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The Impact of Film on the Construction and Deconstruction of Mental Illness Stigmatization in Young Adults

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**THE IMPACT OF FILM ON THE CONSTRUCTION AND DECONSTRUCTION
OF MENTAL ILLNESS STIGMATIZATION IN YOUNG ADULTS**

PROFESSIONAL DISSERTATION

SUBMITTED TO THE FACULTY

OF

**THE SCHOOL OF PROFESSIONAL PSYCHOLOGY
WRIGHT STATE UNIVERSITY**

BY

MICHAEL SHAUN PERCIFUL, Psy.M.

**IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
OF
DOCTOR OF PSYCHOLOGY**

Dayton, Ohio

September, 2013

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July 11, 2012

I HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER MY SUPERVISION BY **MICHAEL SHAUN PERCIFUL** ENTITLED **THE IMPACT OF FILM ON THE CONSTRUCTION AND DECONSTRUCTION OF MENTAL ILLNESS STIGMATIZATION IN YOUNG ADULTS** BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PSYCHOLOGY.

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Abstract

The current study examined the impact of film on participants' knowledge, attitudes, and behaviors towards people with schizophrenia. Films viewed in the current study included a fear-based inaccurate, likeable-inaccurate, and an educational-accurate depiction of schizophrenia. A control group was included. A total of 106 participants were recruited. Participants completed pre and post questionnaires separated by a 45-minute excerpt of a film. A 2 x 4 mixed design ANOVA was implemented to determine the effects of the films on measures of knowledge and attitudes. A Chi-square analysis was used to determine whether or not the films would impact potential behavior. Manipulation checks were included, as well as control measures for familiarity with schizophrenia. Results yielded significant increases in stigmatizing attitudes for participants in the fear-based inaccurate group compared to the accurate and control group. Stigmatizing attitudes were significantly lower for participants in the accurate group when compared to the likeable-inaccurate group. Knowledge did not vary. Participants viewing the likeable-inaccurate and accurate film tended to endorse behavioral benevolence compared to the fear-based inaccurate and control film. Lastly, fear-based participants reported increased negative affect and endorsed statements that people with schizophrenia were unpredictable, dependent, and dangerous. These results provide support for previous research indicating that accurate portrayals of severe mental illness decrease stigmatizing attitudes. The current study provides newly introduced empirical support for the hypothesis that negative, inaccurate portrayals of severe mental illness enhance stigmatizing attitudes. The direct advancement of social psychological research, as well as individual, social, and clinical implications are noted.

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Chapter I

It is estimated that about one-in-five youths, and one-in-four adults, in the United States (U.S.) have been diagnosed with a mental illness (National Institute of Mental Health [NIMH], 2006). It is also projected that fewer than one-in-five people receive needed psychological treatment (U.S. Department of Health and Human Services, 2000). Stigma has been deemed a major deterrent to treatment seeking behaviors for those with mental illness (U.S. Department of Health and Human Services, 2000). One-fourth of the 50-million Americans diagnosed with a mental illness avoid seeking treatment due to stigma (Brown & Bradley, 2002). Moreover, those attending treatment are less likely to comply with treatment recommendations (e.g., medications) when the level of perceived public stigma is high (Sirey et al., 2001). In a call for a national action agenda, the Surgeon General targeted reduction of mental illness stigma as a key interest and an overriding social issue (U.S. Department of Health and Human Services, 2000). The media, including television, newspaper articles, and popular films have been implicated in the facilitation of mental illness stigmatization by presenting negative and inaccurate depictions of various diagnoses.

Aim and Purpose

The purpose of this research is to investigate the immediate impact films depicting characters diagnosed with schizophrenia have on viewers' attitudes, knowledge, and benevolent behavior towards people with schizophrenia. The films used

in the current study were either identified as accurate or inaccurate depictions in the psychological or sociological literature. Measures used have also been documented in the literature as having adequate psychometrics. While negative and inaccurate portrayals of mental illness have been well documented in the literature, the impact of these portrayals has not been empirically explored.

Chapter II provides a review of the relevant literature on the stigmatization of mental illness. Chapter III describes the design and materials used to conduct the current study. Chapter IV reviews the results of the implemented statistical analyses and, finally, Chapter V discusses the implications, limitations, and future considerations yielded from the current study.

Chapter II

Literature Review

Labeling Debate

Stigma begins from the process of being labeled, in the present case, with a mental illness. The labeling of mental illness has yielded both positive and negative effects. Debate regarding the advantages and disadvantages of mental illness labels primarily stems from the controversial labeling theory published by Scheff (1966). Scheff argued that labeling an individual with a mental illness causes and exacerbates socially deviant behaviors. Gove (1975) vehemently opposed Scheff's stance by arguing that labeling an individual with mental illness does not cause deviant behavior. Rather, Gove proclaimed that mental illness labels are social consequences to deviant behavior. On one hand, Scheff's (1966) labeling theory illuminated possible deleterious effects of labeling others with a mental illness. On the other hand, Grove's (1975) criticism of labeling theory suggests that consequences of labeling are minimal. Moreover, labeling an individual with a mental illness can facilitate communication among psychological professionals and treatment recommendations. While this classic debate caused a rift among some researchers and mental health clinicians, it also set a foundation for future research and theory focused on ways in which stigma impacts those labeled as having a mental illness.

What is Stigma?

Decades of research has expanded knowledge regarding the mechanisms

underlying mental illness stigma. Link and Phelan (2001) integrated previous research and posited that stigma is comprised of multiple components. Specifically, Link and Phelan propose a model incorporating four key aspects of mental illness stigmatization, which include: (1) distinguishing and labeling differences, (2) associating differences with negative attributes, (3) separating “us” from “them,” and (4) status loss and discrimination (i.e., individual and structural).

