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Media and the Criminalization of Mental Illness: The Impact of Stigma Reduction Videos

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Media and the Criminalization of Mental Illness:

The Impact of Stigma Reduction Videos

A thesis presented by Samantha Wilcox

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Abstract

This research investigated the effectiveness of different stigma reduction campaigns following exposure to a newscast that depicted as criminal a mentally ill defendant in a mass shooting case. Participants included 183 individuals, 94 women and 89 men, who represented all major regions of the United States. Participants were recruited through Amazon Mechanical Turk, the online crowdsourcing marketplace. The sample was predominantly White and ages of participants ranged from 18 to 69. The study used a 2 (Newscast) x 3 (Intervention) between subjects factorial design to investigate the hypothesis that participants exposed to either cognitive or emotional anti-stigma campaign would have less punitive scores on the Criminal Responsibility, Mental Illness Beliefs, and Attitudes Toward Schizophrenia measures, than would participants in conditions exposed to a healthy eating habits video. Additionally, it was anticipated that punitive attitudes would be higher for participants exposed to footage of movie theater shooter, James Holmes, than would those who were not. The results of the Factorial MANOVA were non-significant, however there was a significant main effect for type of intervention on the Mental Illness Beliefs scale, $F(1, 183) = 4.22, p = .016$. A post-hoc Tukey test indicated a significant difference between the cognitive anti-stigma video and the healthy eating habits video, $p = .015$.

Keywords: mental illness, media, schizophrenia, punitive attitude, criminalization

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Media and the Criminalization of Mental Illness:

The Impact of Stigma Reduction Videos

The national conversation that focuses on mental illness following mass shootings fails to capture the true problem in society; the stigma surrounding mental illness plays a role in these events. Such stigma discourages mentally ill individuals from seeking treatment, and inadequate healthcare often fails those who do seek treatment. Stigma arises from the media's quickness to focus on the mental status of criminal offenders, particularly following heinous crimes such as the Sandy Hook Shooting or the Colorado Movie Theater Massacre. While mental status may play a role in these tragic occurrences, the media neglects to provide accurate information regarding mental illness, instead collectively portraying the individuals involved as criminal, dangerous, unpredictable, and violent. Recent efforts to decrease the stigma surrounding mental illness include media campaigns that address the erroneous and damaging stereotypes associated with mental illness. The effectiveness of these stigma reduction campaigns may be mitigated by how the media portray mental illness following particularly violent crimes, therefore raising questions about the extent to which stigma can be reduced if the media continues to sensationalize and criminalize mental illness.

Stigma

In contemporary culture stigma is ubiquitous; it permeates all aspects of society, from racial and ethnic relations, to gender inequality, to class divisions. The effects of stigma are felt at a universal level across the globe. Despite its prevalence, agreement about how to define stigma is missing. Overlap exists in the definition of stigma, as it calls into question nuances between labeling, stereotyping, and discrimination. In essence, stigma amalgamates these

separate phenomena into a singular entity resulting from the inherent relationships between each. In other words, stigma involves labeling, which in turn results in stereotyping and ultimately, discrimination. In 1963, Goffman provided the most comprehensive general description of stigma, “an attribute that is deeply discrediting’ and reduces the bearer from a whole and usual person to a tainted, discounted one” (Link & Phelan, 2014, p. 67). Link and Phelan further conceptualize stigma by addressing it on three levels: human, cultural, and individual:

Stigmatization is entirely contingent on access to social, economic, and political power that allows the identification of differentness, the construction of stereotypes, the separation of labeled persons into distinct categories and the full execution of disapproval, rejection, exclusion, and discrimination. (2014, p. 79)

Stigma therefore affects the most marginalized and oppressed members of society, which over time came to include individuals with mental illness. Exploitation and domination, commonly seen as causes for stigmatization, are generally not seen with mental illness. Instead, the stigma of mental illness arises from the reinforcement of social norms.

The levels of stigmatization moving inward from the human race, to culture, to the individual give way to three additional classifications of stigma, public, to personal, to self-stigma. Public stigma or the degree to which the public holds negative views and discriminates against a specific group, produces prejudice, aids in the perpetuation of stereotypes, and leads to the desire to distance oneself from the targeted group (Corrigan, 2004; Pedersen & Paves, 2014). Public stigma not only leads to distance between individuals with mental illness and individuals without mental illness, but also discourages treatment-seeking behavior. One-fifth of college students with unmet mental health needs indicate that worrying what others would think of them

acts as a major barrier to seeking care (Pedersen & Paves, 2014). In contrast to public stigma, which is an individual's belief about how others view or treat that person, personal stigma is how one views and treats others. Public stigma involves looking at perceptions from the outside in, whereas personal stigma evaluates the stigma from the inside out. One way to test these perceptions is to compare perceived public stigma (i.e., how one thinks others would view and treat that person) with personal stigma (i.e., how one actually would view and treat others). Self-stigma is the degree to which an individual applies damaging stereotypes about mental illness to him or herself. Self-stigma leads to low self-esteem and low self-efficacy, or one's confidence in one's abilities to perform in any given situation (Corrigan, Larson, & Rusch, 2009)

The stigma associated with mental illness was first addressed in the 1950s, at a laboratory for Social and Environmental Studies at the National Institute of Mental Health. In the 1960s, Sociologist Thomas Scheff expanded upon the work of the NIMH through the development of his labeling theory, which allowed society to categorize deviant behaviors. Scheff argued that labeling resulted equally from social factors alongside symptoms of mental illness, suggesting that the social construction of normalcy versus deviance contributes greatly to how mental illness is perceived and positioned in society. Link and Phelan state, "Stigma was a central process in this theory as it 'punished' people who sought to shed the identity of mental illness and return to normal social roles, interactions, and identities" (2014, p. 77). This quote demonstrates how the stigmatization of mental illness eventually transitioned to criminalization. Repudiated by society, individuals with mental illness became implicitly and explicitly associated with criminality through the process of stigmatization that associated unpredictability, violence, and danger with mental illness (Arboleda-Florez & Sartorius, 2008).

The association of criminality to mental illness has led to a large influx of individuals with mental illness into the United States prison system. Ostracized and criminalized by society, and lacking access to the care and treatment resources they required to combat their disorders, the number of inmates who meet criteria for various psychological disorders and dysfunctions has substantially grown in the prison system. Additionally, the association of criminality and violence with mental illness deters individuals from seeking help in fear of alienating themselves from family, friends, coworkers, and society in general (Stuart, 2006). In 1955, the number of people in public psychiatric hospitals peaked at 560,000. The number of individuals with mental illness in prison had not yet been recorded, although it is very likely that many inmates did meet the criteria for mental health problems, potentially contributing to why they were incarcerated (Pan, 2013). In the early 1960s, the view of hospitalization changed, with rising concerns over the civil rights of institutionalized individuals. In 1963, President Kennedy signed the Community Mental Health Act into law, which sought to provide funding for the construction of community based preventative care and treatment facilities. Despite this initiative, the economic crisis and the Vietnam War prevented the program from receiving adequate funding.

The passage of Medicaid in 1965 furthered the deinstitutionalization movement. Rather than providing funds for specific institutions to treat the mentally ill, Medicaid incentivized states to move patients out of mental hospitals and into nursing homes and general hospitals, which were unable to provide specialized mental health treatment. In 1980, President Carter signed the Mental Health Systems Act to improve community health services. In 1981, President Reagan's Omnibus Budget Reconciliation Act repealed Carter's legislation, effectively ending the government's role in providing services to individuals with mental illness (Pan, 2013).

Because of stigmatization, criminalization, and the failure of the deinstitutionalization movement, prisons have de facto become the new psychiatric hospitals. Between the 1980s and the present-day, numerous studies have found increases in both the percentage of individuals with mental illness who are homeless, as well as in the prison population. In 1990, a study found that 1 in 15 prisoners at Cook County Jail in Chicago had some form of mental illness; more recently, a conservative estimate is 1 in 3 (Ford, 2015). In 2004, a study revealed that there are more than three times as many people with serious mental illness in jails and in prisons than in hospitals (Pan, 2013). Today, more than 1.3 mentally ill individuals are incarcerated in comparison to only 70,000 patients who are served by psychiatric institutions (Torrey, Kennard, Eslinger, Lamb, & Pavle, 2010). The current healthcare system in the United States fails to provide adequate care for mentally ill individuals (Torrey et al., 2010), which contributes to these high rates of incarceration.

The increasing number of mentally ill individuals in prison will need to be addressed through policymaking. Currently, the large numbers of mentally ill individuals who are incarcerated reinforces the stereotype that people with mental illness are violent, despite the typically low-level nature of their offenses. Generally, the policies and practices that focus on mental illness at any given point in time depend on conceptions associated with the disorders. In order to encourage future government spending, as well as public acceptance of mental health problems, misconceptions, such as this association of violence with mental illness, must be addressed. In the United States, mental illness is often perceived as a less legitimate disease in comparison to physical ailments such as cancer (Corrigan & Watson, 2004). Recent campaigns to end discrimination have focused on improving the public's understanding of the

neurobiological causes of mental illness in order to decrease stigma and increase treatment-seeking (Easter, 2012; EDC, 2008).

Despite these stigma reduction efforts, a national study found “that there were widespread increases in public acceptance of neurobiological theories about the causes of mental illness and significant changes in public support for treatment but no reduction in social distance or perceptions of dangerousness to self or others” (Link & Phelan, 2014, p. 86). The misconceptions that link danger and violence with mental illness are perpetuated by the media, and strengthen the association of mental illness with criminal behavior (Wilcox, 2014). Therefore, working to decrease stigma by reshaping how the media portrays mental illness may have several outcomes, including: an overall decrease in stigma, increased focus on the more significant causes of violence in society, and greater acceptance of the need for accessible outpatient and inpatient mental health treatment at the community level.

Mental Illness and Violence

The media plays a significant role in the stigmatization and subsequent criminalization of the mentally ill. Media, through radio, television, newspaper, and magazine outlets, have the ability to circulate information across all levels of society. The United States has seen multiple mass shootings in the past few years alone, and after each one, media coverage sparks a national conversation about mental illness, resulting from the immediate questions that arise about the sanity of the perpetrator after each massacre. As the conversation focuses on the mental health status of the offender, it reinforces the link between violence and mental illness.

According to Dr. Jeffery Swanson of Duke University School of Medicine, although individuals with serious mental illness are three to four times more likely to be violent than are

those who are not, the majority of mentally ill individuals are not violent. There are many other risk factors for gun violence in particular, such as substance abuse, violent victimization, and neighborhood and social disadvantage. In 1990, an epidemiological study found lifetime violence rates were estimated at 15% for the population without mental illness, 33% in those with serious mental illness only, and 55% for those with serious mental illness and substance abuse combined. According to the study's findings, if major depressive disorder, bipolar disorder, and schizophrenia no longer existed, gun violence would only decrease by 4%. This conclusion is supported by the study's finding that the attributable risk of violence associated with serious mental illness was only found in 4% of the surveys completed by participants. The study reported findings similar to that of previous research, reporting that there is substantially increased risk for violent behavior within particular demographic subgroups, specifically young males of lower socioeconomic status, and those having problems involving alcohol or illicit drug use; these risk factors were significant in predicting violence in people with or without mental illness (Swanson, McGinty, Fazel, & Mays, 2014).

In contrast to the images of violence that are commonly associated with mentally ill individuals in the media, statistical evidence indicates that mentally ill inmates commit violent crimes at a rate similar to the rate of violent crime committed by non-mentally ill individuals. According a report issued by the Justice Bureau, 49% of mentally ill state prisoners' most serious offenses were violent in nature, followed by property crime (20%) and drug offenses (19%); of violent crime, only 12% included homicide. Mentally ill inmates were no more likely than were non-mentally ill violent offenders to have used a weapon during the offense, 37 % of offenders in each category used a weapon (Bureau of Justice Statistics, 2006). Media portrayal additionally

fails to account for the fact that mentally ill individuals are far more likely to be victims than perpetrators of violence (Stuart, 2006).

Overall, the risk of any type of violence associated with severe mental illness is modest relative to the risk associated with gender, age, educational level, and previous history of violence (Penn, Kommana, Mansfield, & Link, 1999). Despite these findings, mentally ill individuals are constant targets of the criminal justice system, with more than half of prison inmates meeting the criteria for one or more mental health problems (Bureau of Justice Statistics, 2006). Again, it is important to remember that the majority of these inmates are incarcerated for nonviolent crimes, such as petty theft, crimes of survival, and drug-related offenses.

Mental Illness in the Media: Impact on Attitude Formation

The media play a significant role in developing an individual's opinions, attitudes, and expectations about various topics and issues. In fact, previous research has suggested that heavy viewers of media gain a considerable part of their knowledge about the world from watching television (Kimmerle & Cress, 2013). Diefenbach and West (2007) found further evidence that indicates television is a primary source of information about mental health issues for the public. Furthermore, media portrayals of mentally ill individuals are generally negative, providing the public with inaccurate information regarding mental health problems (Diefenbach & West, 2007). Experimental research identified a direct link between exposure to these negative television portrayals and the development of negative attitudes toward the mentally disordered and toward mental health issues (Diefenbach & West, 2007). A considerable amount of the research has focused on why and how these negative stereotypes develop. Essentially, the greater the amount of exposure to media content that depicts a mentally ill person as violent or

dangerous, the more likely an individual is to internalize this representation and believe it to be an accurate and factual depiction of mental illness. Research has revealed that mentally ill individuals are 10 times more likely to be fictionally portrayed as violent criminals than are non-mentally ill individuals, contributing to the likelihood that an individual will develop erroneous perceptions regarding mental illness (Diefenbach, 1997).

