1991, a special investigation looked into a number of high-profile crimes committed by people who were diagnosed as mentally ill in London. The results, which were published in 1994, showed that these cases (34 in a three-year period) represented only a small fraction of the total homicides that occurred in England and Wales in the same time frame (Morgan, 1997, pp. 579–580). Yet, the newspaper headlines that followed the publication of the investigation painted a much different picture.

Headlines following the release of the report were as follows: “‘33 Patients Freed to Kill’ (Daily Express, 17 August, p. 1); ‘Care in the Community’ Mental Patients Kill 34 People in 18 Months’ (The Times, 17 August, p. 5); ‘One Murder a Fortnight by Mentally Ill’ (Daily Telegraph, 17 August, p. 1); ‘Insane Killers’ (Evening Standard, 17 August, p. 9); ‘Scandal of Loonies Freed to Kill’ (Daily Star, 18 August, p. 8); ‘Sick and Dangerous’ (Daily Mail, 18 August, p. 8); ‘Free to Kill’ (The Sun, 18 August, p. 6)” (Crepaz-Keay, 1996, p. 38). It is important to note that British newspapers are notorious for sensationalism and these headlines may not reflect what would be found in the United States. However, they still provide insight into the depiction of mental illnesses in the print media (Burgers & de Graaf, 2013, p. 171).

The first problem with these headlines is that they are not accurate. The study took place over three years, yet many of the newspapers reported that the crimes were committed
in 18 months. The number of homicides was also misreported in most of the headlines and ranged from 22 to 34. These headlines imply that these individuals were released from in-patient care and went on a rampage killing total strangers. In actuality, fewer than one in 10 of the incidents involved the killing of a stranger. Also, the individuals who committed the crimes had not just been released or “freed” from a mental hospital. In fact, only one person was an inpatient at the time of the homicide (Crepaz-Keay, 1996, pp. 41–42).

In addition to being inaccurate, the headlines used leading language that could prompt a reader to jump to conclusions before they even had all of the information. Many of the terms used in these headlines are descriptions that have permeated everyday language describing mental illnesses, but more importantly, they are often used to describe situations that have nothing to do with mental health. For example, many of those words, such as “crazy” and “loony,” are used with a negative or derogatory connotation. Philo et al. (1996) refer to a 1993 news article published in the Guardian, which used the term schizophrenic incorrectly to describe a divide in the road (p. 46). The term is one of the most misused terms related to mental illness. The mass media often use schizophrenia and split personality interchangeably although schizophrenia and multiple personality disorder have very different psychiatric meanings and are very different types of disorders (Wahl, 1995, pp. 15–16).

Mental illness terms are also often used to describe unusual or eccentric behaviors. To this end, Philo et al. (1996) cite a 1993 Daily Mirror article, which used the headline “Good Luck You Bonkers Loonies, and DON’T PANIC!” as a tactic to increase readership of its exam revision guide (p. 46).
Even the subtlest changes in the language the media use to refer to mental illnesses can make a large difference in the way the terms are perceived by audiences. For example, referring to an individual with schizophrenia as “a person with schizophrenia” rather than “a schizophrenic” places an emphasis on the disorder, not on the individual. Placing the emphasis on the disorder helps prevent audiences from victim blaming, or placing responsibility for the illness on the individual. The media routinely avoid blaming the victim for the majority of other illnesses. A newspaper article would almost never refer to a person with cancer as “a cancerous person” (Wahl, 1995, p. 19).

Although mental illnesses are rarely mentioned in the mainstream media, these headlines indicate negative depictions of mental illnesses. In fact, the Glasgow Media Group found that of the non-fictional media representations of mental illness April of 1993, an overwhelming number of them focused on individuals with mental illnesses harming others (Philo et al., 1996, p. 45). While these examples were published more than 10 years ago in Europe and may not be directly translated to media treatment of mental illnesses in the United States, they show how the media can represent mental illnesses.

Even when the media are not using mental illness terms in a negative way, they sometimes use the terms in a joking, almost mocking way. Mocking is especially present when these terms are used in advertisements. A gift bag developed by Planter’s Peanuts in the 1980s included a can of peanuts in a straitjacket with the label “Certifiably Nuts.” The tag came complete with a “patient history,” stating that the owner’s family had been “nuts for generations.” The package also included a ring that if pulled made hysterical laughter. The package even won an advertising award for innovative retail packaging, which only highlighted
the insensitivity to individuals with mental illnesses (Wahl, 1995, p. 24). While members of the media may view these depictions as harmless and lighthearted, they run the risk of trivializing something that is a serious struggle for millions of people.

Individuals with mental illnesses are one of the only remaining groups that people still consider acceptable to label. Using slang terms for most other groups of people, especially in the mainstream media, is not tolerated. For example, the 1988 headline “One Lunatic, Three Guns,” which was published in *Time* magazine, would probably never have been published as “One Cripple, Three Guns,” or “One Mexican, Three Guns” (Wahl, 1995, p. 27).

In addition to headlines, even a single portrayal can impact the way audiences think about mental illness. A 1993 study of newspaper headlines found that a single, shocking headline—“Girl, 9, Stabbed to Death at Fair: Mental Patient Charged”—was enough to make readers express negative stereotypes of mental illness (Wahl, 1995, p. 93). If exposure to a single depiction can make this much of an impact, it becomes easy to imagine what impact multiple exposures can have. As Wahl (1995) points out, “the average consumer will have multiple, perhaps even daily, exposures to such images. It seems reasonable to expect that the detectable effects of single exposures will be magnified many times by the steady diet provided by the mass media” (p. 94).

Another aspect to consider about how the media influence audience opinions of mental illness is how messages are received and then either believed or rejected. In a qualitative study by the Glasgow Media Group, six focus groups were used to test how people interpret and remember media messages. The groups each participated in three exercises: writing a news story from an actual headline, answering questions about their beliefs of mental illness and the
sources of those beliefs, and being interviewed in depth about their answers. The results of the study shine light on the true power of the media to influence audience opinions. One key finding was summed up by Philo et al. (1996):

One of the key issues explored here was whether serious mental illnesses was associated with violence and whether people with illnesses such as schizophrenia were “quite likely to be violent.” Forty percent of the people in the general sample believed this to be so and gave the media as the source of their belief. (p. 96)

Many of the comments made by individuals in the focus groups revealed a high level of fear of individuals with mental illnesses. This fear was attributed by the respondents to representations of mental illness in both fictional and nonfictional sources.

The history of how mental illness has been portrayed, both in the media and in society as a whole, is key to understanding the way it is now, and how to change it in the future. Many of the representation of mental illness seen today are the result of portrayals circulated for centuries. These beliefs have been modified in certain ways by scientific discovery and understanding. However, society still harbors residue from the times when mental disorders were thought to be the result of evil spirits and those affected were seen as being punished for transgressions against their gods. This hidden assumption that mental illness is a result of a person’s moral lapse is key in explaining how mental illness has acquired such a negative connotation.

Such negative connotations continue despite research and scientific evidence that mental disorders develop due to chemical imbalances in the brain, not as punishment for one’s sins. However, the medical community does have some responsibility for the negative or inaccurate portrayals of mental illness. Early understandings of the body’s nervous system led medical experts to conclude some people had weaker or more unstable nervous systems. It was
also believed by these early doctors that individuals with weakened nervous systems were more prone to developing mental disorders. The scientific community also devoted its effort to studying skull shapes and variations to prove that “abnormal” people were physically different than sane patients (Wahl, 1995, pp. 115–116). Eventually, a short-lived psychological test was developed to assess notions of physical distinctiveness of various forms of mental illness. Participants were shown photographs of individuals with varying psychiatric disorders and asked to choose the ones they liked the most and the least. This was said to reveal the participant’s own underlying identification with the disorder of the faces they preferred (Buros, 1949, pp. 200–202).

While some of the negative connotations attached to mental illness have faded, many of the slang terms, such as “lunatic,” are still “leftovers of a time when people with mental illnesses were seen as little more than insensate beasts, when they were chained in dungeons and treated as objects of amusement for nobles who paid to view them as if in a human zoo” (Wahl, 1995, p. 22).

In fact, despite an increase in mental health education over the past four decades, the U.S. public still has an unwillingness to engage socially with individuals with mental illnesses (Martin, Pescosolido, & Tuch, 2000, p. 219–220). Also, a 1998 study found that families of individuals with mental illnesses experience more “courtesy stigma,” experienced as a direct result of being related to or closely associated with individuals with mental illness, than they did 20 years earlier (Corrigan & Kleinlein, 2005, p. 23).
RESEARCH QUESTIONS AND HYPOTHESIS

This research seeks to examine how the language and factual medical information used by journalists influence public opinion of mental illness and how making changes to the language used can help journalists avoid stigmatizing individuals with mental illnesses. This will be accomplished by using a 2 x 2 factorial experimental design (use of labeling or negative mental illness terms in the body text vs. use of corrective information about mental illnesses in the body text). Using these variables this study seeks to find ways print journalists can write about mental illness to decrease the proliferation of stigmas against mental illness. This study poses the following research questions:

RQ1: Does the use of labeling or negative mental-illness terms in a print article have an effect on whether readers will form a negative opinion of individuals with mental illnesses?

RQ2: Does including corrective information about mental illnesses have an effect on whether readers will form a negative opinion of individuals with mental illnesses?