The previously mentioned underlying aspects of stigmatization will likely vary in appearance depending on social characteristics of the labeler and the person being labeled, as well as the social situation in which interactions occur (Link & Phelan, 2001). For example, the first aspect, distinguishing and labeling differences can be identified by emotional, cognitive, or behavioral differences compared to the large majority, such as visual hallucinations. Once deemed salient by larger society, stereotypes (i.e., often negative) become associated with these differences (e.g., "People who see things that aren't there are scary"). Stereotypes may be based on past experience, personal observation, second-hand information, or messages from media outlets. Stereotypes and ensuing labels then become the foundation for beliefs that an individual is “fundamentally different” than others which facilitates the third aspect of mental illness stigmatization, the “us” and “them” mentality. This dichotomous mentality sets the stage for the fourth aspect, dehumanization (e.g., "He's not like us, he's schizo"). That is, the labeled individual typically becomes “a schizophrenic” rather than “a person diagnosed with schizophrenia.” The labeled individual will then likely experience individual and structural status loss and discrimination. Once individuals and society as a whole associate negative attributes to an entire group of people, those group members are likely

to be individually and systemically devalued, rejected, and excluded. Thus, they will inherently begin to lose status, and experience discrimination in a structured system organized to benefit those in power. For example, schizophrenia receives low levels of funding for research and treatment when compared to other physical illnesses (Link & Phelan, 2001).

Public Perceptions of Those with Mental Illness

The stigmatization of those with mental illness by the general public has been well documented in psychological literature and is reinforced during childhood, adolescence, and adulthood. Wahl (2002) suggested that stereotypical attitudes toward people with mental illness are likely instilled during childhood. Specifically, Wahl reviewed a number of studies suggesting that children as young as first graders have developed a concept mental illness. Moreover, children were more likely to associate mental illness with violence and become less accepting of those with mental illness as they progressed in age (i.e., from third grade to ninth grade). In contrast, children became more accepting of all other included disabilities (i.e., blindness, cancer, paraplegia, and mental retardation) over time (Wahl, 2002). Research also indicates that negative attitudes toward those with mental illness are likely to be reinforced and remain consistent or worsen into adulthood (Coverdale & Nairn, 2006).

Overall, research suggests that individuals with mental illness are perceived by children, adolescence, and adults as aggressive, violent, dangerous, and unpredictable in their behavior (Corrigan, 1998; Hannigan, 1999; Phelan & Link, 1998; Phelan, Link, Stueve, & Pescosolido, 2000). Phelan et al. (2000) found that the public's conception of mental illness broadened (i.e., knowledge of non-psychotic disorders) between 1950 and

1996. However, those with severe mental illnesses were two-and-a-half times more likely to be stereotyped as violent when compared to perceptions in the 1950's. In addition, certain segments of the population still perceive those with more common non-psychotic disorders (i.e., depression) as unrealistically violent toward others (Anglin, Link, & Phelan, 2006).

Link Between Violence and Mental Illness

It is important to note, however, that in reality mental illness has been weakly linked with violent behavior (Corrigan & Cooper, 2005). Corrigan and Cooper analyzed data from the Epidemiologic Catchment Area (ECA) and the 2000 United States (U.S.) Census data to examine potentiality of violence among those with a mental illness compared to the general population. They found age was a more accurate predictor of violent behavior than the diagnosis of a mental illness. Specifically, the association between violence and mental illness is weaker than the association between adolescence and violent behavior. However, slight elevations in risk for violent behaviors have been noted for those with dual diagnoses (Elbogen & Johnson, 2009). Specifically, Elbogen and Johnson found that those with severe mental illness with co-occurring substance abuse and/or dependence were more likely than the general population to engage in violent behavior. However, severe mental illness alone did not predict future violence. Overall, Corrigan and Cooper's (2005) and Elbogen and Johnson's (2009) analyses indicated that those with a major mental disorder (i.e., not using comorbid substances) were no more likely to engage in violent behavior than others without a mental illness diagnosis. Nonetheless, the public overwhelmingly senses a strong link between violent behaviors and mental illness, which is likely the result of stigma rather than fact

(Corrigan & Cooper, 2005).

Individual and Structural Discrimination

Misconceptions between mental illness and dangerousness exacerbate the stigmatization of, and in turn, worsen discrimination toward those with mental illness (Corrigan & Cooper, 2005). Individual and structural consequences of mental illness stigma include discrimination in housing, employment, and interpersonal relationships (Corrigan, 1998); status loss (Link & Phelan, 2010); decreased self-esteem (Corrigan, 2004); internalized devaluation, shame, and withdrawal (Link & Phelan, 2010); decreased treatment seeking behaviors (Wahl, 2003); prevention of funding for treatment centers and mental health parity (Corrigan & Cooper, 2005; Corrigan & Kleinlein, 2005); and dehumanizing those with mental illness by negating person-first identification. Stigma has long been thought to be rooted in media portrayals of mental illness (Sief, 2003).

A Call to Examine Media Outlets as a Source of Stigma

Selective media reporting is likely to exacerbate preconceived notions linking violence and mental illness (U.S. Department of Health and Human Services, 1999). In order to decrease negative perceptions of individuals with mental illness, there has been a call to examine media outlets and their contribution to the development of mental health stigma (Coverdale & Nairn, 2006; Stout, Villegas, & Jennings, 2004). Since the call to action, literature examining the portrayal of those with mental illness in the media has expanded. Researchers in psychology and sociology have recently focused on specific media channels including television and film. Moreover, there has been a move to investigate media specifically geared toward different age groups including children,

adolescents, and adults. Research suggests that film, in general, likely has an impact on children, adolescent, and adult attitudes and behavior. The following sections will review this impact, as well as discuss the common, and not so common, portrayals of mental illness in film.