Wahl and Roth investigated prime-time television content in attempts to pinpoint how the media most commonly portrays mental illness. According to their findings, mental illness was a common theme in both news and entertainment media, with the overall depiction of mental illness coming across as decidedly negative (1982). Research conducted by Diefenbach and West focused explicitly on television and attitudes toward mental health issues. Content analysis of 84 hours (1 week) of primetime television recorded in April of 2003 revealed that of 29 mentally ill characters, 11 were violent criminals that in total had committed 38 violent offenses, including: 13 murders, 11 rapes, 2 robberies, 2 assaults, 9 cases of abuse, and 1 case of reckless endangerment. This portrayal suggests that individuals with mental illness commit the majority of violent crimes; however, in a review of 22 studies published between 1990 and 2004, major mental disorders accounted for between 5 and 15 % of community violence (Joyal, Dubreucq, & Gendron, 2007). Another study of 331 individuals with severe mental illness in the United States found that only 17.8% had taken part in serious violent acts that involved weapons or caused injury, and that medication noncompliance and substance abuse problems contributed to these violent acts (Swartz, Swanson, & Hiday, 1998).

The media's portrayal of mental illness supports the social distance theory, which suggests that members of the public to seek distance between themselves and individuals with mental disorders. Support for the social distance theory arises from research by Wahl and Roth,

which included a telephone survey of 419 community participants. The responses supported the hypothesis that media stereotypes affect public attitudes toward mental health issues.

Respondents who reported regularly watching television news were far less supportive of living near individuals with mental illness than were those who did not report regularly watching television news. The researchers' overall conclusion supports the idea that media portrayals of mental illness influence viewers' beliefs about their safety levels if mental health services are provided within the community, as opposed to treating those with mental disorders away from the public's view (Diefenbach & West, 2007).

Media is not limited to television or film portrayal; print journalism also perpetuates negative stereotypes of mental illness. Thornton and Wahl of George Mason University conducted research on the impact of print journalism in relation to attitudes toward mental illness. Their research measured the effect of reading a "target" newspaper article that reported a violent crime committed by a mentally ill individual on the attitudes people held toward mental illness in general. The participants included 120 college students. The study measured the impact of coupling the target article with one of two articles that served to address misconceptions associated with mental illness. One article alerted the reader to the media's distortion of mental illness, whereas the other provided correct information regarding the percentage of crimes committed by mentally ill individuals, focusing on the overall rarity of violent and criminal acts linked to mental illness.

The results indicated that exposure to the articles that tackled common misconceptions had a significant impact on how the participants perceived individuals with mental illness, even after reading the target article that depicted the violent crime. The findings indicated that the impact of newspapers on attitudes was similar to that of other media sources (e.g., television,

movies), all of which have been found to encourage harsher attitudes towards mentally ill people (Thornton & Wahl, 1996). Despite this conclusion, the media continues to perpetuate negative stereotypes that contribute to the criminalization of mentally ill individuals, or in another words, the process by which it has become a crime to have a mental illness (Wilcox, 2014).

The media has a particularly strong impact on the development of beliefs by young members of society because much of attitude formation occurs during childhood. Specifically, the media's portrayal of mental illness can have a damaging effect on the development of youths' attitudes toward individuals with mental illness. These attitudes become ingrained, perpetuating the cycle of stigmatization as these adolescents mature and take on leadership roles in society. Research conducted by Dietrich, Heider, Matschinger, and Angermeyer (2006) examined the impact of two newspaper articles on 167 students' (aged 13-18) attitudes toward people with mental illness. One article linked mental illness with violent crime; a second article provided factual information on schizophrenia. Results indicated that respondents who had read the article linking mental illness with violent crime were more likely to describe individuals with mental illness as dangerous and violent, whereas respondents who read the factual article used descriptive words such as "violent" and "dangerous" less frequently.

The media's depiction of mental illness not only affects non-mentally ill individuals' attitudes, but also impacts mentally ill individuals' self-perceptions. In particular, negative media coverage discourages those who have mental health problems from seeking treatment. Stuart suggests the media capitalize on stories that involve mental illness, emphasizing "the violent, delusional and irrational behavior of people with mental illness," and exaggerating "headlines on story content in order to attract attention" (2006, p.101). Stuart focuses heavily on the negative consequences of the media's portrayal of mental illness noting that community fear of mental

illness increases and that stereotypes are reinforced each time a violent act is reported (2006). The public's fear further stigmatizes mentally ill individuals and can lead to their isolation from society due to fear of being "found out" as well as to low self-esteem, which impedes their recovery. Similar to several of the researchers cited previously, Stuart suggests that in order to change the media, one must use the media; "the media may be enlisted as a formidable ally in helping to challenge public prejudice, initiate public debate and project positive, human interest stories about people who live with mental illness" (2006, p. 104).

Schizophrenia in the Media

Not all mental illnesses are depicted the same way by the media. Schizophrenia is described in particularly negative terms, largely as a result of the individuals with whom the term is publicly associated. Mental illness and schizophrenia have become synonymous with the names of violent offenders like Adam Lanza, perpetrator of the Sandy Hook Elementary School shooting, and James Holmes, the man who carried out the Colorado Movie Massacre. Typically, psychological disorders like schizophrenia, which includes psychosis, or loss of touch with reality, are portrayed and discussed very differently than are disorders like depression or anxiety.

Research previously distinguished five types of schizophrenia, a biological brain disorder: paranoid, catatonic, residual, disorganized, and schizoaffective disorder. The most recent Diagnostic Statistical Manual for mental disorders however, the DSM 5, has removed these subtypes due to their lack of diagnostic or predictive value. The distinct types will be discussed below to elaborate on how popular media has perpetuated certain stereotypes of the disease, despite its various symptoms.

Paranoid schizophrenia causes a person to experience positive symptoms like visual or auditory hallucinations and/or delusions, and feel extremely suspicious, persecuted, or grandiose. This form includes symptoms that are most likely to be depicted by fictional portrayals of an individual that has schizophrenia. It is the most likely to be associated with violence due to the occurrence of psychotic episodes, although all subtypes of schizophrenia can include psychosis. Psychotic episodes indicate the presence of positive symptoms. In contrast to common belief however, psychotic episodes do not necessarily include violent behavior. When a person with schizophrenia feels persecuted it may lead to violent behavior, but it is far more likely that the individual will attempt to hide from his/her perceived persecutors (Mental Health America, 2015).

The remaining four forms of schizophrenia are less likely to be associated with violence in the media (Owen, 2012). With disorganized schizophrenia, an individual may experience incoherent thoughts or speech, but is not delusional. Individuals with catatonic schizophrenia are withdrawn, mute, negative, and often assume unusual body positions. Residual schizophrenia occurs when a person is no longer experiencing delusions or hallucinations, but has no motivation or interest in life. Schizoaffective disorder results from a combination of both schizophrenia and a major mood disorder, like depression. Individuals may experience different forms of schizophrenia throughout the course of their disorder, another reason for the DSM's discontinuation of the separate categories.

As a result of its portrayal in the media, schizophrenia has become one of the most stigmatized and criminalized mental illnesses in the United States. A broad, nationally representative survey found that 61% of Americans endorsed the belief that people with schizophrenia were "very likely" or "somewhat likely" to be violent toward others; the same

survey also found that 61% of respondents indicated they preferred maintaining a social distance from people with schizophrenia (Link et al., 1999; Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999; Van Dorn, Swanson, Elbogen, & Swartz, 2005). This preference for social distance arises from the perception of danger and violence commonly associated with schizophrenia.

In addition to negative effects on self-esteem, willingness to seek treatment, and difficulty securing employment opportunities, schizophrenia and other mental illnesses are undeniably linked with crime. Research shows that those with severe mental illness are more likely to be arrested than are members of society that do not have severe mental illness. This pattern occurs partly because of unwarranted suspicion directed toward people with mental illness; additionally people with mental illness are often erroneously blamed for misconduct, crime, and other general problems (Schluze & Angermeyer, 2003; Van Dorn et al., 2005).

Fictional Portrayal

Evidence suggests that the fictional portrayal of individuals with mental illness, particularly schizophrenia, can be even more damaging than the portrayal of such individuals by television news or print journalism. Fictional portrayals influence the language that is used when discussing mental illness in real life situations. For this reason, when considering the media as a proponent of stigmatization and criminalization of mental illness, both fiction and nonfiction sources must be considered.

Cinema has been described as the most influential form of media (Cape, 2003; Damjanovic'Vukovic', Jovanovic', & Jašovic'-Gašic', 2009). Therefore, films play a role in influencing attitude formation regarding mental illness. Schizophrenia has become one of the

most popular mental illness narratives in fictional media. In film media, psychosis is more commonly stigmatized than is any other mental health problem. Furthermore, psychosis is often misinterpreted by film, but these inaccuracies are held as truths by viewers (Leff, 2006; Kimmerle & Cress, 2013). Inaccurate portrayals include linking psychosis to violence through popular cinematic images of the “homicidal maniac,” “slasher,” or “psycho killer.” Films have long emphasized grossly disorganized and bizarre behaviors of characters with schizophrenia, or characters that are suggested to have schizophrenia (Owen, 2012). Such films include horror films: *Psycho* (1960), *The Shining* (1980), *American Psycho* (2003), as well as thrillers: *Fight Club* (1999), *Donnie Darko* (2001), *Shutter Island* (2010), and *Black Swan* (2010).

The inaccurate portrayal of schizophrenia in film media perpetuates damaging stereotypes regarding this form of mental illness. In 2012, a study evaluated 42 characters with schizophrenia from 41 movies produced between 1990 and 2010. The results found that cinematic portrayals of schizophrenia overemphasize the positive symptoms of the disease, despite the fact that the negative symptoms are far more common (Owen, 2012). Positive symptoms or symptoms that are additional to typical behavior characteristics, including auditory and visual hallucinations, and grossly disorganized thought or behavior, appeared in more than 60% of characters, whereas only 8 characters displayed negative symptoms such as flat affect, and 2 showed alogia (lack of speech) and avolition (lack of motivation). Of the 42 characters, 35 or 83% displayed violent or dangerous behavior toward others. Of these 35, about one-third engaged in homicidal behavior (Owen, 2012). The author of the study concluded, “the finding that contemporary movies provide misinformation and negative representations of schizophrenia parallels the negative depiction of mental illness by other media, such as television and newspaper” (Owen, 2012, p. 658).

One of the oldest and most popular cinema categories, horror, has used themes of mental illness since the creation of films. In 1909, the short, silent film “Maniac Cook,” became one of the first movies to incorporate mental illness into the horror genre. In contemporary films, the portrayal of an individual with schizophrenia has shifted from “slasher” to “paranormal,” but the element of violent and homicidal tendencies remains prevalent (Owen, 2012). “The association of schizophrenia with the paranormal is a newly identified stereotype...the ‘schizophrenic as possessed’” has become a popular narrative in more modern films (Owen, 2012, p. 657). One study evaluated 55 horror films, including 33 that included psychosis, and coded characters with schizophrenia according to common stereotypes. In 78% of the films, the individual with schizophrenia was portrayed as a “homicidal maniac.” In 64% of the films, restraints and straitjackets were used, further perpetuating the association of danger with schizophrenia. Beyond the portrayal of mentally ill individuals, mental health treatment centers were regularly depicted as dirty, unhygienic, and decrepit (Goodwin, 2013). The author of the study broadly addressed his findings in the discussion with consideration of the popularity of horror films: “It stands to reason that cinema’s influential nature has in some way contributed to the negative viewpoint the public often holds in relation to [mental illness]” (Goodwin, 2013, p. 230).

Mass Shootings

Fictional and nonfictional portrayals of mental illness perpetuate stereotypes of violence and danger. On occasion however, mentally ill individuals do commit violent crimes, which are then sensationalized by the media. Individuals who commit particularly violent crimes are often immediately identified as having some form of schizophrenia. Furthermore, individuals with schizophrenia are not typically the focus of positive headlines, so the viewer does not receive information that counters the association of violence with schizophrenia. These factors contribute

to the reinforcement of the “violent schizophrenic,” a label that has been applied to several mass shooters in the past several years.

On December 14th, 2012, Adam Lanza shot and killed 20 children and 6 adults at Sandy Hook Elementary School in Newtown, Connecticut; he also shot and killed his mother before moving on to the school. The massacre became the most deadly mass shooting in the United States since the 2007 Virginia Tech Shooting in which Seung-Hui Cho killed 32 people. The media covered the story from its break, reporting the deaths in rising numbers. The massacre finished with Lanza’s suicide. In the weeks following the shooting, the media alternated between showing images of the young victims and the school staff members who sacrificed their lives attempting to protect others, and debating Lanza’s motives and mental health status. Nearly two years later, *The New York Times* reported that Lanza was “completely untreated” before the massacre, despite obvious indications of mental illness. The article included a psychologist’s postmortem diagnosis of Lanza as having paranoid schizophrenia (Cowan, 2014). The media immediately honed in on Lanza’s previous diagnosis of both anxiety and obsessive compulsive disorder, as well as of Asperger’s, a mild form of autism characterized by socially awkward behavior. While autism itself has not been directly linked to violence, antisocial behavior has been. Recent research suggests clinical and biological links between autism and schizophrenia, leading many media professionals to “diagnose” Lanza, despite lacking the proper medical training or knowledge to reach this conclusion (Turndorf, 2012). The media did provide coverage of Lanza’s access to automatic weapons within his own home (licensed to his mother), as well as criticism of both the school system and healthcare in general for failing to properly address Lanza’s mental state. Despite this coverage, the vast majority of news stories focused on

the likelihood that Lanza had schizophrenia, reinforcing the link between violence and mental illness (Friedman, 2012).