While past research has attempted to measure the impact of news articles on mental illness stigma, there are several gaps that this research seeks to fill. First there are few studies that use an experiment as the primary method. In the case of measuring and eradicating mental illness stigma, experiments can be extremely important because they can provide evidence of causality. Specific variables, (i.e., mental illness labels and corrective information about mental illness) are manipulated individually, which can show a cause-and-effect relationship (Wimmer & Dominick, 2000, p. 210).

In addition, few studies have considered ways in which the print media can reduce mental-illness stigma. The most recent to do so was conducted by Thornton and Wahl (1996). This study investigated whether corrective information could offset the stigmatizing effect of a
newspaper article about a murder committed by a person with a mental illness. The study found that those who read the corrective information before the stigmatizing article were more accepting and less fearful of individuals with mental illnesses than those who didn’t read the corrective information (Thornton & Wahl, 1996, p. 21). However, the corrective information in this study was a separate article, which doesn’t provide a practical guideline for journalists to follow when writing a news article on mental illnesses. With these gaps in mind, this study seeks to use an experiment to test the effects of corrective information and labeling within the body text of a news article.

Corrective information in this case is defined as information included in the body text of a news article that seeks to explain or give context to any mention of mental illness within the article. Similar to the study by Thornton and Wahl (1996), the corrective information used in this experiment will include facts and common misconceptions of the mental illness detailed in the article (p. 18).

Research has defined labeling as “mental illness expressions are used as labels, adjectives as opposed to nouns” and used terms such as “schizophrenic, neurotic, psychotic, alcoholic, anorectic, bulimic” as examples (Rukavina et al., 2011, pp. 1132). The same study identified terms such as “madman, madhouse, lunatic, maniac, junkie, psychopath” as negative mental illness terms (p. 1134).

Based on research that has shown how media coverage of mental illnesses that includes the labeling language has contributed to the spread of mental-illness stigma (Rukavina et al., 2011, pp. 1131–1132) and research that has shown that corrective information can reduce stigma (Thornton & Wahl, 1996, pp. 21–22), this study presents the following hypotheses:
H1: Readers will be more likely to form a negative opinion of individuals with mental illnesses after reading an article that contains labeling or negative mental-illness terms than an article that doesn’t contain labeling or negative mental-illness terms.

H2: Readers will be more likely to form a negative opinion of individuals with mental illnesses after reading an article that doesn’t contain corrective information about mental illnesses than an article that does contain corrective information about mental illnesses.
METHOD

Instruments

The newspaper article (target article) was chosen for this study for several reasons. First, it was published recently (August 24, 2013) in a U.S. local publication (Morning Call from Allentown, Pennsylvania), which was considered to be an important factor because in order to generalize the findings of this study to current and future U.S. journalists, the target article needed to be current and local.

Secondly, the article contained many of the characteristics of stigmatizing media portrayals as defined by Thornton and Wahl (1996). For example, the article (1) describes the tragic murder of innocent victims by a mentally ill person; (2) uses attention-grabbing and emotionally charged language in the body text as well as the headline (“Michael B. Lindgren Committed the Crimes after Going off His Medication for His Mental Illness”); (3) describes the individual in a stereotypical way and as a person without social identity (“he wore a hospital gown and laughed several times,” he “couldn’t keep” a job for any length of time, “he said he never married or had children”); (4) depicts the mentally ill individual as unpredictable, dangerous, aggressive, and irrational; and (5) uses the term “mental illness” five times throughout the article without explaining what is meant by the term or naming the specific diagnosis of the individual.

The target article was manipulated in order to test two independent variables, amount of labeling or negative mental-illness terms and inclusion of corrective mental-illness information. This factorial design enabled the examination of the individual effects of the two independent variables as well as the interaction effect of the two variables on the reader. The
controlled experiment featured five groups. The control group was given an article that had nothing to do with mental illnesses, while the four experimental groups were given a manipulated version of the original article (See Appendices A-E).

The decision to use a control group was made in an attempt to avoid the sensitization that could happen as a result of the pre-test. Because the pre-test featured questions about mental illnesses, it would have been difficult to know that the participant’s answers on the post-test were the result of the assigned article or the result of questions on the pre-test.

The original article was stripped of as many labeling terms as possible. No corrective information was added to the first version of the original article. For the version that required the addition of labeling terms, manipulations were based on the previously mentioned research by Rukavina et al. (2011) and Rose et al. (2007), both of which identified specific terms that are considered to be labeling. Labeling terms were added based on research that labeling leads to the stigmatization of individuals with mental illnesses. Labeling is a major factor in preventing individuals to seek help for mental health problems (Rose et al., 2007, p. 1). In versions of the article that required the addition of corrective information, medical information about mental illness was obtained from the National Alliance on Mental Illness website. Corrective information was added based on research that such information is essential in replacing myths about mental illness (Corrigan et al., 2001, p. 189).

While each packet featured a different version of the article, they each included the same pre-test and post-test (See Appendices F-G). The pre-test included questions about what, if any, experience with mental illnesses the respondent had. This characteristic was measured in light of research that showed personal experience with mental illness, such as working in the
medical field or having a close-relative relationship with a mental illness, can increase empathy toward individuals with mental illnesses in general (Corrigan et al., 2002, p. 301). The pre-test also included questions that gauged the participant’s acceptance of individuals with mental illnesses. These questions were taken from the Community Attitudes Toward Mental Illness, or CAMI (Taylor & Dear, 1981, p. 230). Specifically, the question with the highest level of loading on each section of the CAMI was used. The sections in the original CAMI are (1) authoritarianism, which measures beliefs regarding the need to hospitalize those with mental illnesses and the difference between people with mental illnesses and people without; (2) benevolence, which addresses ideas about society’s need to help those with mental illnesses and the need for sympathetic attitudes; (3) social restrictiveness, which measures beliefs about the dangerousness of individuals with mental illnesses and the need to maintain social distance; and (4) community mental health ideology, which expresses ideas surrounding the therapeutic value of community to those with mental illnesses (Thornton & Wahl, 1996, p. 19).

The CAMI is made up of 40 statements, with 10 statements in each section. The original CAMI was shortened in the interest of keeping the length of time to complete the experiment to less than 20 minutes. In each category, the four statements that respectively had the highest level of loading on each original CAMI category were used in both the pre-test and post-test, although they were rearranged in the post-test. Responses were measured using a 7-point scale as the pre-test, with 1 being strongly agree and 7 being strongly disagree. The pre-test also included a question regarding where the participants receive their information about mental health. They were given six options (nonfiction media, fiction media, personal interaction, educational tools, social media, or other) and were told to select all that applied to them. The
next question asked the participant how they would rate the media’s coverage of mental illness. Finally, the pre-test also included standard demographic questions about the participant’s age, level in school, gender and race. These questions were included due to previous research that has shown these variables can sometimes make a difference in stigmatizing mental health.

The post-test include two manipulation checks to ensure the variables being manipulated were in fact the variables being measured (“This story provides enough medical information about schizophrenia” and “This story paints a negative picture of individuals with schizophrenia”). Again, a 7-point scale was used to measure the responses with 1 meaning *strongly agree* and 7 meaning *strongly disagree*. Lower scores meant participants felt the article included a substantial amount of labeling mental illness terms and no corrective information while higher scores meant participants felt the article did not include a substantial amount of labeling mental illness terms and did include corrective information. A two-way ANOVA test was conducted to ensure that the manipulation of the independent variables had the intended effect.

Seven questions in the pre-test and six questions in the post-test were recoded to ensure their values had the same meaning as the others when it was time to analyze the data. The first question in the pre-test to be recoded was “more tax money should be spent on the care and treatment of the mentally ill.” Because the values originally meant that 1 (*strongly agree*) was a more positive response toward the mentally ill and 7 (*strongly disagree*) was a more negative response to the mentally ill, the values were flipped to match the majority of the other questions in which 1 meant a more negative response toward the mentally ill and 7
meant a more positive response toward the mentally ill. Therefore, for this question, *strongly disagree* was assigned a value of 1 while *strongly agree* was assigned a value of 7, with 2 being *moderately disagree*, 3 being *slightly agree*, 4 being *neither agree nor disagree*, 5 being *slightly agree*, and 6 being *moderately agree*.

The next four pre-test questions to be recoded were the ones that asked participants about their personal experience with individuals with mental illnesses. These questions were, “I have observed persons with a severe mental illness on a frequent basis,” “I have a relative who has a severe mental illness,” “I have worked with a person who had a severe mental illness at my place of employment,” and “A friend of the family has a severe mental illness.” These were originally coded so that 1 (*strongly agree*), represented a higher level of experience while 7 (*strongly disagree*) represented a lower level of experience. In this case, a higher level of experience was expected to produce more positive attitudes toward individuals with mental illness, based on the research that those with personal experience are more empathetic. Therefore, the responses to these questions had to be recoded to match the others in which the higher the number, the more positive the response is toward individuals with mental illnesses. Again, *strongly disagree* was assigned a value of 1 while *strongly agree* was assigned a value of 7, with 2 being *moderately disagree*, 3 being *slightly agree*, 4 being *neither agree nor disagree*, 5 being *slightly agree*, and 6 being *moderately agree*.