Impact of Film on Youth Health-Related Attitudes and Behavior

There are a number of public health-risk studies examining the impact of film on youths' attitude and behavior change. For example, research investigating the effects of tobacco use in popular films suggests that merely observing these films can change attitudes toward smoking (Sargent et al., 2002). Sargent and colleagues administered a survey to middle school students asking them to identify what films they had viewed from a random subset of films portraying tobacco-use. They found a strong relationship between viewing positive portrayals of tobacco use in films and more positive attitudes toward smoking. They suggested that viewing positive depictions of smoking likely desensitizes adolescent's exposure, enhances their perceptions of the positive benefits of smoking, and makes them more likely to initiate smoking in the future (Sargent et al., 2002).

Dalton et al. (2003) found that adolescents are more likely to initiate smoking if exposed to popular films condoning smoking behavior. Dalton and colleagues surveyed adolescents aged 10 to 14-years-old in order to assess exposure to smoking in films. Participants were then contacted 13 to 24 months later to determine whether or not participants had initiated smoking. They found that those in the highest quartile of exposure to smoking in films were nearly three-times more likely to initiate smoking than those in the lowest quartile. Overall, research suggests that film portrayals condoning

smoking behavior shape attitudes toward smoking and smoking behavior as well.

If it is possible to change behavior and attitudes through media portrayals, certainly attitudes toward those living with mental illness can be impacted as well. Repeated exposure to films portraying negative stereotypes of those with mental illness may have an impact on stereotyping and discrimination. Moreover, observing discriminatory responses by others towards those with mental illnesses in films may impact actual behavior as well. There are several common types of mental illness portrayals in film.

Common Negative Portrayals of Mental Illness

In general, media depictions of mental illness have been associated with violence, danger, and aggressiveness (Sief, 2003; Wahl, Wood, & Richards, 2002). Moreover negative stereotypes of mental illness have been found in media directed towards audiences at different developmental levels. Wahl and colleagues (2003) examined the media's portrayal of mental illness in child-oriented films. They found that, like adult media portrayals of mental illness, media representations of those with a mental illness in child-oriented films were also likely to be portrayed as violent, dangerous, and aggressive. Moreover, dehumanizing stereotypes referring to mental health problems are used to mock and isolate individuals with a mental illness (e.g., wacko, nuts, maniac) and are pervasive in children's television and film (Wahl, 2003). Young children are observing negative stereotypes and the dehumanization of those with mental illness. These depictions are likely reinforced throughout adolescence by the popular-media.

Sargent et al. (2002) found that six out of the top ten violent movies viewed by an adolescent sample included a character labeled as having a mental illness (e.g., *Scream, I*

Know What You Did Last Summer, Halloween). Characters within these violent movies are often identified by derogatory terms referring to mental illness (e.g., crazy, insane), they may display symptoms related to mental illness, and/or have had prior exposure to or currently attend a mental health treatment facility. These movies typically included extreme gore, as well as gratuitous violence. For example, the villainous character from the *Halloween* films is notorious for gruesomely bludgeoning his victims to death. The legend to his character is that he escaped from a mental hospital. Forty-five percent of Sargent and colleagues (2002) adolescent sample had watched this feature film associating mental illness and violence (Sargent et al., 2002).

A depiction of mental illness differing from the violent and dangerous character is that of a feeble-minded, needy, dependent character that cannot function at an age-appropriate level because of his or her disorder (Corrigan, 1998; Sief, 2003). These characters depict those with mental illness as a laughable yet “likeable” character. However, these portrayals have been criticized for negating, or at least minimizing, the seriousness of some mental disorders (Corrigan, 1998; Sief, 2003). These characters are typically rendered as unusually silly individuals, are often involved in ludicrous mishaps, or are free spirited to the point of being completely out of touch with reality. For example, in the 1991 film *What about Bob?*, “Bob” is a character with multiple phobias and obsessions, and is depicted as a likeable and humorous man, but one who is foolish and excessively dependent on his therapist. His behaviors throughout the film evoke his therapist to tie him up at gun point and strap dynamite to him as a means of getting rid of him. The whimsical character thinks this is part of his therapy and ends up accidentally blowing up the therapist’s house. “Bob” ultimately becomes a personified caricature of

obsessive-compulsive disorder. Although the aforementioned film is a fictional comedy, it may still contribute to the development of inaccurate beliefs and stereotypes about people with mental illness. These types of portrayals have been found common in popular film. The impact these portrayals have on viewer's conceptualization of mental illness has not been examined.

Media Influence During Adolescence and Young-Adulthood

The media, including television (i.e., news, shows, and movies), books, and magazines, has been noted as a primary source of information for youths (Lopez, 1991). Lopez assessed adolescents' attitudes toward mental illness, as well as their perceptions of the primary influences on their attitudes. In regards to attitudes, she found that youths' attitudes toward those with mental illness tend to be insensitive (i.e., less accepting, greater social distance). Lopez attributed insensitive attitudes to impulsiveness associated with this age group, as well as a perceived dangerousness and unpredictability from those with a mental illness (Lopez, 1991). Lopez (1991) also found that along with parental influence and personal exposure to somebody diagnosed with a mental disorder, the media was commonly reported as an authority affecting the way youths perceive those with mental illness. Specifically, one-fourth of youths ranging from 14 to 18-years-old reported the media as a primary source of information regarding mental illness. Nearly two-thirds of youths reported media as either their primary or secondary source of information concerning those with mental illness. Lopez's (1991) suggested there was an association between the media as a primary source of mental illness information and negative stereotypes, thus, suggesting that the media has an opportunity to dispute or create negative stereotypes of mental illness. The way in which media presents images of

those with mental illness is likely to have distinct consequences for the adolescent and young-adult population.