Nearly 6 months before the Sandy Hook Shooting, James Holmes opened fire at the midnight premiere of *The Dark Knight Rises* at a movie theater in Aurora, Colorado. Twelve people were killed and 70 others were injured. Unlike Lanza, Holmes was apprehended and on August 7, 2015, he was sentenced to life in prison. Like Lanza, Holmes had a history of mental illness; however, unlike Lanza, Holmes also had a history of receiving treatment. The media reported that Holmes had met with at least three mental health professionals at the University of Colorado, where he had been a PhD candidate in neuroscience before dropping out a little over a month before the shootings (CBS, 2012). Due to the confidential nature of psychiatric treatment, therapists are not compelled to report clients or even share information after a crime has occurred. During the trial, Holmes' public defender countered the prosecution's declaration that Holmes had been sane as he plotted the movie massacre, arguing that 20 psychiatrists who had examined him in custody as well as the therapist he saw prior to the shootings all agreed he meets the symptom criteria for schizophrenia (CBS, 2015).

There are several important differences in the cases of Adam Lanza and James Holmes that must be considered when discussing mental illness and the media's coverage following mass shootings. First, as noted before, Lanza killed himself before he could be brought to justice. Second, Holmes' diagnosis of schizophrenia was far less contested. Instead, whether or not Holmes could be held criminally responsible became the main focus on his trial; he pled not guilty by reason of insanity. Under Colorado law, the prosecution was required to prove that Holmes was sane so that he could face the death penalty or life in prison. Despite the fact that several psychiatrists testified for the defense, arguing Holmes' mental illness has caused his

actions, the prosecution ultimately succeeded in convincing the jury that Holmes had been sane when he planned the shooting.

The trial of James Holmes commenced in April, 2015, nearly three years after the massacre took place. This meant the story was essentially “evergreen,” a media term for a story that can be constantly used and maintains relevance for the viewer. With the Sandy Hook shooting following in the months after the Aurora shooting, the media had plenty of fuel to regularly discuss mental illness and gun violence. The trial coverage was particularly damaging in terms of influencing attitudes toward schizophrenia. The media’s major networks, NBC, CNN, CBS, Fox, consistently reported that Holmes showed no emotion throughout the trial, even during victims’ emotional testimonies. These reports sought to dehumanize Holmes, portraying him as a truly evil individual who showed no regret for his actions. None of the sources considered that one of the most common negative symptoms of schizophrenia is flat affect, or lack of emotion. Instead, the media uses mental illness when it is convenient, as a reason for violence or murder; but if an individual shows no remorse, he is evil, not ill.

How the Media Constructs Crime

Proponents of the media may argue that news media perform a public service in educating society about crime, therefore aiding in crime prevention. In reality, the media devotes little attention to crime avoidance, crime prevention, or personal safety. Instead, evidence suggests that the media sensationalizes and over-reports crime, especially crimes that are violent. In her work on media and crime, Jewkes identifies 12 news values the media use as guidelines when reporting on crime. News values are the value judgments journalists and editors make about the public appeal and public interest of a story (Jewkes, 2011). Public appeal can be

measured quantitatively, typically through ratings. Public interest is more complex to identify. Therefore, news values become vital in determining how much interest a story will generate.

The following news values are considered when reporting crime: threshold, predictability, simplification, individualism, risk, sex, celebrity, violence, graphic imagery, proximity, child victims, and political pressure (Jewkes, 2011). Threshold refers to the scope of the story; for example, a mass shooting in the United States generates national, even international attention. Predictability considers the rarity of the event; although some Americans may argue that shootings have become too commonplace in the contemporary United States, mass shootings that result in high numbers of fatalities remain relatively rare. Proximity refers to the idea that Western nations are largely ethnocentric, meaning they over-report incidents in their own country without allocating equal coverage to other nations. Crime rates may therefore appear higher than they actually are in comparison to the rates of other countries. Individualism creates a dichotomy between the “offender” and the “offended.” Offenders are depicted as impulsive loners who are irrational, violent, and increasingly, mentally ill, whereas victims are vulnerable and innocent, let down by ineffective social systems in society (Jewkes, 2011).

Risk, or the news value that suggests all members of society are potential victims, is a relatively new media phenomenon. After the collapse of the rehabilitative model of prison in the 1960s, the media ended its sympathetic depiction of offenders and instead began perpetuating a view of serious crime as “random, meaningless, unpredictable, and ready to strike anyone at any time” (Jewkes, 2011, p. 51). The news value of sex results in the media over-reporting incidents of sexual crime, particularly cases in which women are raped or assaulted by strangers. In reality, women typically know their attackers in cases of sexual assault. The celebrity component of media extends beyond the scope of crime news, as news media increasingly focus on high status

individuals in society in hopes of boosting ratings. Combining celebrity with crime only increases the popularity of a story. In some cases, media coverage has resulted in convicted criminals gaining celebrity-like status (Jewkes, 2011).

Children are seen as a reflection of innocence in society, therefore the presence of children can considerably elevate a crime's newsworthiness. Jewkes argues that a child's presence heightens the threshold of victimization more than if the crime had been committed against adults alone. This news value perhaps offers an explanation as to why the media always reports the number of children who are killed in mass tragedies like plane crashes or shootings; or why the Sandy Hook Elementary School shooting of 2012 remains one of the most cited incidents when discussing the need for gun reform in the United States.

Major media corporations are often influenced by politics, evident in whether or not stations are considered to be more "liberal" (like NBC) or "conservative" (like Fox News). The press retains a great deal of control over what is reported on in order to keep the government in check, a right protected by the First Amendment of the Constitution. In recent decades however, it appears that the media have become more of an ally than a whistleblower for politicians. Crime rates began to rise in the late 1950s, and in the late 1960s, crime had become one of the most pressing social issues for the American public. Pressure to decrease crime influenced politicians to adapt "tough on crime" rhetoric in the face of a failing rehabilitative system. The Nixon Administration promised a War on Crime, which is the first phase of the mass incarceration era. In the 1980s, the Reagan Administration capitalized on public fear of crime by creating the War on Drugs to earn the vote of White working class constituents at the expense of poor Blacks. The media complied with the statements made by Reagan and his supporters, despite the lack of evidence that crack cocaine was actually a problem. The news perpetuated

heavily racialized images of the crack epidemic that was supposedly sweeping the nation. As a result of the War on Drugs, crack cocaine and powder cocaine became more popular and the punitive measures of the government led to the racial disparities still evident within the criminal justice system today (Clear & Frost, 2014).

Jewkes (2011) argues that violence serves as the most common news value for all media sources, in that it fulfills the media's desire to present dramatic events in the most graphic and disturbing way possible. The media continuously push the boundaries of acceptable imagery in news stories with a particularly shocking component of violence. As previously discussed, violence and mental illness have become inherently linked in crime media. In combination with graphic imagery, this relationship reinforces the stigma and fear of mentally ill individuals.

Confirmation Bias

If the media continues to misrepresent mental disorders, and does not become an ally in ending the stigmatization of mental illness, then changing punitive attitudes will be much more of a challenge. Not only has the public become "lethargic," soaking up media content rather than challenging it (Jewkes, 2011), but humans are also known for making decisions based on an existing framework of beliefs and not seeking out information that disconfirms this framework. This psychological phenomenon known as confirmation bias can therefore be said to operate in two ways: selective information search and biased interpretation of available information (Ask & Granhag, 2005).

Selective information search causes individuals to only seek out information that confirms their established beliefs; in relation to mental illness, this may take the form of an individual seeking out examples of violent crimes committed by mentally ill people in order to

support his or her belief that mental illness causes violence. Biased interpretation, on the other hand, suggests that individuals process new information in ways that are consistent with both explicit and implicit attitudes. For example, upon hearing that a shooter has killed several people in a public setting, an individual may immediately assume that person has a mental illness.

Confirmation bias in the criminal justice system can be particularly problematic. Police officers tend to be inclined to think a suspect is guilty. The release of an arrested but innocent individual may be delayed because investigators disregard evidence that may exonerate that person. Instead, they tend to interpret it in a way that supports their assumption that the individual is guilty (Ask & Granhang, 2005). The presumption of guilt has led to incarceration and even execution of innocent individuals by the United States criminal justice system. When considering mental illness and confirmation bias in the criminal justice system, investigators or a jury may be less accepting of a defendant's "insanity plea" as if they do not believe mental illness to be a legitimate disease or if the majority of their understanding about mental illness comes from how it is portrayed in the media.

Juror Bias

Media coverage of mental illness not only influences attitudes of the general public, but can also disrupt the United States' system of due process, which ensures a fair and impartial trial supported by the underlying principle that an individual is innocent until guilt is proven. Evidence suggests that numerous factors prohibit a juror's ability to be truly impartial, as each individual brings his or her own backgrounds, prejudices, and processes for making decisions to the courtroom (Gunnell & Ceci, 2010). One of the most consistent finding suggests that a defendant's physical attractiveness affects a juror's decision-making more than does any other

factor, with more attractive defendants receiving more lenient sentences than is true of less attractive defendants. This pattern raises the possibility that a defendant's other traits may influence a juror's decision-making process.

Individual personality differences, processing style, and cognitive ability also may affect the juror's style of decision-making; most notably, the authoritarian personality, which tends to be highly punitive (Gunnell & Ceci, 2010). The Cognitive Experiential Self Theory suggests that people process information through "two independent but parallel cognitive systems, one a preconscious experiential/intuitive system and the other a conscious rational/analytical system" (Gunnell & Ceci, 2010, p. 853). In other words, people make decisions either more emotionally or more logically.

Previous research has examined what factors influence jurors to make decisions rationally versus emotionally. Findings indicate that the use of graphic or vivid language tends to motivate jurors to process emotionally, rather than rationally. In high profile court cases, like the trial of James Holmes, the prosecution relied heavily on the raw and emotional testimonies of victims, as well as graphic depictions of the aftermath in order to influence the jury. Based on evidence, this approach suggests the jury was compelled to process information emotionally. How the members of the jury perceive mental illness would also influence their judgment in the trial of a mentally ill individual. Considering the public's implicit and explicit attitudes toward mental illness, no jury is truly impartial when sentencing a mentally ill individual.

Beyond attitudes and beliefs that develop from an individual's life experiences, the media also largely contribute to the problem of juror bias. Particularly high profile cases are subject to media scrutiny from the minute the story breaks on the news until the defendant is sentenced.

The ubiquitous nature of the media complicates the process of finding jury members who have no previous knowledge of the case. Who could forget that in the infamous trial of George Zimmerman, the neighborhood watchman who shot and killed 17-year-old Trayvon Martin? Zimmerman's attorney opened his statements with a knock-knock joke, "Knock-knock" – "Who's there?" – "George Zimmerman" – "George Zimmerman, who?" – "You're on the jury!" Despite this awkward attempt at humor, it reveals an important truth about the government's ability to deliver on its promise of an impartial trial.

Pretrial publicity affects jurors by biasing their opinions of defendants and attorneys. Research has shown that jurors who have been exposed to negative pretrial publicity are more likely to view the defendant as less credible than are those not exposed to pretrial publicity (Ruva & Guenther, 2014). Even when given instructions by the judge not to discuss any pretrial attention a case may have received, jurors are likely to disobey these instructions during their deliberation. The modern media-driven culture of the United States has evidently presents a challenge to the constitutional right of an impartial trial.

Changing the Narrative: Media Reform

Reducing the presence of negative stereotypes in society can limit the influence they have on attitude formation. Researchers propose several techniques for preventing the development of negative stereotypes; one appeals to the media and another appeals to the community. The first approach simply calls for media professionals to stop reporting inaccurate representations of mental illness. Since the Civil Rights Era, reporting guidelines have encouraged reporters and journalists to avoid using stereotypical language when referring to ethnic and racial minorities, and to people with disabilities; however, there are no widely used guidelines for reporting on a

person with mental illness (Stucke, 2015). The 2007 edition of the *Associated Press Stylebook* states that journalists and reporters should not “use derogatory terms...except in direct quotes and then only when their use is an integral, essential part of the story” (Stucke, 2015, p. 1). According to Dietrich et al., some states have implemented reporting guidelines regarding mental illness. Major networks however, do not make these guidelines public, making it difficult to confirm they exist. It is more likely that networks may follow recommendations made by organizations like The Carter Center, rather than adopting official guidelines. The Carter Center, in partnership with Emory University, developed the Rosalynn Carter Fellowships for Mental Health Journalism to inform media professionals on appropriate reporting for stories involving mental illness. The Carter Center additionally created a pamphlet of guidelines and references in order to educate members of the media who do not participate in the fellowship.

A second approach for reducing the presence of negative stereotypes places greater responsibility on parents, teachers, social workers, and all other adults that have influential roles in children and adolescents’ lives. This approach calls for these individuals to lead discussion and reflection with young people about the messages promoted by the media in order to negate inaccurate and stigmatizing information (Dietrich et al., 2006). Although less direct than changing the media itself, helping prevent children and adolescents from becoming inoculated by the media’s inaccurate information can be beneficial beyond changing how they perceive mental illness. For example, teaching young people about how the media depicts the human body can help decrease the likelihood that a child will develop an eating disorder (NEDC, 2015).