The last two questions that were recoded in the pre-test were those concerning the coverage of mental health issues in the news media. These were, “News coverage of mental illness and mental health issues is adequate,” and “In news stories about mental illness, individuals with mental illnesses are represented as functioning members of society.” For these
questions, an answer of 1 (strongly agree) would be a positive response for the media and its mental illness coverage and 7 (strongly disagree) would represent a negative attitude toward the media and its mental illness coverage. In order to have the response values match the rest of those on the pre-test (the lower the number, the more negative the response), the responses were recoded and strongly disagree was given a value of 1 while strongly agree was given a value of 7, with 2 being moderately disagree, 3 being slightly agree, 4 being neither agree nor disagree, 5 being slightly agree, and 6 being moderately agree.

The first two questions to be recoded in the post-test were the manipulation-check questions: “This story provides enough medical information about schizophrenia,” and “This story paints a negative picture of individuals with schizophrenia.” These responses were originally coded so that 1 (strongly agree) meant there was more medical information and more negative mental illness terms in the article and 7 (strongly disagree) meant there was less medical information and negative mental illness terms in the article. In order to have these match the pre-test pattern of the lower numbers representing negative or lacking responses, these questions were recoded so that strongly disagree was assigned a value of 1 while strongly agree was assigned a value of 7, with 2 being moderately disagree, 3 being slightly agree, 4 still being neither agree nor disagree, 5 being slightly agree, and 6 being moderately agree.

The next post-test question recoded was the same CAMI question from the pre-test, “More tax money should be spent on the mentally ill.” As it was when the questions was recoded in the pre-test, strongly disagree was assigned a value of 1 while strongly agree was assigned a value of 7, with 2 being moderately disagree, 3 being slightly agree, 4 still being neither agree nor disagree, 5 being slightly agree, and 6 being moderately agree. Again, this
was to match the pattern of lower numbers being more negative and higher numbers being more positive.

The last three questions to be recoded in the post-test were also CAMI questions, although they were not included in the pre-test. These were: “We need to adopt a far more tolerant attitude toward the mentally ill,” “Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community,” and “Locating mental health services in residential neighborhoods does not endanger local residents.” Originally, the responses to these three questions were coded so that the lower numbers represented more positive attitudes toward the mentally ill and higher numbers represented more negative attitudes toward the mentally ill. Again, these were recoded to match the rest of the questions so that lower numbers represented more negative attitudes and higher represented more positive attitudes. This was done by assigning *strongly disagree* a value of 1 while assigning *strongly agree* a value 7, with 2 being *moderately disagree*, 3 being *slightly agree*, 4 still being *neither agree nor disagree*, 5 being *slightly agree*, and 6 being *moderately agree*.

Procedure

Participants were recruited and given the survey on March 25 and 26, 2014. The participants were all undergraduate students at the University of North Texas. The students who took the survey on March 25 were from two different undergraduate political science classes and those who took it on March 26 were in an undergraduate journalism class. The professors had informed their students that they had an opportunity to earn extra credit for
completing a survey. At the beginning of each of the three class sessions, an announcement was made to the class that a journalism graduate student needed participants to take a survey for a master’s thesis. The students were also informed that the thesis was about the language print journalists use and how that language affects reader’s perception of the subject. They were then told that they do not have to participate and all of their responses will be kept anonymous. Finally, instructions were given before the packages were distributed. They were told to first open the packet and read the informed consent, which provided contact information and more details about the survey. It was added that if after reading the informed consent they decided they no longer wanted to participate, to place it back in the packet and bring it to the front. After that, they were to open the packet, open the envelope marked 1 in the packet and complete the questionnaire. Then, they were to place the questionnaire back into the envelop marked 1 and put that envelope back in the packet. Then, they could move on to the envelope marked 2. They were to read the article inside very carefully, and when they were finished reading it, place it back in the Envelope 2 and place the envelope back in the packet. Lastly, they were to move on to Envelope 3 and complete that questionnaire. Once they were done, they would put Envelope 3 back in the packet, reseal the packet, and bring it to the front of the room.

The packets, which had been previously randomized, were then distributed to the participants. The packets were randomized using the website www.randomizor.org, which gave me five sets of five alternating numbers. I assigned the versions of the article to numbers (A=1, B=2, C=3, D=4, E=5) and the resulting patterns were; 13254, 41235, 31452, 34125, 15324.
Participants

I was able to get 220 participants out of the three classes. However a few of the questionnaires were not complete and therefore had to be taken out of the sample. That left a slightly smaller sample ($n = 213$). Of those who participated, 125 (58.7%) were female and 88 (41.2%) were male.

The participants were predominately in the beginning of their college career with 78 (36.6%) freshman, 72 (33.8%) sophomores, 47 (22.1%) juniors, and 16 (7.5%) seniors. There were no master’s or Ph.D. students in the sample. The participant’s ages seemed to mirror their class ranking. There were 163 (76.5%) between the ages of 18–21, 36 (16.9%) between the ages of 22–25, 10 (4.7%) between the ages of 26–29, 2 (0.9 %) between the ages of 33–36, and 2 (0.9%) who were 37 or older. There were no participants between the ages of 30–32.

The participants were not evenly divided by race. There were 129 (60.6%) white or Caucasian students, 34 (16.0%) Hispanic or Latino(a) students, 27 (12.7%) African-American or black students, 16 (7.5%) Asian students, 3 (1.4%) Native-American or Pacific-Islander students, and 4 (1.9%) students chose to answer the questions with “other.”

As mentioned before, the pre-test also include a question about where students get their information about mental illness, which allowed for multiple responses. One hundred thirty-six (64.5%) participants obtained their mental health information from nonfiction media, 86 (39.5%) from fiction media, 135 (62.2%) from educational tools, 130 (60.5%) through personal interactions, 54 (25.6%) from social media, and 13 (5.8%) from other sources.

Participants were also asked to identify their level of personal experience with individuals with mental illness. Nighty-five (44%) participants agreed (either slightly,
moderately, or strongly) that they have observed persons with a severe mental illness on a frequent basis, 77 (36.1%) participants agreed (either slightly, moderately, or strongly) that they have a relative who has a severe mental illness, 77 (36.1%) participants agreed (either slightly, moderately, or strongly) that they have worked with a person who had a severe mental illness at their place of employment, and 90 (42.2%) participants agreed (either slightly, moderately, or strongly) that a friend of their family has a severe mental illness.

Despite losing a few samples due to incompleteness, there was a near-equal distribution of participants for each group: with 43 students (20.2%) receiving Version A of the article (no labeling and no corrective information), 42 (19.7%) receiving Version B (labeling but no corrective information), 45 (21.1%) receiving Version C (labeling and corrective information), 42 (19.7%) receiving Version D (no labeling but corrective information), and 41 (19.2%) receiving the control article.
RESULTS

Because there was concerned about the possibility of the pre-test questions about mental illness sensitizing the participants, responses of the control group were tested first. A paired-samples $t$-test was run with the four Community Attitudes toward Mental Illness questions. The responses of the control group on the pre-test were compared with those from the post-test. No difference was found between mean of the pre-test and post-test for the question from the Benevolence section of the original CAMI “More tax money should be spent on the care and treatment of the mentally ill” ($M = .00, SD = .90$). There was no significant difference found between the means for the question from the Social Restrictiveness category of the original CAMI “The mentally ill should be isolated from the rest of the community” ($M = -.15, SD = 1.46$). The difference in means for the question from the Community Mental Health Ideology category “Mental health facilities should be kept out of residential neighborhoods” was also non significant ($M = .15, SD = 1.50$). However, the question from the Authoritarianism category “As soon as a person shows signs of mental disturbance, he should be hospitalized” did show a significant mean difference ($M = 1.05, SD = 1.36, 4.94(40) = 1.48, p = .000$). While opinions of authoritarianism changed between the pre-test and post-test for the control group, overall it was determined the pre-test did not impact participant’s responses on the post-test. See Table 1.
Table 1

*Dependent Variable Means and Reliability*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benevolence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) The mentally ill don’t deserve our sympathy.</td>
<td>6.39</td>
<td>1.16</td>
<td>0.79</td>
</tr>
<tr>
<td>2) We need to adopt a far more tolerant attitude toward the mentally ill in our society.</td>
<td>5.66</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>3) Increased spending on mental health is a waste of tax money.</td>
<td>5.33</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>4) More tax money should be spent on the care and treatment of the mentally ill.</td>
<td>4.99</td>
<td>1.58</td>
<td></td>
</tr>
<tr>
<td>Community Mental Health Ideology</td>
<td></td>
<td></td>
<td>0.85</td>
</tr>
<tr>
<td>1) Residents should accept the location of mental health facilities in their neighborhoods to serve the needs of the local community.</td>
<td>4.24</td>
<td>1.66</td>
<td></td>
</tr>
<tr>
<td>2) Locating mental health services in residential neighborhoods does not endanger local residents.</td>
<td>4.08</td>
<td>1.68</td>
<td></td>
</tr>
<tr>
<td>3) Mental health facilities should be kept out of residential neighborhoods.</td>
<td>3.45</td>
<td>1.74</td>
<td></td>
</tr>
<tr>
<td>4) Local residents have good reason to resist the location of mental health services in their neighborhoods</td>
<td>3.33</td>
<td>1.71</td>
<td></td>
</tr>
<tr>
<td>Social Restrictiveness</td>
<td></td>
<td></td>
<td>0.77</td>
</tr>
<tr>
<td>1) A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.</td>
<td>5.65</td>
<td>1.45</td>
<td></td>
</tr>
<tr>
<td>2) The mentally ill should not be given any responsibility.</td>
<td>5.51</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>3) The mentally ill should be isolated from the rest of the community.</td>
<td>4.86</td>
<td>1.72</td>
<td></td>
</tr>
<tr>
<td>4) I would not want to live next door to someone who has been mentally ill.</td>
<td>4.27</td>
<td>1.81</td>
<td></td>
</tr>
<tr>
<td>Authoritarianism</td>
<td></td>
<td></td>
<td>0.56</td>
</tr>
<tr>
<td>1) The best way to handle the mentally ill is to keep them behind locked doors.</td>
<td>6.11</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td>2) One of the main causes of mental illness is a lack of self-discipline and will power.</td>
<td>5.58</td>
<td>1.64</td>
<td></td>
</tr>
<tr>
<td>3) There is something about the mentally ill that makes it easy to tell them from normal people.</td>
<td>5.1</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td>4) As soon as a person shows signs of mental disturbance, he should be hospitalized.</td>
<td>4.83</td>
<td>1.76</td>
<td></td>
</tr>
</tbody>
</table>