Adolescent and Young Adult-Specific Consequences to Negative Portrayals

The onset of many mental disorders occurs during adolescence and young adulthood. These age ranges are, therefore, a favorable time for the prevention and treatment of mental disorders. Evans and Seligman (2005) suggest early treatment is often associated with more positive prognosis and the likelihood of suicidal ideation increases when symptoms go untreated. They also report that adolescent behaviors can be precursors to adult behaviors. Therefore, it is likely that adolescents who observe negative depictions of mental illness will be less willing to identify themselves as having a particular disorder, seek help for existing symptoms, or seek help as adults in the future (Evans & Seligman 2005). In fact, Jamieson, Romer, and Jamieson (2006) found that adolescents who had recently experienced depressive and suicidal symptoms, and were exposed to films associating suicide and mental illness, were less likely to believe in the efficacy of psychological treatment. These individuals were less likely to seek treatment. In summary, negative depictions of those with mental illness in the media can influence attitudes toward treatment efficacy, as well as behavioral avoidance of treatment. If media portrayals can affect behavior, they can likely affect attitudes.

Impact of Educational Films on Stigmatizing Attitudes

Evidence has been found suggesting that educational films (i.e., accurate depictions) can positively influence attitudes towards those with mental illness. For example, Laroi and Van der Linden (2009) presented a documentary depicting the lives of people diagnosed with schizophrenia. They found that an accurate depiction of

schizophrenia can decrease negative attitudes. Specifically, participants had less negative stereotypical attitudes (e.g., dangerousness) and desired less social distance from people with a mental illness (Laroi & Van der Linden, 2009).

In another study, Penn, Chamberlin, and Mueser (2003) examined whether or not viewing an accurate portrayal of schizophrenia would decrease stigma associated with the disorder. Participants were randomly assigned to one of four conditions including: (1) no documentary film, (2) documentary about polar bears, (3) documentary about fears of being overweight, and (4) a documentary about schizophrenia. Participants in the documentary about schizophrenia condition were less likely to blame individuals for having a disorder. Moreover, those same participants were more likely to believe the disorder could be successfully treated when compared to the remaining conditions (i.e., documentaries with no mention of mental illness; Penn et al., 2003).

Kerby, Calton, Dimambro, Flood, and Glazebrook (2008) found improvements in general attitudes towards those with serious mental illness. Specifically, Kerby and colleagues tested whether or not two educational anti-stigma films would impact fourth-year, undergraduate, medical student trainees' attitudes regarding social distance, perceived dangerousness, and psychiatry in general. The anti-stigma films directly challenged stereotypes such as dangerousness, inability to work and maintain relationships, and promoted a sense of overcoming adversity. Participants who watched the films had less stigmatizing attitudes after the film when compared to participants in a control condition (i.e., documentary unrelated to mental illness; Kerby et al., 2008).

Impact of Negative Film Portrayal on Stigmatizing Attitudes

There is evidence indicating that negative portrayals of those with mental illness

are pervasive in popular films. Research exploring negative portrayals of mental illness in popular film primarily focuses on whether or not portrayals are negative or positive. Researchers have measured decreases in stigmatizing attitudes by having participants view an educational or accurate portrayal of mental illness. However, studies measuring direct attitudinal change (i.e., positive, negative, or no change) after viewing negative depictions of mental illness in popular films is lacking.

Intention and Hypotheses

Negative portrayals of those with mental illness in fictional films are thought to facilitate and exacerbate the stigmatization of those with mental disorders. However, although derogatory depictions are well documented, the impact of these fictional negative portrayals on attitude has not been determined. The current study will explore the impact on knowledge, attitudes, and behavior of participants viewing a film portrayal of an individual diagnosed with schizophrenia. Specifically, the current study will examine whether or not films consisting of a negative (i.e., likeable yet inaccurate), negative (i.e., fear-based and inaccurate), or educational (i.e., accurate) portrayal of schizophrenia will have differing impacts on stigmatizing attitudes, accurate knowledge of schizophrenia, and potential benevolent behavior. It is hypothesized that viewing films (i.e., other than a control film) will impact participants attitudes, knowledge, and behaviors towards people with schizophrenia. It is hypothesized that both “Negative” film portrayals (i.e., likeable yet inaccurate and fear-based inaccurate) will decrease favorable attitudes, knowledge, and behavioral benevolence towards people with schizophrenia. It is hypothesized that the “Educational” film portrayal (i.e., accurate) will alternatively increase favorable attitudes, knowledge, and behavioral benevolence

towards people diagnosed with schizophrenia. Lastly, the “Neutral” or control film will lead to no change in attitudes, knowledge, and behavior.

Chapter III

Method

Participants

One-hundred and six undergraduate students, enrolled in basic psychology courses at Wright State University, voluntarily participated in the current study. The method and design of the current study was approved by the Institutional Review Board at Wright State University. Participants received research credit that went toward requirements for an introductory psychology class. Participants were recruited with the use of Wright State University's SONA system (i.e., a human subject pool management software program). All participants were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct."

Materials

The questionnaire packet included:

Demographics. A demographics questionnaire (See Appendix A) was provided in order to assess sex, age, sexual-orientation, race/ethnicity, employment, marital status, religion, education, current academic status, and annual income.

Attitude. Social distance scales are one of the most commonly encountered measures used in literature measuring mental illness stigma (Link, Yang, Phelan, & Collins, 2004). Social distance measures typically assess the likelihood that a respondent will initiate or maintain different types of relationships with a target person (e.g., individual with mental illness). Link and colleagues (2004) note that social distance

scales typically have internal-consistency reliability ranging from 0.75 to greater than 0.90. Moreover, the construct validity of social distance scales is generally adequate. A social distance scale (Ritterfeld & Jin, 2006; See Appendix B) was used to assess baseline attitudes towards those with mental illness, as well as to measure potential change in attitudes after viewing films. The social distance scale consists of fifteen items which can be segmented into three constructs comprising attitude. The scale measures emotional, cognitive, and behavioral aspects of attitude. Similar to Ritterfeld and Jin (2006), items were put in a semi-projective format by writing them from a third-person perspective in order to account for social desirability attached to attitudes. Items were measured using a five-point Likert scale with anchors ranging from (1) “Completely Disagree” to (5) “Completely Agree.” This measure was given pre and post viewing the film.