The media’s position of importance in American society gives it a platform to influence attitude change, “[the media has] great scope to dispel inaccurate and stigmatizing stereotypes...” (Stuart, 2006, p. 101). Despite this potential to influence public attitudes,

“reporters emphasize the violent, delusional, and irrational behavior of people with a mental illness...often [to] sensationalize headlines or story content in order to attract attention” (Stuart, 2006, p. 101). Current suggestions for media professionals include taking additional steps to provide factual information and statistics regarding mental illness, as well as avoid the use of stigmatizing and criminalizing language (Stuart, 2006). Factual reporting should provide the public with a more accurate picture of mental illness, decreasing fear and stigma. Furthermore, the offender’s mental health status should not be the central theme of the story; instead the media should question the other factors that produce violence in society. As stated by Dr. Swanson, “most violence in society is caused by other things” (Beckett, 2014, p. 2).

Despite the call for the media to provide more factual information when reporting on mentally ill offenders, research suggests that people often make decisions based on emotion, not through well-informed reasoning. This behavior has obvious implications for the development of anti-stigma campaigns, given their intention to shift public beliefs about mental illness. According to a study on emotion versus cognition in decision making, “emotion has evolved to guide behavioral responses in certain contexts...immediate danger elicits fear, encouraging avoidance of a close or looming threat...” (Luo & Yu, 2015, p. 27). When the media covers stories that evoke fear in its viewers, such as massacres or human tragedies, emotion drives the viewers’ decisions about the story content. News stories that link violence to mental illness may influence the viewer to make misinformed decisions about what it means to be mentally ill and how mental illness affects society. These decisions cause broader development of punitive and fearful attitudes toward those with mental health problems. Research has also indicated that affective, feeling-based decision-making happens more quickly than does decision-making based on cognitive reasoning (Pham et al., 2001). Because the media has evolved to be a fast-paced

source of news, especially with the growth of social media, consumers have little time to fact-check or question media content.

Research that directly examines how to combat social stigma suggests that two main strategies, 1) contact and 2) education, are the most effective interventions (Corrigan & Penn, 1999). The first strategy, contact, refers to interaction with an individual who has a mental illness. Studies have consistently found that contact and stigma share an inverse relationship; the more time spent with someone who has a mental illness, the less stigma reported (Link & Cullen, 1986, Penn et al., 1994; Van Dorn et al., 2005). Furthermore, the more diverse the experience, the greater the acceptance and tolerance for those who are different (Blau & Schwartz, 1984; Van Dorn et al., 2005).

In England, an anti-stigma campaign called “Time to Change” incorporated two types of social contact interventions aimed at attracting members of the public with and without mental illness in order to promote positive intergroup interaction. One intervention, “Roadshow,” produced a series of 12 events held in prominent locations around the city. Volunteers who had direct experience with mental illness ran each event; the volunteers engaged the public with anti-stigma material such as postcards, factsheets, etc., and all participants were asked to join the movement by having a photograph taken or producing a written message or video. The second intervention, “Time to Get Moving,” included over 200 mass participation physical activity events, such as football [soccer] matches, dance workshops, walking groups, and other opportunities for social activities. The aim of the events was to bring members of the community together, allowing those with mental health problems and those without to interact in an informal, real-world setting. The researchers assessed the effectiveness of social contact through participants’ survey responses. Of those individuals without mental health problems, 67%

indicated that their interactions went “very well,” whereas only 29% of those with mental health problems indicated the same level of agreement, a significant difference. This outcome suggests that the interaction was more salient and meaningful for those without mental health problems, which is consistent with other research that hearing about personal experiences directly from individuals with mental illness can have a significant effect on people without mental health problems (Evans-Lacko et al., 2012).

The second approach uses education in order to decrease the social stigma of mental illnesses such as schizophrenia. The educational approach provides knowledge about the causes, nature, and outcomes of mental illness to the public. Research has shown that participation in brief educational programs that focus on mental illness and treatment can reduce negative attitudes toward people with mental illness; however, the effectiveness in stigma reduction largely depends on what information is presented (Morrison & Teta, 1980; Van Dorn et al., 2005). In one study one group of participants received information about post-treatment living arrangements, learning that newly discharged patients often live in supervised conditions. These participants’ scores indicated a decrease in stigma perception. Another group of participants were educated about the psychotic symptoms of schizophrenia; these participants’ scores indicated an increase in stigma perception. Despite these results, providing accurate information about the prevalence of violence among individuals with mental illness should decrease negative attitudes. Furthermore, a combined approach of education and contact should be the most effective in reducing stigma, although educational interventions are easier to implement than are contact interventions because they can be produced through media and therefore have a more widespread impact.

Anti-Stigma Campaigns

Based on the literature, two types of anti-stigma campaigns that focus on schizophrenia will be used in this study: one that evokes an emotional response in the viewer, and one that provides the viewer with factual information about mental illness. The emotion-based video will provide a personal testimony from an individual with schizophrenia, attempting to mimic the social contact approach when actual contact is not feasible, whereas the cognitive-based video will use an educational approach to teach the viewer about schizophrenia.

Previous research has examined the impact of stigma reduction campaigns for severe mental illness, with several focusing on schizophrenia. The majority of these studies used an educational or information-based approach when attempting to decrease participants' stigma. Providing accurate statistical information to correct misconceptions has been effective in reducing participants' notions that people with schizophrenia are inherently violent. Normative education or demonstrating that other clinical groups in society, like substance abusers, are more likely to be violent than are individuals with schizophrenia additionally helps reduce fear among participants (Yamaguchi, Mino, & Uddin, 2011; Zvonkovic & Lucas-Thompson, 2015).

Research by Zvonkovic and Lucas-Thompson used an Implicit Association Test in addition to a self-report measure to examine the effectiveness of an educational approach in reducing perceptions of violence associated with schizophrenia. The Implicit Association Test allows researchers to measure attitudes that an individual may wish to hide (because of social desirability) or attitudes that are held at a subconscious level (Greenwald & Banaji, 1995; Teachman, Wilson, & Komarovskaya, 2006; White & White, 2006; Zvonkovic & Lucas-Thompson, 2015). Participants in the experimental condition were provided with a fact sheet

about schizophrenia, written by the American Psychological Association. The control group read trivia facts that were unrelated to mental illness.

The results indicated that the educational approach was only successful in reducing explicit attitudes (those recorded by the self-report); however, the results from the IAT indicated that providing information is not sufficient to change unconscious attitudes about schizophrenia. The results of this study are important for several reasons, predominantly because evidence suggests implicit attitudes are more accurate in predicting behavior than are explicit attitudes (Greenwald et al., 1998, 2009; Zvonkovic & Lucas-Thompson, 2015). Zvonkovic and Lucas-Thompson's findings suggest that individuals exposed to educational interventions may continue to endorse stereotypes that stigmatize individuals with mental illness, either because these interventions are unable to alter implicit biases, or because the changes in explicit attitudes arise from the individual's social desirability or from demand characteristics. While more education may influence implicit attitudes, most stigma reduction campaigns are designed to be cost effective and easily disseminated. Comprehensive and time-intensive interventions, including contact-style interventions, may be more effective at changing implicit attitudes.

Both educational and contact-style, emotion-based stigma reduction campaigns face their own set of challenges. In order to overcome these obstacles, some researchers have begun to evaluate combination approaches. These approaches combine factual information with the presence of an individual who has schizophrenia, enhancing the effect of the intervention (Corrigan et al., 2002). This style most closely aligns with the methods of the present study. Ritterfeld and Jin used the combination approach in their research on decreasing stigmatizing perceptions of individuals with schizophrenia. Their work used the "Entertainment-Education" strategy, which involves "the process of designing and implementing a media message in order

to increase knowledge about an educational issue, create favorable attitudes toward socially desirable targets, shift social norms and change behaviors” (Ritterfeld & Jin, 2006, p. 249). This strategy was adapted to fit the study of mental illness, as evidence has consistently determined that an individual’s familiarity with mental illness significantly influences attitudes toward individuals that have these mental health problems (Angermeyer, Matschinger, & Corrigan, 2004). Familiarity was interpreted to mean both knowledge regarding mental illness as well as experience or contact with an individual who has mental illness.

Consistent with the Entertainment-Education strategy, participants watched an accurate and empathetic movie portrayal of schizophrenia, followed by an educational trailer. The movie, *Angel Baby*, released in 1995, depicted a variety of factual symptoms, up-to-date treatment methods, and social consequences of the disorder. After watching the movie, participants viewed one of six different types of educational trailers designed to provide factual information about schizophrenia. The three different types included: personal/inductive message style, in which the speaker directly referenced the main character of the movie with or without using movie footage; general/deductive message style, in which the speaker gave information regarding schizophrenia in a general manner (again, with or without movie footage). The speaker in each approach varied: the information was delivered either from the patient’s point of view or from an expert’s point of view, creating six versions of the educational trailers.

The results found that the empathetic movie portrayal increased knowledge regarding schizophrenia. Viewing the film in addition to the educational trailer not only increased knowledge acquisition but also influenced explicit stigma reduction. Prior to exposure to the film and educational trailer, 99 % of the sample believed that “schizophrenia results in aggressive and often violent behavior”. Only 31 % of the sample reported this misconception after exposure to

the film and trailer (Ritterfeld & Jin, 2006). The source of the information in the trailer created variations in stigma reduction. Participants were more likely to experience stigma reduction when they received information from an expert, rather than from a patient with schizophrenia. This finding contradicts the theory that stigma is reduced when an individual comes in contact with a mentally ill person, which the researchers attributed to the participants' perceived legitimacy of the advocate. Despite the accuracy and empathetic nature of the film, it alone was not enough to influence people's perceptions of schizophrenia. The study indicated that viewing the movie alone without the additional educational trailer resulted in stigma increase. Ritterfeld and Jin theorized that although the research team ensured that the movie did not convey any negative stereotype of a violent character with schizophrenia, the dramatic complexity of the film may have "produced conflicting or disturbing ideas in some individuals, reinforcing existing stereotypes" (2006, p. 260). This outcome is crucial to consider when developing stigma reduction campaigns; stigma is more likely to be reduced when a multifaceted approach is taken.

In the past decade, mental illness has become more closely associated with gun violence. Today, the United States faces separate issues of gun violence and inadequate mental health care, however, the two have become irrevocably intertwined by the media. Therefore, the need for stigma reduction campaigns has only increased in light of the numerous recent mass shootings, many of which have been perpetrated by an individual with mental illness. The most feasible widespread anti-stigma campaigns are easily disseminated and cost-effective, so long-term interventions which are generally costly, are not the preferred way to address the problem. Given previous research findings, the most effective anti-stigma campaign would include both emotional and cognitive components in one integrated approach, which for this study could not be found. This study therefore evaluated cognitive and emotional-based stigma reduction

campaigns separately, following the theory of Corrigan and Penn (1999) that the two most effective ways to minimize stigma are contact and education. It was hypothesized that participants in conditions with anti-stigma videos would be less punitive than would participants in conditions that were not exposed to any anti-stigma videos. Additionally, it was hypothesized that punitive attitudes would be higher for participants exposed to footage of movie theater shooter, James Holmes, than for those who were not exposed to the footage.

Method

Research Design

This experiment was a between subjects design, where participants were randomly assigned to one of six conditions. Each group was administered a pretest and a posttest, as well as a control video. Groups 1 through 3 viewed a newscast that portrays a man with severe mental illness in court after committing a mass shooting. Two of these groups then viewed a video that seeks to reduce stigma surrounding mental illness; one was cognitive-based and the other was emotion-based. Groups 4 through 6 did not view the newscast, but two of these groups also watched either a cognitive-based anti-stigma video or an emotion-based anti-stigma video. Group 6 simply took the pretest, watched the control video, and then took the posttest (see Table 1). The groups will hereafter be referred to as the following: Holmes-Cognitive (HC), Holmes-Emotional (HE), Holmes-Healthy (HH), Organic-Cognitive (OC), Organic-Emotional (OE), Organic-Healthy (OH).

Participants

Participants were recruited through the online crowdsourcing marketplace, Amazon Mechanical Turk. Each participant was paid \$1 for his/her time and participation. A total of 183

participants, 94 women and 89 men, representing all geographical regions of the United States, participated in the study. Their ages ranged from 18 to 69. In the HC condition there were 29 participants, whereas the HE condition and the HH condition had 31 participants. The OC condition and the OE condition each had 30 participants, while the OH condition had 32 participants. Of the participants, 86 % identified as Caucasian, 6 % as African-American, 4% as Asian-American, 3 % as Hispanic or Latino, and less than 1 % identified as Native American, Mixed Race, or did not specify their race.

Materials

Mental Illness Beliefs

Participants' general attitudes toward mental illness were assessed using this scale, developed by Ross in 2012. The scale consists of 23 items, scored from 1-5 with higher scores indicating more negative ratings (see Appendix A). The scale assesses beliefs regarding personal responsibility for illness, dangerousness associated with illness, social appropriateness and predictability, and prognosis. The scale was adapted from Angermeyer and Matschinger (2004) and subsequently revised. The author of the revised scale indicated its reliability is good, but did not report Cronbach's alpha (Ross, 2012). For this study, Cronbach's alpha was found to be .819, which indicates good reliability.

Attitudes toward Schizophrenia

Participants' specific attitudes toward schizophrenia were assessed using this scale. Developed by Ritterfeld and Jin in 2006, this scale consists of 15 items scored on a five-point Likert scale from "completely disagree" to "completely agree" (see Appendix B). The scale format consists of three sections, including six emotional items, five cognitive items, and four

connotative items related to attitudes towards people with schizophrenia. Cronbach's alpha ranged from .58 to .73 for the three subscales (Ritterfeld & Jin, 2006). For this study, Cronbach's alpha was calculated to be .892 for the overall scale, indicating good reliability.