**Manipulation Checks**

In order to determine that the manipulation of amount of labeling terms and corrective information was successful, a 2 X 2 ANOVA (Labeling terms X Corrective information) was conducted on participant’s responses to the manipulation check questions in the post-test.
(“This story provides enough medical information about schizophrenia” and “This story paints a negative picture of individuals with schizophrenia”).

For the question of whether the article provided enough medical information about schizophrenia, the amount of corrective information did make a difference. Participants who read the articles with corrective information perceived the article to have enough medical information more than participants who did not read an article with corrective information ($F(1, 168) = 11.41, p = .004$). The amount of labeling terms did not make a difference in the perception of whether the article had enough medical information if the article also had no corrective information. Participants who read the article with no labeling and no corrective information did not have a significantly different perception of the level of medical information in the article than those who read the article with no corrective information but that included labeling terms ($F(1, 168) = 2.01, p = .16$). However, the amount of labeling terms did make a significant difference in the perception of whether the article provided enough medical information if the article also contained corrective information. Participants who read the article containing corrective information but no labeling terms perceived the article to contain medical information less than the participants who read the article with both labeling terms and corrective information ($F(1, 168) = 11.42, p = .001$). A reason for the number of labeling terms impacting opinions of medical information but not a negative picture could have to due with the wording of the manipulation check questions. The phrase “painted a negative picture” in the labeling terms manipulation check may have been misleading. It may have been better to say something such as, “this article reinforces stereotypes about individuals with schizophrenia.” The participants may have felt that the negative labeling terms weren’t quite
enough to paint a negative picture, but they were enough to paint a negative picture. See Table 2.

Table 2

*Manipulation Check*

<table>
<thead>
<tr>
<th>No Labeling</th>
<th>Labeling</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable: Article provides enough medical information about schizophrenia.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Corrective Information</td>
<td>2.24</td>
<td>2.50</td>
</tr>
<tr>
<td>Corrective Information</td>
<td>3.80</td>
<td>4.10</td>
</tr>
<tr>
<td>Total</td>
<td>3.00</td>
<td>3.32</td>
</tr>
</tbody>
</table>

**Dependent Variable: Article paints a negative picture of individuals with schizophrenia.**

| No Corrective Information | 4.40 | 5.52 | 5.00 |
| Corrective Information    | 3.88 | 4.27 | 4.10 |
| Total                     | 4.14 | 5.0  |      |

To test the reliability of the modified CAMI scale, the four items in each section were added and divided by four to create four indices (benevolence, community mental health ideology, social restrictiveness, and authoritarianism). Cronbach’s alpha was then run for each subscale of the CAMI in order to determine its internal consistency. Benevolence (α = .79), community mental health ideology (α = .85), and social restrictiveness (α = .77) were all considered to have acceptable reliability. The authoritarianism subscale (α = .56) did not have acceptable reliability. However, the subscales of the CAMI as a whole were considered reliable. Therefore, four items of each subscale were added and divided by four, creating four indices.

A 2 X 2 analysis of covariance (ANCOVA) with four CAMI pretest covariates, four personal-experience items, and two news-media items was run on the each CAMI index (benevolence, community mental health ideology, social restrictiveness, and authoritarianism).
The four CAMI pretest covariates were; “as soon as a person shows signs of mental disturbance, he should be hospitalized” (authoritarianism), “more tax money should be spend on the care and treatment of the mentally ill” (benevolence), “the mentally ill should be isolated from the rest of the community” (social restrictiveness), and “mental health facilities should be kept out of residential neighborhoods” (community mental health ideology). The four personal-experience covariates were; “I have observed persons with a severe mental illness on a frequent basis,” “I have a relative who has a severe mental illness,” “I have worked with a person who had a severe mental illness at my place of employment,” and “a friend of the family has a severe mental illness.” The two news-media covariates were; “news coverage of mental illness and mental health issues is adequate” and “in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society.”

**Benevolence**

For the benevolence index, neither labeling and corrective information main effects nor interaction effect were statistically significant, $F(1, 164) = 1.26, p = .26 \text{(ns)}$, partial $\eta^2 = .01$ (labeling); $F(1, 164) = .08, p = .77 \text{(ns)}$, partial $\eta^2 = .00$ (corrective information); $F(1, 164) = .95, p = .33 \text{(ns)}$, partial $\eta^2 = .006$ (interaction). Two CAMI covariates, “more tax money should be spent on the care and treatment of the mentally ill” and “the mentally ill should be isolated from the rest of the community,” were statistically significant, $F(1, 164) = 173.67, p = .00 \text{(s)}$, partial $\eta^2 = .51$ (“more tax money should be spent on the mentally ill); $F(1, 164) = 11.15, p = .00 \text{(s)}$, partial $\eta^2 = .06$ (“the mentally ill should be isolated from the rest of the community”).

Four personal-experience items, (“I have observed persons with a severe mental illness
on a frequent basis,” “I have a relative who has a severe mental illness,” “I have worked with a person who had a severe mental illness at my place of employment,” and “a friend of the family has a severe mental illness”), made up a second set of covariates. Neither labeling and corrective information main effects nor interaction effect were statistically significant, $F(1, 165) = .23, p = .63$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 165) = .122, p = .73$ (ns), partial $\eta^2 = .00$ (corrective information); $F(1, 165) = .035, p = .85$ (ns), partial $\eta^2 = .00$ (interaction). None of the individual covariates were statistically significant.

The ANCOVA run on the news-media items showed no statistical significant for either labeling and corrective main effects or interaction effect, $F(1, 166) = .11, p = .74$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 166) = .00, p = .97$ (ns), partial $\eta^2 = .00$ (corrective information); $F(1, 166) = .31, p = .58$ (ns), partial $\eta^2 = .00$ (interaction). Both of the news-media covariates, (“news coverage of mental illness and mental health issues is adequate” and “in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society”), were statistically significant, $F(1, 166) = 17.74, p = .00$ (s), partial $\eta^2 = .10$ (“news coverage of mental illness and mental health issues is adequate”); $F(1, 166) = 7.08, p = .01$ (s), partial $\eta^2 = .04$ (“in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society”). See Tables 3 and 4.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Corrective Information</th>
<th>No Corrective Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling</td>
<td>5.61</td>
<td>5.64</td>
<td>5.62</td>
</tr>
<tr>
<td>No Labeling</td>
<td>5.56</td>
<td>5.61</td>
<td>5.56</td>
</tr>
</tbody>
</table>

$F(1,164)= 1.26, p=.26$(labeling); $F(1,164)= .08, p=.77$ (corrective); $F(1,164)= .95, p=.33$ (interaction)
Table 4

*Dependent Variable: Benevolence*

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling/ No Corrective</td>
<td>42</td>
<td>5.63</td>
<td>1.11</td>
</tr>
<tr>
<td>Labeling/ Corrective</td>
<td>45</td>
<td>5.61</td>
<td>1.02</td>
</tr>
<tr>
<td>Corrective/ No Labeling</td>
<td>42</td>
<td>5.61</td>
<td>.99</td>
</tr>
<tr>
<td>No Corrective/ No Labeling</td>
<td>43</td>
<td>5.51</td>
<td>1.26</td>
</tr>
</tbody>
</table>

Community Mental Health Ideology

For the community mental health ideology index, neither labeling and corrective information main effects nor interaction effect were statistically significant, $F(1, 164) = .01, p = .94$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 164) = .46, p = .50$ (ns), partial $\eta^2 = .00$ (corrective information); $F(1, 164) = 1.19, p = .28$ (ns), partial $\eta^2 = .01$ (interaction). Two covariates, (“more tax money should be spent on the mentally ill” and “mental health facilities should be kept out of residential neighborhoods”), were statistically significant, $F(1, 164) = 5.94, p = .02$ (s), partial $\eta^2 = .04$ (“more tax money should be spent on the mentally ill”); $F(1, 164) = 130.38, p = .00$ (s), partial $\eta^2 = .44$ (“mental health facilities should be kept out of residential neighborhoods”).

Again, personal-experience items were not statistically significant, $F(1, 165) = .04, p = .85$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 165) = 1.14, p = .29$ (ns), $\eta^2 = .01$ (corrective information); $F(1, 165) = .92, p = .34$ (ns), partial $\eta^2 = .01$ (interaction). None of the individual covariates were statistically significant.