Knowledge. The Knowledge About Schizophrenia Test (KAST; Compton, Quintero, & Esterberg, 2007) was given in order to measure whether or not each film made an impact on the viewers knowledge about schizophrenia (See Appendix C). The KAST is a brief, self-administered, 18-item multiple choice test that measures general knowledge of schizophrenia. It has been reported as having adequate internal consistency, reliability, and construct validity (Compton et al., 2007). This measure was given pre and post viewing the film.

Behavioral Benevolence. The potential behavior of participants is a difficult construct to measure in mental illness stigmatization research. In order to measure “potential” behavior, the primary investigator created a mock “Community Volunteer Application (See Appendix D).” This last measure completed by participants requested

that they give two-hours of their time, for a single day, engaging in a recreational activity (e.g., board games, arts and crafts, reading, pool) with a person diagnosed with schizophrenia. Participants were informed that there would be no monetary compensation. However, volunteering their time was presented as a rewarding experience in itself.

Affect. The Positive and Negative Affect Schedule – Short Form (I-PANAS-SF; Thompson, 2007; See Appendix E) was used to determine whether the four films had differential effects on participants' mood. The I-PANAS-SF is a self-report measure consisting of 10-item mood scales. The I-PANAS-SF mood scale consists of ten words describing either positive or negative affect. Using a five-point Likert scale, each participant rated how strongly s/he felt each emotion at the present moment. The terms included in the positive affect scale were Alert, Active, Determined, Attentive, and Inspired. The terms on the negative affect scale were Upset, Hostile, Nervous, Ashamed, and Afraid. This measure was given pre and post viewing the film.

Familiarity/Proximity. Participants completed The Level of Contact Report (LOCR; Holmes, Corrigan, Williams, Canar, & Kubiak, 1999; See Appendix F). The LOCR assesses familiarity with those having a mental illness. LOCR lists 12 situations of varying interaction or familiarity with those with severe mental illness. The 12 scenarios listed on the questionnaire range from least intimate contact to medium and high intimacy. For example, an item with a score of two reads, "I have observed, in passing, a person I believe may have had a severe mental illness." An item with a score of 12 reads, "I have a severe mental illness." Experts in severe mental illness and psychiatric rehabilitation ranked the situations in terms of intimacy with an interrater reliability of

0.83. Research participants were asked to check all items which apply to their individual situation. The items were scored and tallied in order to assess participant familiarity with severe mental illness.

Immediate impact. Participants completed an additional self-report questionnaire quantifying their perceived attitude change, if any, before and after viewing the film. The Impact on Attitude Self-Report Scale (IOA-SR; See Appendix G) was constructed in order to assess the immediate impact of viewing each film. The IOA-SR was filled out after watching the film. The IOA-SR consists of 10-items adapted from the Community Attitudes Toward the Mentally Ill scale (CAMI; see Taylor & Dear, 1981). Participants were instructed to rate their agreement for each of the statements included on the measure after viewing the film. Statements include stereotypical attitudes, as well as attitudes of benevolence and separatism. No psychometric data is available on this scale.

Films

All experimental films portrayed an individual labeled in the film as having schizophrenia. The negative (i.e., likeable yet inaccurate and fear-based inaccurate) and educational (i.e. accurate) portrayals of mental illness were selected based on brief descriptions in the psychological literature.

Me, Myself, and Irene, (Likeable – Inaccurate). The selected movie *Me, Myself, and Irene*, starring Jim Carrey, is a comedy released in 2000. Jim Carrey plays a nice guy cop (Charlie) who becomes “schizo” after his wife leaves him. Charlie quickly develops a "split personality" that could be characterized as a modern day Jekyll and Hyde. On one hand, he is kind, warm, and caring. However, he quickly switches to his outrageous alternate personality (i.e., Hank) who has a filthy mouth, a bad attitude, and is

easily angered. Overall, the film paints a picture of a laughable character that has no control of his diagnosed “advanced delusional schizophrenia” (which is inaccurately depicted as dissociative identity disorder). Rosenstock (2003) describes the film as a “clownish comedy that advocacy groups see as being almost entirely devoid of accuracy” (p. 118).

Donnie Darko (Fear-based - Inaccurate). The selected movie *Donnie Darko*, starring Jake Gyllenhaal, is drama/thriller released in 2001. Donnie depends on medication to help him cope with episodes of schizophrenia. Donnie is portrayed as delusional and experiences auditory and visual hallucinations. Specifically, he is often plagued by visions of a large bunny rabbit named “Frank” that influences Donnie to commit a series of crimes including violent acts and vandalism (See Garrett, 2008).

The Brush, The Pen, and Recovery (Educational – Accurate). The selected movie *The Brush, The Pen, and Recovery*, is a documentary of an art program for people with schizophrenia. The artists are preparing for their first show in a commercial gallery and the audience is able to experience their immediate thoughts and feelings. Dr. Peter Cook comments on the website (<http://www.cuttingforstone.com/thebrush.html>) “I love this film. Without shying away from the realities of having a serious and persistent mental illness, three courageous people talk of their struggles, their dreams and their hope. Educational, accurate, human, and compelling.”

What the Bleep Do We Know!?! (Control – Neutral). The selected movie *What the Bleep Do We Know!?!*, is a film that follows a deaf photographer, as she questions the meaning of life. The film is an exploration of spirituality, quantum physics, and consciousness.

Procedure

Students were informed that they would be taking part in a study investigating societal and mental health issues. Once the total number of participants was acquired, each individual was randomly assigned to one-of-four conditions. The four conditions are as follows: (1) Likeable – inaccurate portrayal film, (2) Fear-based – inaccurate portrayal film, (3) Educational – accurate portrayal film, and (4) Film lacking any portrayal of mental illness. All participants were then notified to report to a classroom located on Wright State University's campus at a chosen time. Each group met on the same day and at the same specified time.