Criminal Responsibility

Participants' attitudes toward the relationship between mental illness and criminal responsibility were assessed using this scale. Developed by Roberts, Golding, and Fincham in 1987, the scale consists of 13 questions rated on a seven-point scale (see Appendix C). The authors did not report the psychometrics specific to this scale (Roberts et al., 1987). For this study, Cronbach's alpha was calculated to be .723, which indicates fair reliability.

Procedure

Participants were recruited through the survey website, Amazon Mechanical Turk. Each participant was randomly assigned to one of the six conditions. Every group viewed a newscast (a video on James Holmes or a video on organic food), a control video, an intervention (cognitive anti-stigma, emotional anti-stigma, or healthy eating habits video, and then completed a posttest. The control group (Condition 6) was administered only the organic food video, the control video, the healthy habits video and the posttest. The posttest consisted of questions in random order from the Mental Illness Beliefs Scale, the Attitudes toward Schizophrenia, and the Criminal Responsibility Scale (see Appendices A, B, and C). The control video focused on a neutral topic in order to create more time between stimuli.

Conditions 1 through 3 viewed a segment of a newscast about James Holmes, the Colorado movie theater shooter (see Appendix D). The newscast depicted an attorney directly placing blame for the tragedy on Holmes' mental illness. Condition 1 then viewed an

informational anti-stigma video, created by the Roche Institute (see Appendix E). Condition 2 viewed an emotion-based anti-stigma video by Choices in Recovery in partnership with Johnson & Johnson (see Appendix F). Condition 3 viewed an informational video on healthy eating (see Appendix G) before completing the posttest. This variability in exposure sought to potentially demonstrate differences in attitude towards mental illness based on emotional or cognitive-based approaches to reducing stigma.

Conditions 4 through 6 viewed a newscast about organic food (see Appendix H). Condition 4 viewed the informational anti-stigma video and Condition 5 viewed the emotion-based anti-stigma video. Condition 6 served a control group, and viewed the video on organic food, the control video, and the informational video on healthy eating before completing the posttest. Potential differences in posttest scores for Conditions 4, 5, and 6 in comparison to Conditions 1, 2, and 3 may indicate the effects of punitive media on attitude formation. See Appendix K for the conditions.

Ethical Issues

This experiment used deception because the demand characteristics of the study would affect responses if the participants had known the actual topic under investigation. Instead of the true nature of the study, participants were told the research assessed attitudes toward current events as portrayed by the media. The deception used was minor and was not thought to cause any harm or discomfort to participants. They were debriefed following completion of the study and were given resources to consult should they wish to learn more about mental illness and the media.

Results

Participants were recruited to take part in this research during the month of February 2016 through Amazon Mechanical Turk. The survey was described as a 30-minute questionnaire regarding the media's coverage of current events. It was available for less than 24 hours before the target number of responses was acquired.

In order to test the hypothesis that participants who did not view the Holmes newscast video would express less punitive attitudes toward mental illness following exposure to either a cognitive-based or emotional-based stigma reduction campaign than those who viewed the. A 2 (Holmes vs. Organic) X 3 (Emotional vs. Cognitive vs. Healthy) factorial analysis of variance was performed. The analysis tested the effects of exposure to a newscast and an intervention on punitive attitudes toward mental illness. Wilk's Lambda was significant for intervention, $\Lambda = .010$, $\eta^2 = .047$ but it was not significant for newscast, $\Lambda = .204$, $\eta^2 = .026$, nor was it significant for the interaction between intervention and newscast, $\Lambda = .311$, $\eta^2 = .020$. Overall, scores on each measure across conditions did not vary significantly (see Figure 1).

Results indicated a significant main effect for intervention on the Mental Illness Beliefs measure, $F(1, 183) = 4.22$, $p = .016$. There was not a significant main effect for newscast, $F(1,183) = .206$, $p = .650$. There was also not a significant interaction effect for newscast and intervention, $F(183) = 1.391$, $p = .222$. A post-hoc Tukey test assessed differences in scores based on intervention. Findings for the Mental Illness Belief indicated a significant difference between conditions exposed to the cognitive anti-stigma video and the healthy eating video, $p = .015$. Furthermore, conditions exposed to the cognitive anti-stigma video and emotional anti-stigma video differed at the $p = .117$ level, approaching significance. Scores of participants in the

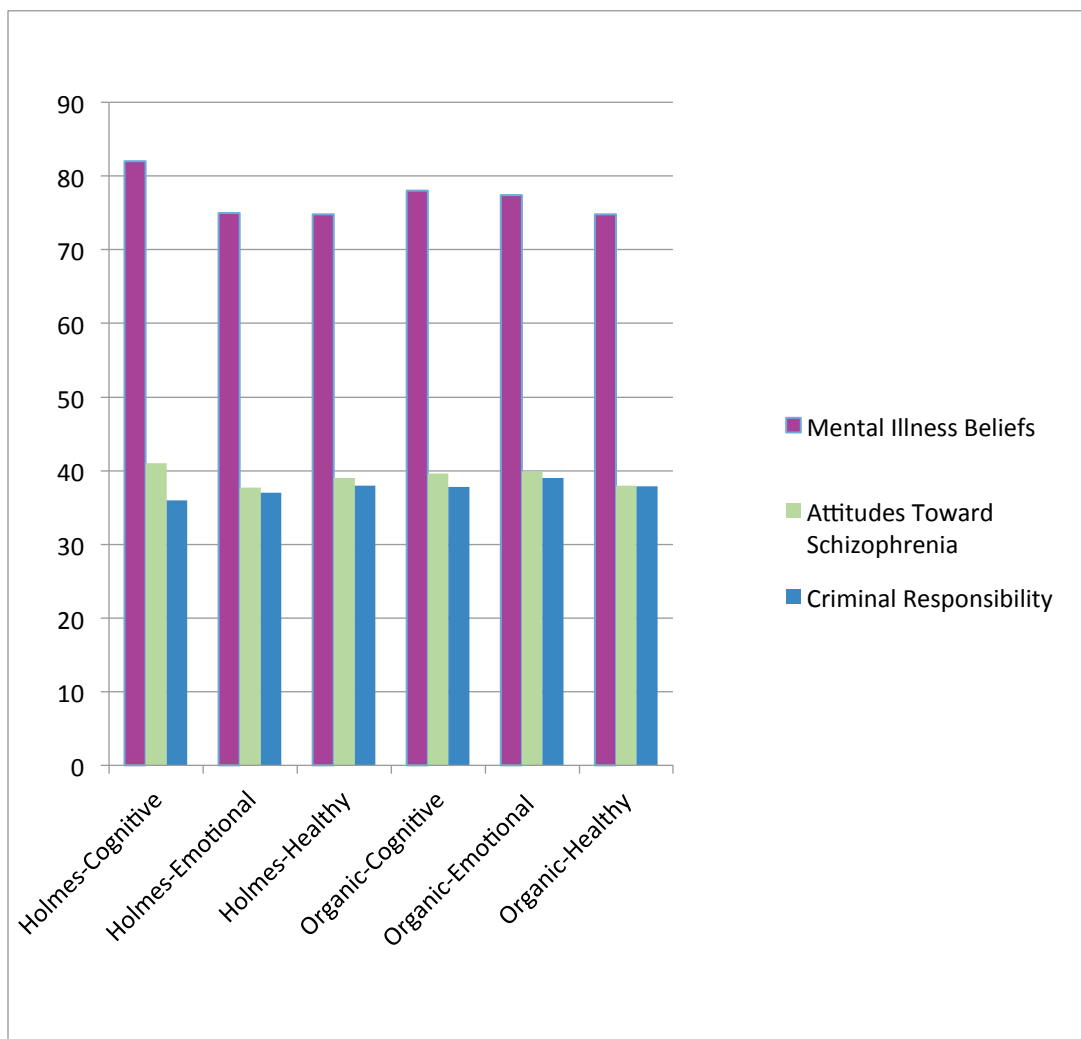


Figure 1. Comparison of each condition's scores across the three measures

Holmes-Cognitive group ($M = 82.21$, $SD = 8.70$) differed from participants in the Holmes-Healthy group ($M = 74.85$, $SD = 12.68$) at the $p = .068$ level. Additionally, scores of participants in the Organic-Healthy group ($M = 74.85$, $SD = 9.43$) differed from those in the Holmes-Cognitive group at the $p = .065$ level.

Participants who were not exposed to either the cognitive or the emotional anti-stigma video had scores on the Mental Illness Beliefs measure that indicated more punitive attitudes than did those who watched stigma reduction campaigns (see Table 1). Overall, participants who watched the cognitive anti-stigma video expressed the least punitive views, HC ($M = 82.21$, $SD = 8.70$), OC ($M = 78.08$, $SD = 11.27$). Participants who watched the emotional anti-stigma video fell in the middle, HE ($M = 75.35$, $SD = 9.16$), OE ($M = 77.40$, $SD = 10.10$). Although the result was not significant, the cognitive anti-stigma video appears to have been more effective in reducing punitive attitudes than was the emotional anti-stigma video for participants that viewed the newscast of James Holmes, ($p = .109$). Finally, participants who did not watch either stigma-reduction campaign scored the lowest on the measure, indicating slightly more punitive attitudes toward mental illness, HH ($M = 74.85$, $SD = 12.70$), OH ($M = 74.85$, $SD = 9.43$) (see Figure 2). The overall mean scores of each condition for the Mental Illness Beliefs measure can be found on Table 1.

The Attitudes Toward Schizophrenia scale did not result in any significant findings. The main effect of newscast was not significant, $F(1, 183) = .004$, $p = .949$. The main effect for intervention was also not significant, $F(1, 183) = .684$, $p = .506$. The interaction effect for newscast and intervention was not significant, $F(1, 183) = .722$, $p = .487$. This scale ranged from 12 to 65, with higher scores again indicating less punitive beliefs. The most punitive attitudes were recorded in the HE condition ($M = 37.74$, $SD = 8.45$), followed by the OH condition ($M =$

Table 1

Means and Standard Deviations of the Mental Illness Beliefs Scale (N = 183)

	<i>M</i>	<i>SD</i>
Holmes-Cognitive	82.21	8.70
Holmes-Emotional	75.35	9.16
Holmes-Healthy	74.85	12.68
Organic-Cognitive	78.08	11.27
Organic-Emotional	77.40	10.10
Organic-Healthy	74.85	9.43
Total	77.05	10.50

Scores range from 22 (highly punitive attitude) to 110 (less punitive attitude).

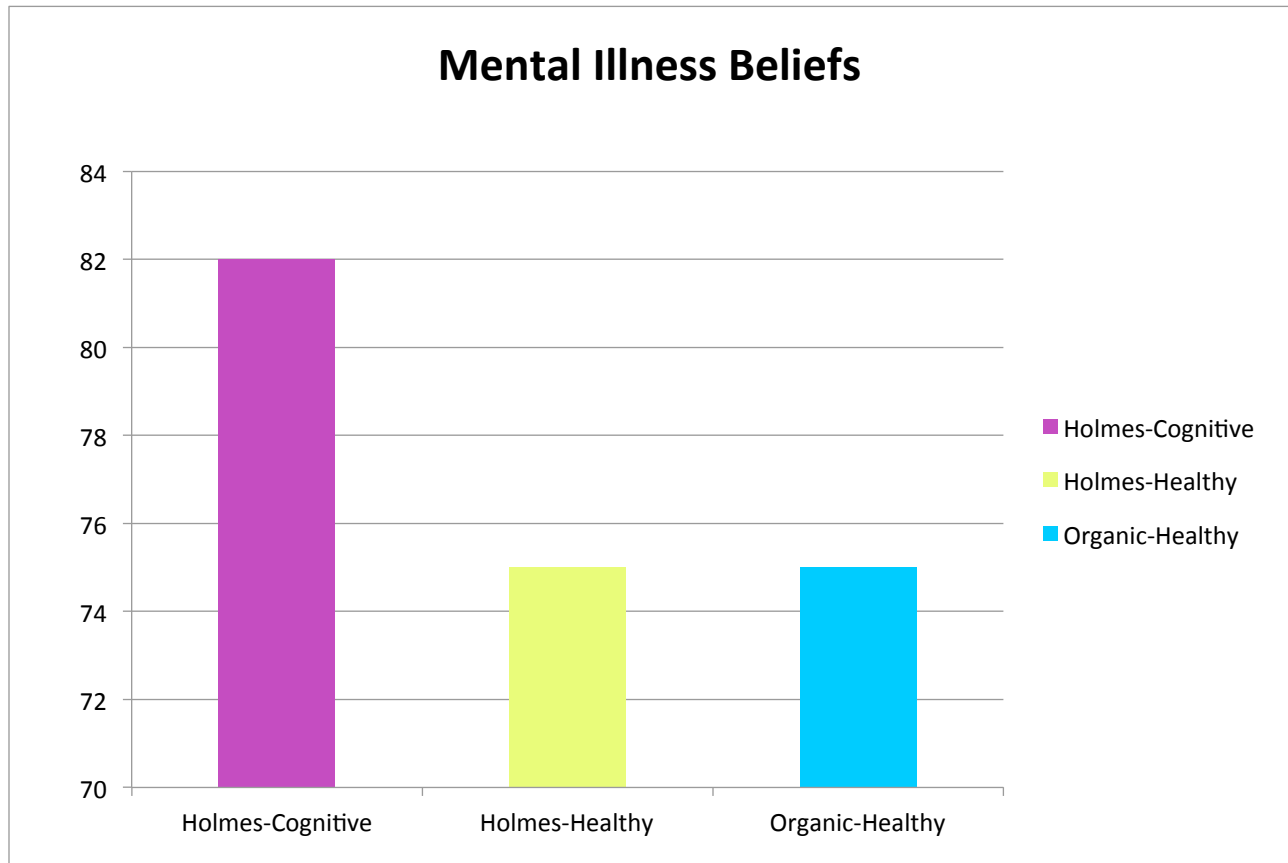


Figure 2. Mental Illness Beliefs least punitive condition and most punitive conditions

38.06, $SD = 9.37$), whereas the least punitive attitudes were recorded in the HC condition ($M = 41.03$, $SD = 7.95$). The remainder of the conditions scores fell around a mean value of 39; mean scores of each condition are recorded on Table 2.