The ANCOVA run on the news-media items showed no statistical significant for either labeling and corrective main effects or interaction effect, $F(1, 166) = .37, p = .55$ (ns), partial $\eta^2 = .
.00 (labeling); $F(1, 166) = .78, p = .38$ (ns), partial $\eta^2 = .01$ (corrective information); $F(1, 166) = .52, p = .47$ (ns), partial $\eta^2 = .00$ (interaction). Neither of the individual covariates were statistically significant. See Tables 5 and 6.

Table 5

*Community Mental Health Ideology Index*

<table>
<thead>
<tr>
<th></th>
<th>Corrective Information</th>
<th>No Corrective Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling</td>
<td>3.92</td>
<td>3.56</td>
<td>3.74</td>
</tr>
<tr>
<td>No Labeling</td>
<td>3.82</td>
<td>3.78</td>
<td>3.8</td>
</tr>
</tbody>
</table>

$F(1,164) = 0.1, p = .94$ (labeling); $F(1,164) = .46, p = .50$ (corrective); $F(1,164) = 1.19, p = .28$ (interaction)

Table 6

*Dependent Variable: Community Mental Health Ideology*

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling/ No Corrective</td>
<td>42</td>
<td>3.55</td>
<td>1.45</td>
</tr>
<tr>
<td>Labeling/ Corrective</td>
<td>45</td>
<td>3.93</td>
<td>1.50</td>
</tr>
<tr>
<td>Corrective/No Labeling</td>
<td>42</td>
<td>3.82</td>
<td>1.23</td>
</tr>
<tr>
<td>No Corrective/ No Labeling</td>
<td>43</td>
<td>3.78</td>
<td>1.45</td>
</tr>
</tbody>
</table>

Social Restrictiveness

The social restrictiveness index also showed that neither labeling and corrective main effects nor interaction effect were statistically significant, $F(1, 164) = .01, p = .94$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 164) = .85, p = .36$ (ns), partial $\eta^2 = .01$ (corrective information); $F(1, 164) = .054, p = .82$, partial $\eta^2 = .00$ (interaction). However, all four of the CAMI covariates, (“as soon as a person shows signs of mental disturbance, he should be hospitalized,” “more tax money should be spent on the mentally ill,” “the mentally ill should be isolated from the rest of the
community,” and “mental health facilities should be kept out of residential neighborhoods”) were statistically significant, $F(1, 164) = 14.54, p = .00$ (s), partial $\eta^2 = .081$ (“as soon as a person shows signs of mental disturbance, he should be hospitalized); $F(1, 164) = 12.79, p = .00$ (S), partial $\eta^2 = .10$ (“more tax money should be spend on the care and treatment of the mentally ill”); $F(1, 164) = 43.30, p = .00$ (s), partial $\eta^2 = .21$ (“the mentally ill should be isolated from the rest of the community”); $F(1, 164) = 5.45, p = .021$ (s), partial $\eta^2 = .032$ (“mental health facilities should be kept out of residential neighborhoods”).

Neither labeling and corrective information main effects nor interaction effect were statistically significant for the personal-experience items, $F(1, 165) = .15, p = .70$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 165) = 2.33, p = .13$ (ns), partial $\eta^2 = .01$ (corrective information); $F(1, 165) = .00, p = .95$ (ns), partial $\eta^2 = .00$ (interaction). One covariate, “a friend of the family has a severe mental illness,” was statistically significant, $F(1, 165) = 5.82, p = .02$ (s), partial $\eta^2 = .03$.

The ANCOVA run on the news-media items showed no statistical significant for either labeling and corrective main effects or interaction effect, $F(1, 166) = 1.87, p = .17$ (ns), partial $\eta^2 = .01$ (labeling); $F(1, 166) = 1.58, p = .21$ (ns), partial $\eta^2 = .01$ (corrective information); $F(1, 166) = .17, p = .68$ (ns), partial $\eta^2 = .00$ (interaction). Both of the news-media covariates, (“news coverage of mental illness and mental health issues is adequate” and “in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society”), were statistically significant, $F(1, 166) = 16.92, p = .00$ (s), partial $\eta^2 = .09$ (“news coverage of mental illness and mental health issues is adequate”); $F(1, 166) = 9.87, p = .00$ (s), partial $\eta^2 = .06$ (“in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society”). See Tables 7 and 8.
Table 7

**Social Restrictiveness Index**

<table>
<thead>
<tr>
<th></th>
<th>Corrective Information</th>
<th>No Corrective Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling</td>
<td>5.13</td>
<td>4.92</td>
<td>5.03</td>
</tr>
<tr>
<td>No Labeling</td>
<td>5.27</td>
<td>4.97</td>
<td>5.12</td>
</tr>
</tbody>
</table>

$F(1,164)=.01, p=.94$ (labeling); $F(1,164)=.85, p=.36$ (corrective); $F(1,164)=.054, p=.82$ (interaction)

Table 8

**Dependent Variable: Social Restrictiveness**

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling/ No Corrective</td>
<td>42</td>
<td>4.92</td>
<td>1.45</td>
</tr>
<tr>
<td>Labeling/ Corrective</td>
<td>45</td>
<td>5.12</td>
<td>1.28</td>
</tr>
<tr>
<td>Corrective/ No Labeling</td>
<td>42</td>
<td>5.27</td>
<td>1.01</td>
</tr>
<tr>
<td>No Corrective/ No Labeling</td>
<td>43</td>
<td>4.97</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Authoritarianism

On the authoritarianism index, neither labeling and corrective main effects nor interaction effect were statistically significant, $F(1, 164) = .43, p = .51$ (ns), partial $\eta^2 = .00$ (labeling); $F(1, 164) = .23, p = .63$ (ns), partial $\eta^2 = .00$ (corrective information); $F(1, 164) = 1.28, p = .26$ (ns), partial $\eta^2 = .01$ (interaction). Three of the four CAMI covariates were statistically significant, $F(1, 164) = 53.55, p = .00$ (s), partial $\eta^2 = .25$ (“as soon as a person shows signs of mental disturbance, he should be hospitalized”); $F(1, 164) = 11.57, p = .00$ (s), partial $\eta^2 = .066$ (“more tax money should be spent on the care and treatment of the mentally ill”); $F(1, 164) =$
4.49, \( p = .036 \) (s), partial \( \eta^2 = .027 \) (“the mentally ill should be isolated from the rest of the community”).

Neither labeling and corrective information main effects nor interaction effect were statistically significant for the personal-experience items, \( F(1, 165) = 1.38, \ p = .24 \) (ns), partial \( \eta^2 = .01 \) (labeling); \( F(1, 165) = .30, \ p = .59 \) (ns), partial \( \eta^2 = .00 \) (corrective information); \( F(1, 165) = 1.06, \ p = .30 \) (ns), partial \( \eta^2 = .01 \) (interaction). None of the individual covariates were statistically significant.

The ANCOVA run on the news-media items showed no statistical significant for either labeling and corrective main effects or interaction effect, \( F(1, 166) = .065, \ p = .80 \) (ns), partial \( \eta^2 = .00 \) (labeling); \( F(1, 166) = .04, \ p = .84 \) (ns), partial \( \eta^2 = .00 \) (corrective information); \( F(1, 166) = 2.32, \ p = .13 \) (ns), partial \( \eta^2 = .01 \). Both of the news-media covariates, (“news coverage of mental illness and mental health issues is adequate” and “in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society”), were statistically significant, \( F(1, 166) = 14.48, \ p = .00 \) (s), partial \( \eta^2 = .08 \) (“news coverage of mental illness and mental health issues is adequate”); \( F(1, 166) = 12.81, \ p = .001 \) (s), partial \( \eta^2 = .072 \) (“in news stories about mental illness, individuals with mental illnesses are represented as functioning members of society”). See Tables 9 and 10.

Table 9

<table>
<thead>
<tr>
<th>Authoritarianism Index</th>
<th>Corrective Information</th>
<th>No Corrective Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>5.42</td>
<td>5.56</td>
<td>5.49</td>
</tr>
<tr>
<td>No Labeling</td>
<td>5.46</td>
<td>5.19</td>
<td>5.32</td>
</tr>
</tbody>
</table>

\( F(1,164)= .43, \ p = .51 \) (labeling); \( F(1,164)= .23, \ p = .63 \) (corrective); \( F(1,164)= 1.28, \ p = .26 \) (interaction)
Table 10

*Dependent Variable: Authoritarianism*

<table>
<thead>
<tr>
<th>Treatment</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling/ No Corrective</td>
<td>42</td>
<td>5.56</td>
<td>1.89</td>
</tr>
<tr>
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<td>45</td>
<td>5.42</td>
<td>1.04</td>
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<tr>
<td>Corrective/ No Labeling</td>
<td>42</td>
<td>5.46</td>
<td>0.95</td>
</tr>
<tr>
<td>No Corrective/ No Labeling</td>
<td>43</td>
<td>5.19</td>
<td>1.12</td>
</tr>
</tbody>
</table>
DISCUSSION

Overall, the results from this study did not support the two hypotheses that labeling terms and corrective information would impact reader’s attitudes toward individuals with mental illnesses. No significant differences were found between the pre-test Community Attitudes toward Mental Illness questions and the post-test Community Attitudes toward Mental Illness questions, regardless of which version of the article was read. However, the manipulation check did show that the addition or elimination of labeling terms and corrective information did influence how the reader perceived the article about mental illness itself and whether they feel the article was medically informative or not.