The primary investigator, as well as three other doctoral level trainees, concurrently implemented the following procedure in separate classrooms. All participants first signed a written informed consent in order to provide research credit. Next, participants were provided with a pencil in order to complete the baseline questionnaire packet. Participants were informed that their responses would be completely confidential, as all identifying information would be absent from their response packet. Ensuring confidentiality minimized responses influenced by social desirability and assisted in maximizing responses representing genuine attitudes towards people with schizophrenia. Students were instructed to stop completing their packets upon reaching a page with a 'STOP' sign.

Next, participants viewed a 45-minute excerpt of a film containing a likeable – inaccurate, fear-based – inaccurate, or educational – accurate portrayal of mental illness depending on their assigned condition (except for those in the control condition). Those in the control condition viewed 45-minutes of a documentary that did not contain aspects

related to mental illness. All participants were then instructed to complete a similar questionnaire packet directly after watching the film.

Finally, participants were debriefed on the intention of the current study and given a synopsis of the existing literature regarding the stigmatization of those with severe mental illness. Participants were also provided with psychoeducational information regarding schizophrenia and other severe mental illnesses, and were given resources for treatment seeking and genuine volunteer opportunities. The primary investigator and doctoral level trainees' processed any questions or concerns before the conclusion of each group. Participants spent a total of 2-hours engaged in the research.

Data Analyses

Analyses were run using NCSS software. The current experiment utilized 2 (i.e., time) x 4 (i.e., type of film) mixed design analyses of variance (ANOVA) in order to determine the effects of the four selected films on measures of knowledge, attitudes, and affect. A Chi-Square was implemented in order to determine whether or not the selected films would impact participants' decisions to potentially volunteer their time engaging in recreational activities with an individual diagnosed with schizophrenia. A Chi-Square was also used to explore whether or not potential differences existed between the composition of groups. Post-hoc tests were implemented following the primary analyses when applicable.

Chapter IV

Results

Demographics

A sample of 106 participants was obtained by recruiting college-age participants enrolled in basic level psychology classes at Wright State University. The sample was 78% female, 91% heterosexual, and an average of twenty years old. The sample was 74% White, 14% Black, 4% Asian, 3% Native Hawaiian or Other Pacific Islander, and the remainder was in another category (i.e., Native American, Latino, or Other). In regards to marital status, 69% participants were single, 23% were in a non-married relationship, 7% were married, and 1% reported being divorced. As far as academic standing, 59% of participants were freshman, 18% sophomores, 12% juniors, and 9% were seniors at the university. The sample was comprised of 83% of participants endorsing Christian denominations (e.g., Protestant, Roman Catholics, Evangelical).

Attitude

A 2 x 4 mixed design ANOVA was used to test the impact of films on participants' attitudes (as operationalized by a social distance scale) towards those diagnosed with schizophrenia. A significant interaction effect for films by time was obtained [$F(3,102) = 12.50, p < .001$]. A Bonferroni (All-Pairwise) Multiple Comparison Test indicated social distance scores for participants in the fear-based group ($M = 44.18$) were significantly increased compared to participants in both the accurate group ($M = 34.19$) and the control group ($M = 37.23$). In other words, participants who viewed the

fear-based film were more likely to endorse stigmatizing attitudes towards people diagnosed with schizophrenia compared to participants who viewed an accurate depiction or neutral film. Furthermore, social distance scores for the accurate group were significantly lower than both the likeable group ($M = 40.81$) and the fear-based group. That is, participants who viewed the accurate film were less likely to endorse stigmatizing attitudes towards people diagnosed with schizophrenia compared to participants who viewed either one of the inaccurate films (i.e., likeable and fear-based). An item-analysis of the social distance scale, using a Bonferroni (All-Pairwise) Multiple Comparison Test, revealed significant differences on individual social distance items. Results indicated significant interactions for multiple statements on the social distance scale encompassing aspects of emotional, cognitive, and behavioral attitudes (See Table 1).

In regards to emotional attitudes on the social distance scale, participants in the fear-based group ($M = 3.79$) were significantly more likely to endorse the statement “I can’t blame anybody for being scared of schizophrenia” than the accurate group ($M = 2.5$). Analyses revealed a significant interaction in the fear-based group for the statement “I would not be able to cope with having a roommate who has schizophrenia” [$F(3,102) = 3.05, p < .05$], but did not meet the conservative criteria for the Bonferroni post-hoc comparison. Participants in the fear-based group ($M = 2.21$) were significantly more likely to endorse the statement “I would be afraid to meet somebody who has schizophrenia” than the accurate group ($M = 1.50$). Participants in the fear-based group ($M = 2.5$) were significantly more likely to endorse the statement “If I met somebody who admitted to having schizophrenia I would feel quite uneasy” when compared to the

both the accurate ($M = 1.92$) and the control group ($M = 1.96$). Furthermore, participants in the accurate group were significantly less likely to endorse the same statement than the likeable group ($M = 2.61$) meaning the likeable group reported feeling more uneasy around somebody who admitted to having schizophrenia than the accurate group.

In regards to cognitive attitudes on the social distance scale, participants in the fear-based group ($M = 3.14$) were significantly more likely to endorse the statement “People with schizophrenia need to be supervised at all times” when compared to the accurate ($M = 2.04$) and control group ($M = 2.19$). Furthermore, those in the fear-based group were more likely to endorse the statement “Healthy people should not become romantically involved with somebody who has schizophrenia” after watching the film ($M = 2.12$) compared to baseline measures of the same group ($M = 1.5$). Lastly, a significant interaction was noted for the statement “People with schizophrenia should try to be more in control of themselves [$F(3,102) = 2.86, p < .05$]. Once again, however, post-hocs did not meet criteria for significance according to Bonferonni multiple comparisons. In regards to behavioral attitudes on the social distance scale, participants in the fear-based group ($M = 3.36$) were significantly more likely to endorse the statement “I understand why companies don’t want to offer jobs to people with schizophrenia” when compared to the accurate group ($M = 2.46$). Furthermore, participants in the accurate group ($M = 2.15$) and the control group ($M = 2.50$) were significantly less likely to endorse the statement “I can understand why nobody would like to have somebody with schizophrenia as a co-worker” than both the fear-based group ($M = 3.18$) and the likeable group ($M = 3.23$).