The final measure, the Criminal Responsibility Scale, also did not produce significant findings. The main effect for newscast was not significant, $F(1,183) = 3.378$, $p = .068$. The main effect for intervention was not significant, $F(1,183) = 1.584$, $p = .208$. The interaction effect for newscast and intervention was also not significant, $F(1, 183) = 1.519$ $p = .222$. The Criminal Responsibility measure was scored from 10 (highly punitive attitudes) to 50 (less punitive attitude), mean scores on this scale for each condition are recorded in Table 3. A trend approaching significance appeared between the OE condition ($M = 39.19$, $SD = 4.47$) and the HC condition ($M = 36.10$, $SD = 3.20$), $p = .06$ (see Figure 3). Despite recording the most punitive scores on this measure, the HC condition produced the least punitive scores on both of the other measures. Implications of this finding are discussed below.

Table 2

Means and Standard Deviations of the Attitudes Toward Schizophrenia Scale (N = 183)

	<i>M</i>	<i>SD</i>
Holmes-Cognitive	41.03	7.95
Holmes-Emotional	37.74	8.45
Holmes-Healthy	39.07	10.90
Organic-Cognitive	39.63	9.19
Organic-Emotional	39.90	7.28
Organic-Healthy	38.06	9.37
Total	39.21	8.90

Scores range from 12 (highly punitive attitude) to 65 (less punitive attitude).

Table 3

Means and Standard Deviations of the Criminal Responsibility Scale (N = 183)

	<i>M</i>	<i>SD</i>
Holmes-Cognitive	36.10	3.20
Holmes-Emotional	37.06	4.43
Holmes-Healthy	38.29	5.49
Organic-Cognitive	37.77	3.33
Organic-Emotional	39.19	4.47
Organic-Healthy	37.94	3.82
Total	37.74	4.26

Scores range from 10 (highly punitive attitude) to 50 (less punitive attitude).

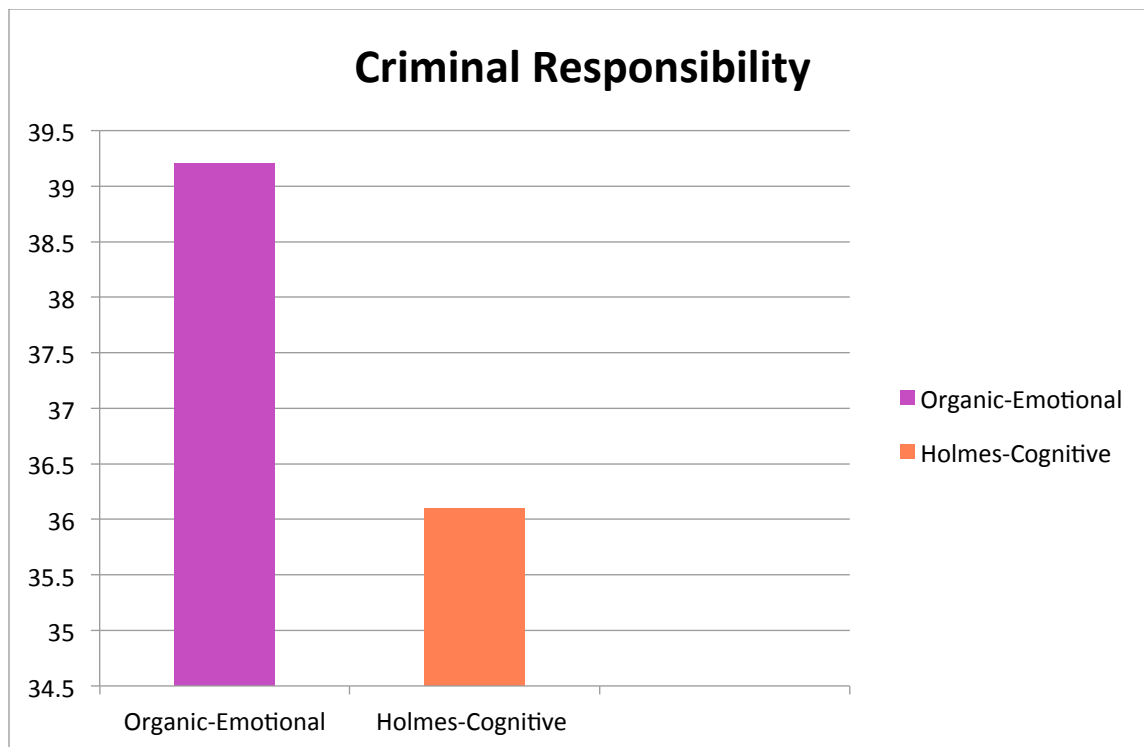


Figure 3. The least and most punitive conditions' scores for the Criminal Responsibility measure

Discussion

The hypothesis that participants who were exposed to conditions that required viewing a cognitive or emotional-based anti-stigma video would be less punitive than would those not exposed to any anti-stigma videos was not supported, however trends appeared that approach significance. The second hypothesis, that exposure to footage of movie theater shooter, James Holmes, may additionally produce more punitive responses, even when followed by videos designed to reduce stigma, was not supported.

The trend approaching significance that appeared within the results for the Mental Illness Beliefs measure indicates that the anti-stigma videos did potentially influence participants' beliefs and knowledge regarding mental disorders, possibly leading to less punitive scores. Higher scores on this scale indicated less punitive attitudes. Participants who were not exposed to either anti-stigma video had the lowest scores, signifying the most punitive attitudes. The mean scores for the HH condition and the OH condition were both 74.85, whereas the groups that viewed the anti-stigma videos scored an average of 3 points higher, indicating slightly less punitive views. This difference, although marginal, suggests that viewing anti-stigma videos may help reduce punitive attitudes.

The hypothesis that individuals who were exposed to James Holmes would express more punitive attitudes, even when exposed to an anti-stigma video shortly afterward, was not supported. This hypothesis was further unsupported by the fact that the condition exposed to the criminalizing newscast of James Holmes followed by the cognitive-based anti-stigma video recorded the highest mean score on the Mental Illness Beliefs measure. This outcome means that

participants within the HC condition expressed less punitive attitudes than did participants who were not exposed to a video that linked violence with mental illness.

The Mental Illness Beliefs measure also indicated support for previous findings that cognitive-based stigma reduction campaigns are more effective in reducing explicit punitive attitudes than are emotional-based anti-stigma videos (although their success is largely dependent on what material is presented to the viewer) (Zvonkovic & Lucas-Thompson, 2015). The Holmes-Cognitive and the Organic-Cognitive conditions recorded the highest mean scores, $M = 82.2$ and $M = 78.1$, respectively. The emotional-based anti-stigma video appeared to be less effective than did the cognitive, but still led to higher, less punitive scores, than in the non-anti-stigma control conditions. The Holmes-Emotional and Organic-Emotional conditions recorded mean scores of $M = 75.4$ and $M = 77.4$, respectively (refer to Table 1). These results may be explained by the unequal strengths of the cognitive and emotional videos. The cognitive video was slightly longer and used several doctors to inform the viewer about schizophrenia. In contrast, the emotional video used the perspective of only one woman with schizophrenia, and she focused less on talking about stereotypes and stigma, but instead spoke of her personal experience with schizophrenia.

The results for the additional two scales used in this research were not as simple to interpret. The Attitudes toward Schizophrenia scale found that punitive attitudes were lowest in the Holmes-Cognitive condition, but highest in the Holmes-Emotional condition. Similar to the results of the Mental Illness Beliefs measure, these findings suggest that reducing negative perceptions of schizophrenia is more easily achieved through educational means. This theory corresponds with previous research that found an accurate-empathetic portrayal of an individual with schizophrenia increased stigmatized beliefs, except when shown in combination with an

educational trailer about the disease (Ritterfeld & Jin, 2006). Again, these results do not support the second hypothesis, which theorized that participants in conditions exposed to James Holmes would have the most punitive attitudes.

In the Criminal Responsibility Scale, participants in the Holmes-Cognitive recorded the most punitive scores, despite having the least punitive scores on both of the other measures. Conversely, participants in the Organic-Emotional condition recorded the least punitive scores. This outcome may be explained by the fact that participants in the Organic-Emotional condition were not exposed to a violent “criminal” with schizophrenia as were the participants in the three Holmes conditions. Instead, participants in the Organic-Emotional condition viewed an emotional-based anti-stigma video that featured a woman speaking openly about her life with schizophrenia. The woman speaks about her path to diagnosis, which occurred after she committed a non-violent crime while experiencing a psychotic episode. Furthermore, she shares that she failed a competency test while in jail, which may have encouraged participants to express the view that individuals with mental illness are less culpable for their actions than are individuals without mental illness. Conversely, participants who viewed the cognitive-based anti-stigma video learned facts about the disorder. Some of these facts may have then challenged misconceptions they held about mental illness, such as the idea that a person with schizophrenia is “crazy” or “dangerous”. By learning that a person with schizophrenia often leads a normal and otherwise healthy life, participants may have determined that a person with mental illness should therefore be held to the same degree of culpability as a person who does not have a mental illness when facing charges for a crime.

In the future, this research would benefit from a number of changes. In order to more accurately assess the impact of the independent variables, participants should complete a pretest,

as well as a test following exposure to the criminalizing newscast (or control video), and a posttest following exposure to the stigma-reduction or control video. Administering the scales several times as opposed to just once at the end would allow the researcher to see variations in scores over the course of the study. The study would then need to be conducted over the course of a few weeks to prevent participants from realizing what they are being tested on.

Administering the tests over a lengthier period of time would additionally improve the ability of the study to examine participants' subconscious attitude formation, rather than gathering responses immediately after exposure to the variables. An additional measure, the Implicit Association Test, should be included to evaluate participants' implicit attitudes, as previous research found that some educational anti-stigma campaigns are only effective at reducing explicit bias.

The two anti-stigma videos used in this study were selected in accordance to Corrigan and Penn's theory that education and contact are the two most effective techniques to reduce stigma. The emotionally-based anti-stigma video was developed to mimic contact with an individual who has a mental illness, in this case, schizophrenia. Despite portraying a person with schizophrenia in an empathetic and more relatable manner, the emotional-based video did not provide the same factual information presented by the cognitive-based video. The cognitive-based anti-stigma video was much more explicit in addressing the stereotypes and misconceptions associated with schizophrenia. On the other hand, the emotional-based video allowed participants to glimpse into the life of a woman with schizophrenia, providing a firsthand account about how the stigma of her disease affects her mental and emotional wellbeing. As previously discussed, the contact hypothesis suggests prejudicial beliefs can be reduced through direct interaction with a member of the stigmatized group. While emotionally-

based anti-stigma videos seek to mimic contact, there are obvious limitations in their ability to do so adequately. Furthermore, when a member of a stigmatized group challenges a stereotype associated with that group, people may see that individual as an exception to the rule. While education and contact are key components in the process of stigma reduction, they are more likely to be effective when used in a combination approach. The combination approach should be balanced, meaning that it is equal in educational and emotional components.

The Entertainment-Education strategy for reducing stigma requires more research. Combination approaches may be the most effective way to decrease stigma and improve attitudes toward mental illness. The current study examined separate anti-stigma approaches, however, additional research is needed to evaluate stigma reduction techniques that combine educational and contact-based elements into one comprehensive campaign. Previous research suggests that people are most receptive to receiving factual information from a trusted source, such as a doctor or psychiatrist, yet this does not allow for contact with an individual who has a mental illness (Ritterfeld & Jin, 2006). Creating a video that uses a mental health expert and an individual who has a mental disorder to educate its viewers about mental illness, including the biological, social, and personal implications of the disease, may remedy this problem. The expert and the individual with mental illness should be presented in a way that gives them both equal status. For example, their clothing could be neutral and they should be roughly the same age. These controls would help prevent the viewer from perceiving the expert as more credible than the individual with mental illness.

Future research should also examine how different types of media representations of mental illness impact attitudes toward individuals with mental illness. This study looked specifically at one newscast in which Colorado movie-theater-shooter James Holmes' actions

were directly blamed on his mental illness; however, fictional portrayals of schizophrenia and other disorders are also problematic when seeking to reduce stigma and punitive attitudes. Similar research could evaluate punitive attitudes of participants following exposure to horror movies that manipulate mental illness to capitalize on society's fascination with psychopaths and serial killers. Television crime dramas are also popular, and new versions seem to consistently premiere on major networks. These shows also often perpetuate the stereotypes of violence and danger commonly associated with mental illness, and therefore could also be used in future research. Researchers may also want to compare how real-life accounts versus fictional portrayals of mental illness affects punitive attitudes, with the option of including an evaluation of anti-stigma campaigns and their effectiveness.