The nonsignificant main effects for labeling and corrective information, as well as the nonsignificant interaction effect may be due to several factors. First, while the manipulation check questions showed that the adjustments to the level of labeling terms and corrective information in the article was recognized by the participants, it is possible that the manipulations weren’t strong enough to affect their opinions on individuals with mental illnesses. For example, if the labeling terms had been greater in number and more extreme in nature, they may have had more of an impact. Tewksbury et al. (2000) also found that the manipulation of a news article can “have a more substantial impact on interpretations than on attitudes” (p. 820). However, in trying to keep the articles, even the modified ones, in the realm of journalism, it wasn’t realistic to use the phrase, “psycho, crazy killer” 30 times in a 250 word article because that isn’t an accurate representation of a news article. The same argument can be made for why the corrective information didn’t have more of an impact on readers’ opinions. Again, to have 70 % of the article devoted to medical information about mental
illnesses and 30 percent about the incident, but that would be more representative of a journal article, not a newspaper article. The purpose of this research is to help find better ways for print journalists to report on mental-health issues. Therefore, it was not an option to manipulate the articles to the point where they were no longer recognizable as journalism. A major argument against the use of survey experiments in research is their lack of realism, which made it that much more important to keep the articles as close to what would be found in a mainstream, print newspaper as possible (Barabas & Jerit, 2010, p. 226). Kinder and Palfrey (1993) also cautioned against validity of powerful findings in survey-experiment research as they may be “the product of an unrealistically powerful manipulation, one that rarely occurs in nature settings” (p. 27).

The way the manipulation check questions were worded may have also influenced the participants’ responses. Rather than asking participants if the article “painted a negative picture of individuals with schizophrenia,” it may have been more effective to ask whether they felt the article reinforced stereotypes about individuals with schizophrenia. The manipulations to the article may not have been strong enough to necessarily paint a negative picture, but they may have been strong enough to be considered stereotypical. The wording of the CAMI questions may have also had an impact on participant responses. These questions were worded exactly as they were in the original CAMI, which was developed in 1981. The 33-year gap between the development of the original study and this study may mean that original wording may not be as familiar to the participants in this study. For example, many of the questions use the phrase “the mentally ill” rather than more neutral wording, such as “an individual with a mental illness.” Another example would be the CAMI questions that refer to “mental health facilities.”
It could be that this description is too general or that it carries a negative connotation and a
description, such as “place intended to help individuals with mental illnesses,” would have
yielded different responses from the participants.

Another reason the manipulations of the articles may not have had the intended effect
could be because the participants may already have been desensitized to sensational media
and therefore, an article with a large number of labeling terms may not have registered with
them as painting a negative picture. As noted in the literature review, individuals with mental
illnesses are often depicted as dangerous and violent (Wahl, 1992, p. 346). In addition, media
outlets sometimes resort to sensationalism to separate themselves from the barrage of other
outlets all competing for audience attention. Grabe et al. (2001) explained sensationalism as
news stories that are supposed to provoke emotional reactions, because they are dramatic, or
appeal to reader’s curiosity (p. 637). These findings could result in labeling terms not having as
strong of an impact as they might if audiences weren’t desensitized to mental illness
stereotypes in the media.

The sample, made up entirely of college students, used may have also influenced the
results of this particular experiment. The use of undergraduate college students as research
participants is nothing new. Wintre et al. (2001) found that of 1,719 journal articles examined,
68.31% used exclusively undergraduates as research subjects (p. 26). One concern with using
this population as a participant pool stems from the generalizability of the results to the
general, non-student population. College undergraduates are typically more representative of
the upper-socioeconomic class, have higher cognitive, math, reading, and verbal skills, and are
more likely to comply with authority figures (Wintre et al., 2001, p. 218). It is therefore unlikely
that research results can be generalized to general adult populations, or even to non-student adolescents. In addition to not demographically representing the general population, college students are also less likely to have a “formulated sense of self,” more likely to have their “identity in flux” (Sears, 1986, p. 521), and more likely to be going through a transitional period (Wintre et al., 2001, p. 218). In the same vein, students are in an academic environment and may base their conclusions on what they have learned from others rather than on personal experiences (Murphy & Gilligan, 1980, p. 84). This is especially relevant to the current study because several of the questions in the pre-test were based on research that has shown personal experience with individuals with mental illnesses is tied to empathy for those individuals. These findings are also relevant to this study because they explain why results of research using college students, specifically younger, first- and second-year students, may lack external validity. Many (70.4%) of the participants in this study identified themselves as either freshman or sophomores, and 76.5% identified themselves as being between 18 and 21 years old.

Another characteristic of the sample that may explain the results is its size (N=213). Research has shown that the larger the sample size, the more sample characteristics become representative of the population and the likelihood of Type II errors decreases. Due to the small sample size of this study, it is difficult to conclude that the probability of the observed differences are due to chance has been minimized. Research has shown the “major danger in a trial of insufficient sample size is that it will produce not just a null result but an uninformative null finding” (Hennekens & Buring, 2001, p. 571). This means that in this study, it is unclear
whether there were truly no difference between the treatment groups and the control group or whether the sample was too small to detect the effect.
CONCLUSION

This study aimed to find a better way for print journalists to report on mental illnesses by manipulating the level of mental illness labeling terms and corrective information in a news article. While the manipulations didn’t impact the participant’s opinions of individuals with mental illnesses in the way the hypotheses stated they would, this study did show that reader’s will notice when an article has labeling terms or corrective information. This could mean that while the manipulated articles weren’t enough to influence the participant’s short-term opinions on individuals with mental illnesses, their exposure to articles with labeling terms and the absence of corrective information could impact the way these individuals view those with mental illnesses in the long term. This should be enough to further this type of research and to make journalist’s cautious when they are reporting on mental health issues.
AVENUES FOR FURTHER RESEARCH

By examining the potential reasons this study didn’t support the hypotheses, several avenues for future research have been found.

In looking at the flaws in this study, one solution for future researchers could be to make a study of this type more of a mixed method, rather than strictly a quantitative study. By incorporating qualitative methods such as focus groups or in-depth interviews as a follow-up to the survey experiment, researchers could ask why the manipulations did or did not impact participant opinions. In taking this route, it would be necessary to address the issue of including sensitive questions in the pre-test and the anonymity of the participants. However, because this study showed that personal experience was not statistically significant, it could be that future studies could eliminate the personal experience questions, lessening the need for participant anonymity. This type of research could go beyond the numbers found here and explore why the target audience interprets mental health issues in the news media the way that they do.

Another avenue would be to still have use a survey experiment, but to pretest the manipulated variables. This could be done on a section of the participant pool that will be used for the main experiment, as long as those particular participants were kept out of the main experiment. In this case of this research, it may have been helpful to test the strength of the manipulations first to see what potential participants consider labeling and corrective information. Discussions following the pretest could have also helped to further develop the manipulations based on their feedback. This could also include testing the wording of some of the questions to find which ones would be most effective.
To address the issue of ensuring the participants read the entire article, it may be helpful to still have the questionnaires be self-administered, to avoid the social-desirability effect, but have a research assistant read the article out loud to the participants as they follow along with their own copies. In this case, one would need to consider ensuring that the reader maintains the same voice inflection and mannerisms when reading each story.

Finally, it may be helpful, for reasons listed in the discussion, to expand the participant pool outside first- and second-year undergraduate college students.
APPENDIX A

PRE-TEST QUESTIONNAIRE
Questionnaire:

1) As soon as a person shows signs of mental disturbance, he should be hospitalized.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

2) More tax money should be spent on the care and treatment of the mentally ill.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

3) The mentally ill should be isolated from the rest of the community.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
4) Mental health facilities should be kept out of residential neighborhoods.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

5) I have observed persons with a severe mental illness on a frequent basis.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

6) I have a relative who has a severe mental illness.
   ___ 1- Strongly agree
7) I have worked with a person who had a severe mental illness at my place of employment.

___ 1- Strongly agree
___ 2- Moderately agree
___ 3- Slightly agree
___ 4- Neither agree nor disagree
___ 5- Slightly disagree
___ 6- Moderately disagree
___ 7- Strongly disagree

8) A friend of the family has a severe mental illness.

___ 1- Strongly agree
___ 2- Moderately agree
___ 3- Slightly agree
___ 4- Neither agree nor disagree
___ 5- Slightly disagree
___ 6- Moderately disagree
___ 7- Strongly disagree
9) Where do you get your information about mental illnesses. Select all that apply.

____ Nonfiction media (newspapers, broadcast news, etc.)
____ Fiction media (movies, television shows, etc.)
____ Educational tools (a class, publications of a mental health organization, etc.)
____ Personal interactions (a friend, family member, etc.)
____ Social media (Facebook, Twitter, etc.)
____ Other. Please explain. ______________________________________________________

10) News coverage of mental illness and mental health issues is adequate.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
____ 5- Slightly disagree
____ 6- Moderately disagree
____ 7- Strongly disagree

11) In news stories about mental illness, individuals with mental illnesses are represented as functioning members of society.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
____ 5- Slightly disagree
6- Moderately disagree
7- Strongly disagree

Please provide the following information about yourself:

1) What is your class standing?
   _______ Freshman
   _______ Sophomore
   _______ Junior
   _______ Senior
   _______ Master’s
   _______ Ph.D.