Table 1

Individual Item Social Distance Analyses For All Groups

Statement	F Score	Significance
Significant interaction with post-hoc significance		
People with schizophrenia should try to be more in control of themselves	2.86	< 0.05
I would not be able to cope with having a roommate with schizophrenia	3.05	< 0.05
Significant difference between fear-based and accurate group		
I can't blame anybody for being scared of schizophrenia	5.00	< 0.01
I would be afraid to meet somebody who has schizophrenia	5.58	< 0.01
I understand why companies don't want to offer jobs to people with schizophrenia	2.66	0.05
Significant difference between fear-based and both accurate and control group		
If I met somebody who admitted to having schizophrenia I would feel quite uneasy	8.71	< 0.01
People with schizophrenia need to be supervised at all times	6.65	< 0.01
Healthy people should not become romantically involved with somebody who has schizophrenia	6.14	< 0.01
Significant difference between accurate and likeable group		
If I met somebody who admitted to having schizophrenia I would feel quite uneasy	8.71	< 0.01
Significant difference between accurate and control group to both fear-based and likeable group		
I can understand why nobody would like to have somebody with schizophrenia as a co-worker	6.17	< 0.01

Knowledge

A 2 x 4 mixed design ANOVA was used to determine the impact of each film on participant's general knowledge about schizophrenia. Analyses yielded no significant differences in increases or decreases of participant knowledge about schizophrenia.

Behavior

A Chi-Square analysis was used to determine if there would be any differences in

whether participants would volunteer two-hours of their time to engage in recreational activities with an individual diagnosed with schizophrenia based on the type of film they had viewed. The Chi-Square analysis did not yield significant results in potential benevolent behaviors towards people diagnosed with schizophrenia [$X^2(3) = 6.38, p = .09$]. However, the analysis approached statistical significance thereby suggesting a notable pattern. Specifically, participants in the likeable (61%) and accurate group (52%) were more likely to volunteer than those in the fear-based (32%) and control group (35%; See Table 2).

Table 2

Behavioral Benevolence Chi-Square Results by Group

	Likeable	Fear-Based	Accurate	Control
Volunteer	16 (61%)	9 (32%)	13 (52%)	9 (35%)
Non-Volunteer	10 (39%)	19 (68%)	12 (48%)	17 (65%)

Affect

A 2 x 4 mixed design ANOVA was used to test the film's impact on participants' affect after viewing their perspective film. Significant interactions for films by time was obtained for Upset [$F(3,102) = 3.17, p < .05$], Nervous [$F(3,102) = 4.84, p < .01$], Afraid [$F(3,102) = 4.84, p < .01$], and Hostile [$F(3,102) = 2.68, p = .05$]. A Bonferroni (All-Pairwise) Multiple Comparison Test indicated that those in the fear-based group ($M = 1.79$) were significantly more likely to feel Upset when compared to control ($M = 1.12$) and accurate group ($M = 1.23$). Participants in the fear-based group ($M = 2.00$) were also significantly more likely to feel Nervous after viewing the film compared to those in the

control ($M = 1.27$) and accurate group ($M = 1.19$). Participants in the fear-based group ($M = 1.82$) were significantly more likely to feel Afraid after viewing the film compared the control ($M = 1.15$), accurate ($M = 1.04$), and the likeable-inaccurate group ($M = 1.35$). Lastly, using the less conservative Fisher's LSD Multiple-Comparison Test, participants in the fear-based group ($M = 1.36$) were significantly more likely to feel Hostile compared to both the control ($M = 1.04$) and accurate group ($M = 1.04$).

Familiarity

A Chi-Square analysis was used to determine whether or not differences existed between groups in participants' familiarity with severe mental illness. The Chi-Square analysis revealed a bimodal distribution where participants were either slightly more or less familiar with severe mental illness. However, the analysis did not yield any significant differences between groups.

Manipulation Check

A One-Way ANOVA was used to determine whether or not each selected film had its intended impact on participants. Scheffe's Multiple-Comparison Test was implemented to analyze significant interactions. Results indicated significant interactions for multiple statements on the manipulation check. See Table 3 for results of post-hoc analyses.

Table 3

Individual Item Manipulation Check For All Groups By Means

Group Number		1	2	3	4	
Items	F Score	Significance	Likeable	Fear-Based	Accurate	Control
This film made me feel that people with schizophrenia are unpredictable	24.18	$p < .001$	6.80 _{3,4}	7.68 _{3,4}	2.85 _{1,2}	3.07 _{1,2}
After watching this film, I believe that people with schizophrenia can live on their own	9.32	$p < .001$	6.38 ₂	3.61 _{1,3}	6.92 ₂	5.23
After watching this film, I think that people with schizophrenia are dangerous	32.21	$p < .001$	5.15 _{3,4}	6.60 _{3,4}	1.65 _{1,2}	2.19 _{1,2}
Viewing this film made me feel more positive about people with schizophrenia	10.98	$p < .001$	4.46 ₃	2.82 _{3,4}	6.81 _{1,2}	5.08 ₂
Viewing this film made me feel less positive about people with schizophrenia	27.20	$p < .001$	5.54 _{3,4}	6.46 _{3,4}	1.46 _{1,2}	1.88 _{1,2}
This film makes me feel more concerned for my safety when around people with schizophrenia	15.95	$p < .001$	3.42 _{2,3}	5.5 _{1,3,4}	1.46 _{1,2}	1.58 ₂
This film helped me to be more empathic towards those with schizophrenia	5.68	$p = .001$	6.35	6.50 ₄	7.19 ₄	4.46 _{2,3}
This film was an accurate portrayal of schizophrenia	13.91	$p < .001$	3.15 _{2,3}	5.21 _{1,4}	5.96 _{1,4}	2.31 _{2,3}
My knowledge of mental comes from the media	2.19	NS	2.85	4.75	3.81	4.5
I think films can impact they way people perceive others with mental illness	4.69	$p < .005$	8.85 ₄	9.11 ₄	8.58	7.11 _{1,2}