Limitations

This research was restricted by a number of limitations. Given several trends in the data that approached significance, a larger sample size may have been increased its power. The sample was also predominantly White and lacking in diversity. The reliability of the Criminal Responsibility scale was found to be $\alpha = .723$, lower than the alpha reported by its authors. Although manipulation checks were used, it is difficult to know if participants completely viewed each video. On average, participants in conditions exposed to the cognitive video completed the study in about 25 minutes, whereas participants in the conditions exposed to the emotional video or the healthy eating habits video completed the study in about 22 minutes. As previously mentioned, the videos themselves were unequal in strength and were not pre-tested. The cognitive video was longer and featured several speakers in contrast to the one speaker featured in the emotional video. The speaker in the emotional video spoke more about her path to diagnosis and only briefly mentioned how stereotypes affect her life whereas the cognitive video

largely focused on debunking stereotypes to reduce stigma. The study would have benefited from the use of a social desirability measure, as it is difficult to know if participants' self-reported responses were altered by the desire to preserve a socially acceptable self-image. Finally, given the short duration of time in which the study was administered, demand characteristics may have influenced how participants completed the questionnaire.

Conclusion and Future Directions

Mental health has become a more popular topic of discussion across the United States. Institutions like Mental Health America, the National Alliance for Mental Illness (NAMI), and the Bazelon Center for Mental Health Law are leading advocates for mental health policy reform. Mental Health America even has a working group that focuses on mental illness portrayal in the media. Despite these efforts, a major national campaign like England's "Time to Change," which facilitated interaction between community members across 12 major cities, has not been seen in the United States. NAMI however, does offer numerous education classes for families and friends of an individual with mental illness, as well as courses and support groups for individuals experiencing a mental health problem themselves. The organization has additionally developed numerous presentations that are given at schools and community centers across the United States. Some groups, like Active Minds, the student-run mental health awareness, education, and advocacy organization designed for college campuses, do host events that make contact possible. This contact however, generally depends on students' willingness to reveal their mental health problems to other students. In order for researchers to assess contact-based stigma reduction, more campaigns that are specifically designed to include interaction must be developed. Most anti-stigma campaigns however, are largely disseminated through media outlets in the form of public service announcements.

Fictional portrayals of individuals with mental illness are difficult to control, given writers' rights to creative freedom. England's "Time to Change" campaign includes a Media Advisory Service that educates both journalists and fiction-writers about mental disorders. The organization runs workshops and works directly with media professional to assist them in accurately portraying mental illness. Their goals include increasing the number of storylines that normalize mental illness while decreasing the number that include violence, creating a new narrative about the stigma a character with mental illness faces, and addressing the misconceptions about therapy and medications, or the idea that someone with mental illness cannot recover. These goals can be adapted for news media as well, by incorporating stories about individuals with mental illness that convey a positive message to the audience, rather than only reporting on instances that cast negative light on mental disorders. Time to Change also uses celebrities to de-stigmatize mental illness. Famous actors, singers, athletes, and writers who have pledged to help reduce stigma share testimonials about their experiences with mental illness on the organization's website.

News media needs formal guidelines for reporting on mental illness. The University of Washington collaborated with reporter John Stucke of the *Spokane Post* to produce pamphlet, "Background Information and a Guide for Reporting on Mental Illness." The pamphlet includes a basic yet comprehensive checklist for reporting on mental illness. The authors begin with a call for the media to first ensure that mental illness is actually relevant to the story being reported. Statements that suggest mental illness is a factor in a violent crime should be verified. Reporters often cite a suspect or offender's past history of mental illness, which is not necessarily a reliable indicator of why the crime occurred. In general, language that implies people with mental illness are violent should be avoided, as should other stereotypical words or phrases. If violence is

integral to the story, reporters should provide context whenever possible. The authors suggest using “People First Language,” or maintaining a person’s individuality rather than defining the individual by a condition. For example, avoid labeling a person as a “schizophrenic.” If necessary, reporters should verify specific symptoms of a disorder through a reliable mental health resource. Furthermore, whenever possible, the media should emphasize that treatment is available and effective, and that prevention works and recovery is possible. Finally, the media should also be sensitive when choosing photographs for stories involving mental illness (Stucke, 2015).

The stigma of mental illness primarily affects individuals that have mental disorders. Self-stigma, as previously discussed, is the degree to which individuals apply stereotypes to themselves. These stereotypes may lower the individual’s self-esteem and self-efficacy, as well as discourage them from seeking treatment. This decision to avoid treatment stems from the fear of ostracizing oneself from family, friends, coworkers, and society (Stuart, 2006). Therefore, if the media implements reporting guidelines and presents new, positive narratives about mental illness, the United States should see an overall decrease in stigma. Additional outcomes may include an increased focus on other causes of violence in society and greater acceptance of the need for accessible outpatient and inpatient mental health treatment at the community level.

Combating the stigma of mental illness requires a comprehensive approach from the media and policymakers, as well as the willingness of the public to engage in interactive education programs. Changing and diversifying the narrative surrounding mental illness has the potential to break down barriers between individuals with mental illness and individuals without mental illness, improve pathways to treatment, and create healthier and happier communities.

References

- Angermeyer, M. C., Matschinger, H., & Corrigan, P. W. (2004). Familiarity with mental illness and social distance from people with schizophrenia and major depression: Testing a model using data from a representative population survey. *Schizophrenia Research, 69*, 175–182. doi: 10.1016/S0920-9964(03)00186-5
- Ask, K., & Granhag, P. A. (2005). Motivational sources of confirmation bias in criminal investigations: The need for cognitive closure. *Journal of Investigative Psychology and Offender Profiling, 2*, 43-63. doi:10.1002/jip.19
- Beckett, L. (2014, June 10). What we actually know about the connections between mental illness, mass shootings, and gun violence. Retrieved March 18, 2015, from <http://www.psmag.com/health-and-behavior/actually-know-connections-mental-illness-mass-shootings-gun-violence-83101>
- Blau, P. M., & Schwartz, J. E. (1984). *Crosscutting social circles*. Orlando, FL: Academic Press.
- CBS. (2012, September 19). James Holmes saw three mental health professionals before shooting. Retrieved December 20, 2015 <http://www.cbsnews.com/news/james-holmes-saw-three-mental-health-professionals-before-shooting/>
- Clear, T., & Frost, N. (2013). *The punishment imperative: The rise and failure of mass incarceration in America*. New York: New York University Press.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59*, 614-625. doi:10.1037/0003-066X.59.7.614

- Corrigan, P. W., & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Psychologist*, *54*, 765–776. doi: 10.1037/0003066X.54.9.765
- Corrigan P. W., Larson, J. E., & Rusch, N. (2009). Self-stigma and the “why try” effect: Impact on life goals and evidence-based practices. *World Psychiatry*, *8*, 75–81. 10.1002/j.20515545.2009.tb00218.x
- Corrigan, P.W.; Rowan, D.; Green, A.; Lundin, R.; River, P.; Uphoff-Wasowski, K.; White, K.; and Kubiak, M.A. Challenging two mental illness stigmas: Personal responsibility and dangerousness. *Schizophrenia Bulletin*, *28*, 293-309, 2002.
- Corrigan PW, Watson AC. At issue: Stop the stigma: call mental illness a brain disease. *Schizophr Bull.* 2004; *30*, :477–479
- Cowan, A. (2014, November 21). Adam Lanza’s Mental Problems ‘Completely Untreated’ Before Newtown Shootings, Report Says. Retrieved December 20, 2015
<http://www.nytimes.com/2014/11/22/nyregion/before-newtown-shootings-adam-lanzas-mental-problems-completely-untreated-report-says.html>
- Diefenbach, D. L., & West, M. D. (2007). Television and attitudes toward mental health issues: Cultivation analysis and the third-person effect. *Journal of Community Psychology*, *35*, 181-195. doi:10.1002/jcop.2014
- Diefenbach, D. L. (1997). The portrayal of mental illness on prime-time television. *Journal of Community Psychology*, *25*, 289-302. doi:10.1002/(SICI)15206629(199705)25:3<289::AID-JCOP5>3.0.CO;2-R

- Dietrich, S., Heider, D., Matschinger, H., & Angermeyer, M. C. (2006). Influence of newspaper reporting on adolescents' attitudes toward people with mental illness. *Social Psychiatry and Psychiatric Epidemiology*, *41*, 318-322. doi:10.1007/s00127-005-0026-y
- Easter MM. “Not all my fault”: genetics, stigma, and personal responsibility for women with eating disorders. *Soc Sci Med*. 2012;75:1408–16. doi: 10.1016/j.socscimed.2012.05.042
- Evans-Lacko, S., London, J., Japhet, S., Rüsçh, N., Flach, C., & Corker, E. (2012) Mass social contact interventions and their effect on mental health related stigma and intended discrimination. *BMC Public Health*, *12*, 489. doi: 10.1186/1471-2458-12-489
- Ford, M. (2015, June 8). America's Largest Mental Hospital is a Jail. Retrieved April 05, 2016, from <http://www.theatlantic.com/politics/archive/2015/06/americas-largest-mental-hospital-is-a-jail/395012>
- Friedman, R. (2012, December 17). In Gun Debate, a Misguided Focus on Mental Illness. Retrieved December 20, 2015. http://www.nytimes.com/2012/12/18/health/a-misguided-focus-on-mental-illness-in-gun-control-debate.html?_r=0
- Greenwald, A.G., & Banaji, M.R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*, 4–27. doi: 10.1037/0033-295X.102.1.4
- Goodwin, J. (2013) The horror of stigma: Psychosis and mental health care environments in twenty-first-century horror film (Part II). *Perspectives in Psychiatric Care*, *50*, 22-234. doi: 10.1111/ppc.12045

- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*, 1464–1480. doi: /10.1037/0022-3514.74.6.1464
- Greenwald, A.G., Poehlman, T.A., Uhlmann, E.L., & Banaji, M.R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology, 97*, 17–41. doi:10.1037/a0015575
- Gunnell, J. J., & Ceci, S. J. (2010). When emotionality trumps reason: A study of individual processing style and juror bias. *Behavioral Sciences & The Law, 28*, 850-877. doi:10.1002/bsl.939
- Hand, Lindsey Jo. (2010). *The Portrayal of schizophrenia in television: An experiment assessing how viewer attitudes are affected*. UNLV Theses, Dissertations, Professional Papers, and Capstones. Paper 233. <http://digitalscholarship.unlv.edu/thesesdissertations/233>
- Hill, C., Memon, A., & McGeorge, P. (2008). The role of confirmation bias in suspect interviews: A systematic evaluation. *Legal And Criminological Psychology, 13*, 357-371. doi:10.1348/135532507X238682
- James, D., & Glaze, L. Mental health problems of prison and jail inmates. *Bureau of Justice Statistics*. 2006. Retrieved November 15, 2014. bjs.gov/content/pub/pdf/mhppji.pdf
- Joyal C. C., Dubreucq J-L., & Gendron C. (2007). Major mental disorders and violence: A critical update. *Current Psychiatry Reviews, 3*, 33–50. doi:10.2174/157340007779815628.

- Link, B., & Cullen, F. (1986). Contact with the mentally ill and perceptions of how dangerous they are. *Journal of Health & Social Behavior*, 27, 289 – 302. doi: 10.2307/2136945
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27 doi: 10.1146/annurev.soc.27.1.363.
- Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B.A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health*, 89, 1328–1333. doi: 10.2105/AJPH.89.9.1328
- Mortimer, A., & Shepherd, E. (1999). Frames of mind: Schemata guiding cognition and conduct in the interviewing of suspected offenders. In A. Memon & R. Bull (Eds.), *Handbook of the psychology of interviewing*, 293–315, Chichester: Wiley.
- Moston, S., Stephenson, G. M., & Williamson, T. M. (1992). The effects of case characteristics on suspect behaviour during police questioning. *British Journal of Criminology*, 32, 23-40. doi: 10.1080/10439463.2013.784297
- NEDC. (2015, June 29). Strategies and key messages. Retrieved April 20, 2016, from <http://www.nedc.com.au/how-to-communicate-about-eating-disorders>
- Norman, R. G., Windell, D., & Manchanda, R. (2012). Mental Illness Beliefs Measure. PsycTESTS, doi:10.1037/t35127-000
- Owen, P. (2012). Portrayals of schizophrenia by entertainment media: a content analysis of contemporary movies. *Psychiatric Services*, 63, 655-659. doi:10.1176/appi.ps.201100371

- Pan, D. (2013, April 23). Timeline: Deinstitutionalization and its consequences. Retrieved December 22, 2015 <http://www.motherjones.com/politics/2013/04/timeline-mental-health-america>
- Pedersen, E. R., & Paves, A. P. (2014). Comparing perceived public stigma and personal stigma of mental health treatment seeking in a young adult sample. *Psychiatry Research*, doi:10.1016/j.psychres.2014.05.017
- Penn, D. L., Guynan, K., Daily, T., Spaulding, W. D., Garbin, C. P., & Sullivan, M. (1994). Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin*, 20, 567–578. doi: 10.1093/schbul/20.3.567
- Penn, D. L., Kommana, S., Mansfield, M., & Link, B. G. (1999). Dispelling the stigma of schizophrenia: II. The impact of information on dangerousness. *Schizophrenia Bulletin*, 25, 437-446. doi: 10.1093/oxfordjournals.schbul.a033391
- Pescosolido, B. A., Monahan, J., Link, B. G. Stueve, A., & Kikuzawa, S. (1999). The public's view of the competence, dangerousness, and need for legal coercion of persons with mental health problems. *American Journal of Public Health*, 89, 339–1345. doi: 10.2105/AJPH.89.9.1339
- Pham, M. T., Cohen, J. B., Pracejus, J. W., & Hughes, G. D. (2001), Affect monitoring and the primacy of feelings in judgment, *Journal of Consumer Research*, 28, 167–88. doi: 10.1086/322896
- Ritterfeld, U., & Jin, S. (2006). Schizophrenia Attitude Scale. *PsycTESTS*, doi:10.1037/t15571000

- Roberts, C. F., Golding, S. L., & Fincham, F. D. (1987). Criminal Responsibility Measures *PsycTESTS*, doi:10.1037/t38265-000
- Ruva, C. L., & Guenther, C. C. (2015). From the shadows into the light: How pretrial publicity and deliberation affect mock jurors' decisions, impressions, and memory. *Law and Human Behavior*, 39, 294-310. doi:10.1037/lhb0000117
- Teachman, B. A., Wilson, J. G., & Komarovskaya, I. (2006). Implicit and explicit stigma of mental illness in diagnosed and healthy samples. *Journal of Social and Clinical Psychology*, 25, 75–95. doi:10.1521/jscp.2006.25.1.75
- Thornton, J. A., & Wahl, O. F. (1996). Impact of a newspaper article on attitudes toward mental illness. *Journal of Community Psychology*, 24, 17-25. doi:10.1002/(SICI)1520-6629(199601)24:1<17::AID-JCOP2>3.0.CO;2-0
- Torrey, E. F., Kennard, A. D., Eslinger, D., Lamb, R., & Pavle, J. (2010, May 1). More mentally ill persons are in jails and prisons than hospitals: A survey of the states. https://www.saferfoundation.org/files/documents/final_jails_v_hospitals_study.pdf
- Turndorf, J. (2012, December 20). Was Adam Lanza an undiagnosed schizophrenic? Retrieved December 20, 2015 <https://www.psychologytoday.com/blog/we-can-work-it-out/201212/was-adam-lanza-undiagnosed-schizophrenic>
- Singhal, A., & Rogers, E. M. (1999). *Entertainment-education: A communication strategy for social change*. Mahwah, NJ: Erlbaum Associates.