2) Gender
   _______ Male
   _______ Female

3) Age
   _______ 18-21
   _______ 22-25
   _______ 26-29
   _______ 30-32
   _______ 33-36
   _______ 37 or older
4) Race

_____ African-American or Black

_____ Asian

_____ Caucasian or White

_____ Hispanic or Latino/a

_____ Native American or Pacific Islander

_____ Other
APPENDIX B

POST-TEST QUESTIONNAIRE
1) This story provides enough medical information about schizophrenia.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

2) This story paints a negative picture of individuals with schizophrenia.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

3) More tax money should be spent on the care and treatment of the mentally ill.
   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
4) Mental health facilities should be kept out of residential neighborhoods.

_____ 1- Strongly agree
_____ 2- Moderately agree
_____ 3- Slightly agree
_____ 4- Neither agree nor disagree
_____ 5- Slightly disagree
_____ 6- Moderately disagree
_____ 7- Strongly disagree

5) The mentally ill should be isolated from the rest of the community.

_____ 1- Strongly agree
_____ 2- Moderately agree
_____ 3- Slightly agree
_____ 4- Neither agree nor disagree
_____ 5- Slightly disagree
_____ 6- Moderately disagree
_____ 7- Strongly disagree

6) Local residents have good reason to resist the location of mental health services in their neighborhood.

_____ 1- Strongly agree
7) One of the main causes of mental illness is a lack of self-discipline and will power.

___ 1- Strongly agree
___ 2- Moderately agree
___ 3- Slightly agree
___ 4- Neither agree nor disagree
___ 5- Slightly disagree
___ 6- Moderately disagree
___ 7- Strongly disagree

8) The mentally ill don't deserve our sympathy.

___ 1- Strongly agree
___ 2- Moderately agree
___ 3- Slightly agree
___ 4- Neither agree nor disagree
___ 5- Slightly disagree
___ 6- Moderately disagree
___ 7- Strongly disagree
9) A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
____ 5- Slightly disagree
____ 6- Moderately disagree
____ 7- Strongly disagree

10) We need to adopt a far more tolerant attitude toward the mentally ill in our society.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
____ 5- Slightly disagree
____ 6- Moderately disagree
____ 7- Strongly disagree

11) The mentally ill should not be given any responsibility.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
12) Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community.

13) I would not want to live next door to someone who has been mentally ill.

14) The best way to handle the mentally ill is to keep them behind locked doors.
15) Increased spending on mental health services is a waste of tax dollars.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
____ 5- Slightly disagree
____ 6- Moderately disagree
____ 7- Strongly disagree

16) Locating mental health services in residential neighborhoods does not endanger local residents.

____ 1- Strongly agree
____ 2- Moderately agree
____ 3- Slightly agree
____ 4- Neither agree nor disagree
____ 5- Slightly disagree
____ 6- Moderately disagree
17) There is something about the mentally ill that makes it easy to tell them from normal people.

   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

18) As soon as a person shows signs of mental disturbance, he should be hospitalized.

   ___ 1- Strongly agree
   ___ 2- Moderately agree
   ___ 3- Slightly agree
   ___ 4- Neither agree nor disagree
   ___ 5- Slightly disagree
   ___ 6- Moderately disagree
   ___ 7- Strongly disagree

Thank you very much for your participation!
APPENDIX C

VERSION A OF THE ARTICLE: NO LABELING TERMS AND NO CORRECTIVE INFORMATION
Bethlehem man admits killing mother, beating father

Michael B. Lindgren committed the crimes after going off his medication for his mental illness.

August 23, 2013 | By Nicole Radzievich and Riley Yates, Of The Morning Call

A Bethlehem man accused of attacking his parents, pleaded guilty but mentally ill Friday.

Michael B. Lindgren gave mostly one-word answers and acknowledged the crimes happened after he went off medications that treated his mental illness.

"No, I don't want to, but I think I'm backed in a corner here," Lindgren told the judge when asked whether he wanted to plead guilty.

The plea means that Lindgren, 52, will serve his sentence in a state prison with mental health facilities. He could face up to 60 years in prison for the crimes when Northampton County Judge Michael Koury sentences him Oct. 25.

Court records say police went inside and found his 77-year-old mother, Shirley Lindgren and his father, John Ralph Lindgren, severely beaten. Shirley Lindgren was pronounced dead after being taken to a hospital. John Lindgren, a retired philosophy professor at Lehigh University, was treated for fractures of his ribs and eye sockets, a cut on his ear and bleeding on the brain.

"I don't know why I did it. I have nothing against them," Lindgren said to Fulmer.

Michael Lindgren has a history of substance abuse problems that began at least as early as the 1990s, court records show.

Frank M. Dattilio Ph.D., a clinical and forensic psychologist who testified on behalf of the defense, said Lindgren has a mental illness. The lifelong disorder, which became more pronounced while he attended Penn State University, was compounded by him going off his medication two weeks before the murder, Dattilio testified.

Dattilio said Lindgren wanted to get help and went to his parents' home that day to get in touch with his sister-in-law, a social worker who had helped him in the past.

"That's when he just snapped," Dattilio said, adding that Lindgren has no clear understanding as to why the assault happened.

Dattilio said Lindgren missed several doctor’s appointments and his prescription ran out. He noted that medication for Lindgren’s type of mental illness periodically needs to be adjusted over the patient's life.
"I don't believe he would have done this had he been properly medicated at the time," Dattilio said.

But, Dattilio added, Lindgren did not meet the high legal standard of insanity, which would have allowed him to avoid criminal responsibility for the deaths. In many cases, defendants found not guilty by reason of insanity are sent to a secure mental hospital for indefinite amounts of time and their cases are reviewed periodically.

While he struggled with mental illness since middle school, these charges are the first time Lindgren had been in legal trouble except for a few parking tickets. He served in the Army and was honorably discharged before attending Penn State.

Lindgren faces up to 40 years for third-degree murder charge and up to 20 years for aggravated assault.
APPENDIX D

VERSION B OF THE ARTICLE: LABELING TERMS BUT NO CORRECTIVE INFORMATION. THE ADDED LABELING TERMS HAVE BEEN ITALICIZED
Schizophrenic man admits killing mother, beating father

Michael B. Lindgren committed the crimes because of his mental illness.

August 23, 2013 | By Nicole Radzievich and Riley Yates, Of The Morning Call

A schizophrenic Bethlehem man accused of brutally attacking his parents, killing his mother, pleaded guilty Friday to third-degree murder and aggravated assault.

Standing in stark contrast to his first court appearance, when he wore a hospital gown and laughed several times, a disturbed Michael B. Lindgren gave mostly one-word answers as he admitted viciously murdering his mother and severely beating his father. He acknowledged the attacks happened after he went off medications that treated his mental illness.

"No, I don't want to, but I think I'm backed in a corner here," Lindgren told the judge when asked whether he wanted to plead guilty.

The plea means that Lindgren, 52, will serve his sentence in a state prison with mental health facilities. He could face up to 60 years in prison for the crimes when Northampton County Judge Michael Koury sentences him Oct. 25.

Police found a bloody Lindgren on the front lawn of his parents' East Wall Street home Aug. 21, 2012, mumbling to himself that he had killed them.

Authorities say that it seemed as though Lindgren had an unpredictable, split personality.

Court records say police went inside and found his 77-year-old mother, Shirley Lindgren, in a pool of blood and his father, John Ralph Lindgren, severely beaten. Shirley Lindgren was pronounced dead after being taken to a hospital. John Lindgren, a retired philosophy professor at Lehigh University, was treated for fractures of his ribs and eye sockets, a cut on his ear and bleeding on the brain.

"I just opened the door and walked in and went ballistic," Lindgren told city police Detective Jason Fulmer, who interviewed him at St. Luke's University Hospital in Fountain Hill after the beating.

"I don't know why I did it. I have nothing against them," Lindgren said to Fulmer, later adding: "Please help me. I'm going insane."

Michael Lindgren, described as a madman, has a history of severe mental health and substance abuse problems that began at least as early as the 1990s, court records show.

Koury repeatedly asked Lindgren during the more than an hour-long guilty plea whether he understood that the plea meant he killed his mother with malice and that Lindgren decided to
make the plea voluntarily. The judge repeated the questions several times after Lindgren said he felt he was backed into a corner.

Frank M. Dattilio Ph.D., a clinical and forensic psychologist who testified on behalf of the defense, said schizophrenic Lingren has "one of the worst mental illnesses" — one that led to psychotic delusions and mood swings. The schizophrenia, which became more pronounced while he attended Penn State University, was compounded by him going off his medication two weeks before the murder, Dattilio testified.

Dattilio said Lindgren wanted to get help and went to his parents' home that day to get in touch with his sister-in-law, a social worker who had helped him get back on his medication when he stopped taking it in the past.

"That's when he just snapped," Dattilio said, adding that Lindgren has no clear understanding as to why the violent assault happened.

Dattilio said Lindgren skipped several doctor's appointments and his prescription ran out. He noted that medication for Lindgren's type of mental illness periodically needs to be adjusted over the sufferer's life.

"I don't believe he would have done this had he been properly medicated at the time," Dattilio said.

But, Dattilio added, Lindgren did not meet the high legal standard of insanity, which would have allowed him to avoid criminal responsibility for the deaths. In many cases, defendants found not guilty by reason of insanity are sent to a secure mental hospital for indefinite amounts of time and their cases are reviewed periodically.

While he struggled with mental illness since middle school, Lindgren said the homicide charge was the first time he had been in legal trouble except for a few parking tickets. He served in the Army and was honorably discharged before attending Penn State.

He graduated with a bachelor's degree in business logistics but said he "couldn't keep" a job for any length of time. He said he never married or had children.

Lindgren faces up to 40 years for third-degree murder charge and up to 20 years for aggravated assault.
APPENDIX E

VERSION C OF THE ARTICLE: LABELING TERMS AND CORRECTIVE INFORMATION. THE ADDED LABELING TERMS HAVE BEEN ITALICIZED AND THE ADDED CORRECTIVE INFORMATION HAS BEEN UNDERLINED
Schizophrenic man admits killing mother, beating father

Michael B. Lindgren committed the crimes because of his mental illness.

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According to the National Institutes of Mental Health, people with schizophrenia are not usually violent but substance abuse may increase the chance of them becoming violent. For example, certain drugs such as cocaine and other stimulants have been shown to exacerbate the symptoms and those who abuse drugs are less likely to follow their treatment plan. In general, individuals with schizophrenia are no more likely to commit violent crimes than the rest of the population.

Dattilio said Lindgren wanted to get help and went to his parents' home that day to get in touch with his sister-in-law, a social worker who had helped him get back on his medication when he stopped taking it in the past.

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Dattilio said Lindgren skipped several doctor's appointments and his prescription ran out. He noted that medication for Lindgren's type of mental illness periodically needs to be adjusted over the sufferer's life.

Experts believe it is the complexity of this disease that can help explain commonly held misconceptions. For example, schizophrenia is not that same as split personality or multiple-personality disorder. In fact, the most common symptoms include delusions, trouble with thinking and concentration and lack of motivation. Schizophrenia is one of the most misunderstood and stigmatized mental illnesses.

Researchers also believe that biological factors play the largest role in the onset and duration of schizophrenia. Specifically, it is believed that interactions between genes and the environment are necessary for schizophrenia to develop and that many environmental factors may be involved, such as exposure to viruses or malnutrition before birth and problems during delivery.

"I don't believe he would have done this had he been properly medicated at the time," Dattilio said.

Several antipsychotic medications have proven successful in managing the symptoms of schizophrenia and enabling individuals with the disorder live normal, productive lives. Psychosocial treatments are also commonly used to help individuals with schizophrenia deal with everyday challenges such as difficulty with communication, self-care and work.
But, Dattilio added, Lindgren did not meet the high legal standard of insanity, which would have allowed him to avoid criminal responsibility for the deaths. In many cases, defendants found not guilty by reason of insanity are sent to a secure mental hospital for indefinite amounts of time and their cases are reviewed periodically.

While he struggled with mental illness since middle school, Lindgren said the homicide charge was the first time he had been in legal trouble except for a few parking tickets. He served in the Army and was honorably discharged before attending Penn State.

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APPENDIX F

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"No, I don't want to, but I think I'm backed in a corner here," Lindgren told the judge when asked whether he wanted to plead guilty.

The plea means that Lindgren, 52, will serve his sentence in a state prison with mental health facilities. He could face up to 60 years in prison for the crimes when Northampton County Judge Michael Koury sentences him Oct. 25.

Court records say police went inside and found his 77-year-old mother, Shirley Lindgren and his father, John Ralph Lindgren, severely beaten. Shirley Lindgren was pronounced dead after being taken to a hospital. John Lindgren, a retired philosophy professor at Lehigh University, was treated for fractures of his ribs and eye sockets, a cut on his ear and bleeding on the brain.

"I don't know why I did it. I have nothing against them," Lindgren said to Fulmer.

Michael Lindgren has a history of substance abuse problems that began at least as early as the 1990s, court records show.

Frank M. Dattilio Ph.D., a clinical and forensic psychologist who testified on behalf of the defense, said Lindgren has a mental illness. The lifelong disorder, which became more pronounced while he attended Penn State University, was compounded by him going off his medication two weeks before the murder, Dattilio testified.

According to the National Institutes of Mental Health, people with schizophrenia are not usually violent but substance abuse may increase the chance of them becoming violent. For example, certain drugs such as cocaine and other stimulants have been shown to exacerbate the symptoms and those who abuse drugs are less likely to follow their treatment plan. In general, individuals with schizophrenia are no more likely to commit violent crimes than the rest of the population.

Dattilio said Lindgren wanted to get help and went to his parents' home that day to get in touch with his sister-in-law, a social worker who had helped him in the past.
"That's when he just snapped," Dattilio said, adding that Lindgren has no clear understanding as to why the assault happened.

Dattilio said Lindgren missed several doctor’s appointments and his prescription ran out. He noted that medication for Lindgren’s type of mental illness periodically needs to be adjusted over the patient’s life.

Experts believe it is the complexity of this disease that can help explain commonly held misconceptions. For example, schizophrenia is not that same as split personality or multiple-personality disorder. In fact, the most common symptoms include delusions, trouble with thinking and concentration and lack of motivation. Schizophrenia is one of the most misunderstood and stigmatized mental illnesses.

Researchers also believe that biological factors play the largest role in the onset and duration of schizophrenia. Specifically, it is believed that interactions between genes and the environment are necessary for schizophrenia to develop and that many environmental factors may be involved, such as exposure to viruses or malnutrition before birth and problems during delivery.

"I don’t believe he would have done this had he been properly medicated at the time," Dattilio said.

Several antipsychotic medications have proven successful in managing the symptoms of schizophrenia and enabling individuals with the disorder live normal, productive lives. Psychosocial treatments are also commonly used to help individuals with schizophrenia deal with everyday challenges such as difficulty with communication, self-care and work.

But, Dattilio added, Lindgren did not meet the high legal standard of insanity, which would have allowed him to avoid criminal responsibility for the deaths. In many cases, defendants found not guilty by reason of insanity are sent to a secure mental hospital for indefinite amounts of time and their cases are reviewed periodically.

While he struggled with mental illness since middle school, these charges are the first time Lindgren had been in legal trouble except for a few parking tickets. He served in the Army and was honorably discharged before attending Penn State.

Lindgren faces up to 40 years for third-degree murder charge and up to 20 years for aggravated assault.
APPENDIX G

VERSION E OF THE ARTICLE: CONTROL ARTICLE
Bottle released by Mass. scientist in 1956 found

By DENISE LAVOIE

BOSTON (AP) — It was April 1956, and the No. 1 song was Elvis Presley's "Heartbreak Hotel." At the Woods Hole Oceanographic Institution on Cape Cod, scientist Dean Bumpus was busy releasing glass bottles in a large stretch of the Atlantic Ocean.

Nearly 58 years later, a biologist studying grey seals off Nova Scotia found one of the bottles in a pile of debris on a beach, 300 miles from where it was released.

"It was almost like finding treasure in a way," Warren Joyce said Friday.

The drift bottle was among thousands dumped in the Atlantic Ocean between 1956 and 1972 as part of Bumpus' study of surface and bottom currents. About 10 percent of the 300,000 bottles have been found over the years.

Joyce found the bottle Jan. 20 on Sable Island, about 185 miles southeast of Halifax.

He contacted scientists at Woods Hole and dutifully gave them the time and place information Bumpus had asked for in a postcard inside the bottle. His reward will be exactly what Bumpus promised in 1956 to anyone who returned a bottle: a 50-cent piece.

"I didn't want the reward, but they said they are sending it to me anyway," Joyce said, chuckling.

Joyce said the bottle had been sand-blasted over about 75 percent of its surface. He could still read the words, "Break This Bottle," so he pried off the rubber stopper. Inside, there was a note from Bumpus explaining that the bottle was among many being released to study the ocean.

In those days, there was no other way to study currents, said Steven Jayne, a senior scientist at Woods Hole.

"We didn't have satellites to track currents like we do now. So the only thing you could do was to see where something started and where it ended up," he said. "That was a pretty good approach."

Using the number on the postcard, Woods Hole workers tracked the bottle found by Joyce to a group of 12 released not far off Nova Scotia on April 26, 1956.

Woods Hole archivist David Sherman said three other bottles from the same batch were found within a few months after they were dropped in the ocean: two in Nova Scotia and a third in Eastham, on Cape Cod. There's no way to tell for sure when the bottle Joyce found washed up
on Sable Island, but judging by its sand---worn condition, it may have been there for decades, Sherman said.

Bumpus needed thousands upon thousands of empty bottles for his well---intentioned littering of the seas. In September 1959, he solicited colleagues' help, writing in a memo: "All hands are respectfully requested (until further notice) to bring their dead soldiers to the lab and deposit them in the box just inside the gate. Whiskey, rum, beer, wine or champagne bottles will be used to make drift bottles. Any clean bottles — 8 oz. to one quart in size will be gratefully received. Bottoms up!"

Bumpus died in 2002. About 270,000 of his bottles remain unaccounted for, Sherman said.

"Some of them were probably damaged, some were probably kept as keepsakes, and the rest, who knows? We may find some more in the future," he said.

"I think everybody loves to find a message in a bottle."
REFERENCES


92


Manderscheid R., Ryff C., Freeman E., McKnight-Eily L., Dhingra S., & Strine T. (2010). Evolving definitions of mental illness and wellness. *Preventing Chronic Disease, 7*(1), A19