- Stuart, H. (2006). Media portrayal of mental illness and its treatments: What effect does it have on people with mental illness?. *CNS Drugs*, *20*, 99-106.
doi:10.2165/00023210200620020-00002
- Swanson, J. W., McGinty, E. E., Fazel, S., & Mays, V. M. (2015). Mental illness and reduction of gun violence and suicide: bringing epidemiologic research to policy. *Annals of Epidemiology*, *5* 366-382. doi:10.1016/j.annepidem.2014.03.004
- Swartz M. S., Swanson J.W., & Hiday V. A. (1998). Violence and severe mental illness: The effects of substance abuse and nonadherence to medication. *American Journal of Psychiatry*, *155*, 226–231. doi: 10.1176/ajp.155.2.226
- Van Dorn, R. A., Swanson, J. W., Elbogen, E. B., & Swartz, M. S. (2005). A comparison of stigmatizing attitudes toward persons with schizophrenia in four stakeholder groups: Perceived likelihood of violence and desire for social distance. *Psychiatry: Interpersonal and Biological Processes*, *68*, 152-163. doi:10.1521/psyc.2005.68.2.152
- Wahl, O. F., & Roth, R. (1982). Television images of mental illness: Results of a metropolitan Washington media watch. *Journal of Broadcasting*, *26*, 599–606. doi:
pdf/10.1080/08838158209364028
- White, M. J., & White, G. B. (2006). Implicit and explicit occupational gender stereotypes. *Sex Roles*, *55*, 259–266. doi:10.1007/s11199-006-9078-z
- Wilcox, S. (2014). *Stigmatization to criminalization: Mental illness incarcerated*. Unpublished Sociology paper, Connecticut College.

Appendix A

Mental Illness Beliefs Measure

Personal responsibility for illnesses

1. Mental illness results from a failure of self-control.
2. Developing mental illness has nothing to do with willpower and self-discipline.
3. Mental illness does not result from a failure of self-control.
4. Mental illness comes about when someone stops making the effort to deal with the challenges of life.
5. People with mental illness are personally responsible for becoming ill.

Danger

1. People with a mental illness are dangerous.
2. In recent years the number of crimes committed by people with a mental illness has been increasing.
3. If all patients with a mental illness were admitted to locked wards, the number of violent crimes would be markedly reduced.
4. People with schizophrenia do not commit brutal crimes.
5. The symptoms of schizophrenia do not lead to violence.

Continuity with normal experience

1. Given extreme circumstances many of us could show signs of mental illness.
2. Most of us from time to time show signs of mental illness.
3. Normal people do not have any of the signs of mental illness
4. There is a lot of similarity between mental illness and the experience of normal people.

Social inappropriateness

1. It would be easy to interact with someone with mental illness.
2. People with mental illness are appropriate in their behavior when interacting with others.
3. People with mental illness often say rude and upsetting things.
4. Someone with mental illness is always able to engage in polite conversation.
5. You can often be embarrassed by what someone with mental illness says or does.

Prognosis

1. Most people with mental illness will completely recover.
2. It is rare for someone with mental illness to be completely cured.
3. With modern treatment methods these days, many patients with mental illness can be cured. Even with treatment, most people with mental illness will long continue to show signs of their illness.

Appendix B

Attitudes toward Schizophrenia Measure

Items

Emotional Attitude Component

1. I understand why most people dislike people with schizophrenia.
2. I can't blame anybody for being scared of schizophrenia.
3. I would really be interested in getting to know somebody who has schizophrenia.
4. I would not be able to cope with having a roommate with schizophrenia.
5. I would be afraid to meet somebody who has schizophrenia.
6. If I met somebody who admitted to having schizophrenia I would feel quite uneasy.

Cognitive Attitude Component

1. People with schizophrenia need to be supervised at all times.
2. I don't want to deal with people who have schizophrenia or other mental problems.
3. Having schizophrenia means to be totally different than anybody else.
4. Healthy people should not become romantically involved with somebody who has schizophrenia.
5. People with schizophrenia should try to be more in control of themselves.

Connotative Attitude Component

1. I understand why companies don't want to offer jobs to people with schizophrenia.
2. I would agree to invite somebody from a psychiatric institution to celebrate a holiday with my family and me.
3. I can understand why nobody would like to have somebody with schizophrenia as a co-worker.
4. I would never hire somebody with a history of schizophrenia as a babysitter.

Note. All items were measured by five-point Likert-type scales anchored by 'Completely Disagree' (1) and 'Completely Agree' (5).

Appendix C

Criminal Responsibility Measure

Items

1. People with mental illness, regardless of its severity, are equally blameworthy as nonmentally-ill persons as far as their socially deviant behavior is concerned.
2. Insanity acquitees should be detained no longer than if they had been found guilty of criminal charges.
3. If I knew that persons found not guilty by reason of insanity would be detained for an equal amount of time as if they had been found guilty, I would be more likely to make that finding.
4. Commitment to a mental hospital subsequent to an insanity acquittal should be for an indefinite amount of time.
5. The issue of insanity should be allowed only at the sentencing and mitigation stage of the trial process.
6. The issue of insanity should be allowed as a complete defense to a criminal charge.
7. I would be more comfortable with a finding of insanity if the release of persons found not guilty by reason of insanity were subject to judicial control, not simply to Department of Mental Health recommendation.
8. The insanity defense requires a retrospective judgment that a person, due to mental disease, either could not appreciate the wrongfulness of their conduct or could not control their behavior.

The subtlety of these judgments makes it nearly impossible to really know if someone was insane at the time of an alleged crime.

9. Persons who commit antisocial acts should be punished, liable to criminal sanctions, regardless of their degree of mental disturbance.

10. A severe mental disorder (e.g., schizophrenia) implies a reduced capacity to make rational decisions, to form criminal intents, and to conform one's conduct to the requirements of the law.

11. There is nothing inconsistent about finding a severely mentally disturbed person guilty of a criminal charge.

12. The “guilty but mentally ill” statutes allow blame to be appropriately imposed while acknowledging the treatment needs of the mentally ill.

13. I believe that the insanity defense strengthens the community's emphasis on personal responsibility in citizens.

Appendix D

Newscast of Mentally Ill Defendant

<https://www.youtube.com/watch?v=DEJiWATOOVQ>

This news clip from NBC Nightly News is available for viewing through YouTube. The newscast covers the jury's guilty verdict for James Holmes, the Colorado Movie Theater shooter, as well as their rejection of his insanity defense. A critical moment in this video arises when Holmes' defense attorney states that, "mental illness caused this".

Appendix E

Cognitive-Based Anti-Stigma Video

<https://www.youtube.com/watch?v=fYEfmkGmGx0>

Roche, the largest healthcare research institute in the world, produces many short videos regarding topics in health. This video uses physicians to address the stigma and stereotypes associated with schizophrenia.

Appendix F

Emotion-Based Anti-Stigma Video

<https://www.youtube.com/watch?v=ZHpKvmTJOhA>

Alongside Choices for Recovery, Johnson and Johnson produced a documentary that features people who have schizophrenia. In this short clip, Ashley talks about her experiences and how negative stereotypes and stigma affect her.

Appendix G

Organic Food Newscast

<https://www.youtube.com/watch?v=C2H1EOQCcvQ>

This newscast, obtained from NBC Nightly News, on YouTube, discusses organic food consumption in the United States. It specifically talks about a report that found organic food did not tend to be more nutritious than conventional food, however was less likely to have traces of harmful pesticides.

Appendix H

Healthy Eating Informational Video

<https://www.youtube.com/watch?v=WSWPgFkUUeU>

This health video, created by Howcast, lists steps for developing healthy eating habits.

Appendix I

Control Video

<https://www.youtube.com/watch?v=TS7WYn0qxzM&app=desktop>

This news story, also obtained through NBC Nightly News' YouTube channel, will be used as a control to create more time between videos. The story talks about a low clearance bridge in Durham, North Carolina, that has resulted in numerous accidents involving tractor trailers.

*Appendix J***Informed Consent**

I hereby consent to participate in Samantha Wilcox's research about news media.

I understand Samantha Wilcox is a student at Connecticut College and that this research is being conducted under the supervision of Dr. Ann Devlin.

I understand that this research will involve viewing a news story on an issue in the United States and completing a series of questionnaires.

While I understand that the direct benefits of this research to society are not known, I have been told that I may learn more about how journalism affects attitude formation.

I understand that this research will take about 30 minutes.

I understand that I will be compensated \$1.00 for my participation in this study.

I have been told that there are no known risks or discomforts related to participating in this research.

I have been told that Samantha Wilcox can be contacted at swilcox@conncoll.edu.

I understand that I may decline to answer any questions as I see fit, and that I may withdraw from the study without penalty at any time.

I understand that all information will be identified with a code number and NOT my name.

I have been advised that I may contact the researcher who will answer any questions that

I may have about the purposes and procedures of this study.

I understand that this study is not meant to gather information about specific individuals and that my responses will be combined with other participants' data for the purpose of statistical analyses.

I consent to publication of the study results as long as the identity of all participants is protected.

I understand that this research has been approved by the Connecticut College Human Subjects Institutional Review Board (IRB).

Concerns about any aspect of this study may be addressed to Professor Audrey Zakriski
Chairperson of the Connecticut College IRB (alzak@conncoll.edu).

I am at least 18 years of age, and I have read these explanations and assurances and voluntarily consent to participate in this research about news media.

Name (printed) _____

Signature _____

Date _____

Appendix K

Research Design

Conditions	IV	Control	IV	DV
Group 1	Holmes	Control	Emotion	Posttest
Group 2	Holmes	Control	Cognitive	Posttest
Group 3	Holmes	Control	Healthy	Posttest
Group 4	Organic	Control	Emotion	Posttest
Group 5	Organic	Control	Cognitive	Posttest
Group 6	Organic	Control	Healthy	Posttest

Appendix L

Demographic Questionnaire

Instructions: Please complete the following demographic information.

Age: _____

Gender: _____

Race: _____

Political Party Affiliation: _____

State of residence: _____

Do you have a mental illness?: _____

Do you know someone who has a mental illness?: _____

Appendix M

Debriefing Form

First of all, thank you for participating in this research . In this study I am looking at the portrayal of mental illness in the media and how different type of videos can reduce the negative attitudes toward mental illness that sensationalism in the media promotes. There were six different parts (conditions) in the study; each participant was involved in only one. I compared different types of anti-stigma video approaches, emotional and cognitive, and their effects on attitudes towards mental illness, specifically schizophrenia. I did not tell you the full purpose of the research to avoid influencing your responses.

Current literature suggests that the media influences attitude formation regarding a wide range of issues, including beliefs about those with mental illness. In light of the recent increase in mass shootings in the United States, this research seeks to establish how media coverage of these events might impact the effectiveness of different forms of anti-stigma videos.

To my knowledge, no research has actually focused on the relationship between media coverage of a mentally ill shooter and its effects on anti-stigma videos.

If you are interested in this topic and want to read the literature in this area, please contact me (Samantha Wilcox) at swilcox@conncoll.edu. If you have questions or concerns about the manner in which this study was conducted, you may contact the chair of Connecticut

College's Institutional Review Board, Audrey Zakriski at alzak@conncoll.edu

Listed below are two sources you may want to consult to learn more about this topic:

Beckett, L. (2014, June 10). What we actually know about the connections between mental illness, mass shootings, and gun violence. <http://www.motherjones.com/politics/2014/06/myth-vs-fact-violence-mental-health-jeffrey-swanson>

Wahl, O.F., & Roth, R. (1982). Television images of mental illness: Results of a metropolitan Washington media watch. *Journal of Broadcasting*, 26, 599–60