1 Significant difference from likeable-inaccurate group

2 Significant difference from fear-based group

3 Significant difference from accurate group

4 Significant difference from control group

NS = Non significant

Chapter V

Discussion

The purpose of the current study was to explore the impact of films portraying characters with schizophrenia on participants' knowledge, attitudes, and behaviors related to people diagnosed with schizophrenia. Specifically, this study was designed to examine the impact of films depicting individuals diagnosed with schizophrenia in fear-based/inaccurate, likeable/inaccurate, and educational/accurate portrayals. A neutral film was also used as a control group. Impact was measured by self-reported attitudes (i.e., social distance scale), knowledge, and potential benevolent behaviors towards individuals diagnosed with schizophrenia.

It was hypothesized that: (1) the fear-based, inaccurate film portrayal would decrease favorable attitudes, knowledge, and behavioral benevolence towards people diagnosed with schizophrenia, (2) the likeable, inaccurate film portrayal would decrease favorable attitudes, knowledge, and behavioral benevolence towards people diagnosed with schizophrenia, (3) the educational, accurate portrayal would increase favorable attitudes, knowledge, and behavioral benevolence towards people diagnosed with schizophrenia, and (4) the control film would yield no change in attitudes, knowledge, and behavioral benevolence. Results of the current study were mixed in that some hypotheses were supported while others were not.

Attitudes

In regards to attitudes, participants watching the fear-based portrayal of

schizophrenia were more likely to endorse stigmatizing attitudes across emotional, cognitive, and behavioral domains of attitude when compared to the accurate and control group. On the other hand, the current study supports previous studies (e.g., Kerby et al., 2008; Laroi & Van der Linden, 2009; Penn et al., 2003) suggesting viewing an accurate portrayal of schizophrenia decreases stigmatizing attitudes. The accurate portrayal successfully decreased overall stigmatizing attitudes when compared to the likeable/inaccurate and fear-based/inaccurate group.

Surprisingly, the accurate and control group did not differ in stigmatizing attitudes. In fact, the control group's stigmatizing attitudes towards those with schizophrenia slightly decreased after watching the neutral film. This decrease in stigmatizing attitudes within the control group may have occurred due to the content of the neutral film (i.e., *What the Bleep Do We Know!?*). Specifically, the film explores theories of quantum physics and encourages people to challenge their perception of reality and normalcy. The film attempts to get viewers to "think outside the box," which may have resulted in less stigmatizing attitudes in spite the absence of a character diagnosed with schizophrenia in the neutral film.

Knowledge

Whether or not selected films would have an impact on the participant's general knowledge about schizophrenia was also investigated. Hypotheses were not supported as there were no differences in the attainment or loss of knowledge among the four groups in the study. Previous researchers (e.g., Ritterfeld & Jin, 2006) have found increases in participant knowledge about schizophrenia after viewing an empathic portrayal of schizophrenia. However, Ritterfeld and Jin (2006) had a more tailored approach and

followed their film with an educational trailer that covered content directly related to their measure of knowledge of schizophrenia. For example, types of medication commonly used to treat schizophrenia were directly addressed in both their film and within their measure of knowledge. While the *Knowledge of Schizophrenia Test* (Compton et al., 2007) has been noted as a valid and reliable measure of general knowledge of schizophrenia, films used in the present study made no direct reference to questions asked on the measure. Therefore, the lack of differences between groups on knowledge about schizophrenia is not surprising.

Behavioral Benevolence

Assessing participant's behavior was difficult given the methodology used in the current study. Therefore, a mock volunteer form was used to measure whether or not participants would "potentially" be willing to spend a brief amount of time engaged in a recreational activity with an individual diagnosed with schizophrenia. Specific hypotheses were not supported as there was no difference in behavioral benevolence between groups. However, results indicated a pattern suggesting that participants in the fear-based and control group tended to be less likely than participants in the likeable and accurate group to volunteer. The fear-based and control group were not presented with stimuli from the films that would have disconfirmed previously held attitudes that people with schizophrenia are dangerous. Therefore, stigmatizing attitudes may have either been reinforced or unchallenged. On the other hand, participants in the likeable and accurate groups were presented with information that could potentially challenge previously held fears of dangerousness, which may have made them more inclined to volunteer. For example, both of these films contain characters diagnosed with schizophrenia that are

polite, conscientious, and agreeable. The inaccuracies of the likeable film portrayal occur when he switches to his more ‘antisocial personality,’ which is relatively unthreatening as well. The character in the likeable film is not only non-threatening, but he is also portrayed as humorous and adventurous. These qualities may have challenged fears of dangerousness in the likeable group, allowing for the notable pattern in behavioral benevolence.

Affect

The I-PANAS-SF (Thompson, 2007) was used to assess the potential impact that films had on participants “positive” or “negative” affect. This measure was also used to assess whether or not the selected films were having the intended impact on participants. Overall, participants in the fear-based group increasingly endorsed negative affect including feeling nervous, upset, hostile, and afraid. In fact, participants in the fear-based group left the study significantly more afraid than all groups’ pre and post viewing the film, suggesting the film had the expected impact on participants. The fear-based film provoked negative affect typically associated with stigmatizing attitudes, increased social distance, and discriminatory behaviors.

Manipulation Check

The manipulation check was created in order to assess each film’s self-reported impact on participants. Information gathered from the manipulation check coincides with other measures, such as the affect and social distance scales, suggesting that each film impacted participants as expected. Overall, those in the fear-based and likeable-inaccurate group endorsed statements insinuating that people with schizophrenia are unpredictable, unable to live independently, dangerous, and have less positive feelings

towards people with schizophrenia. The accurate portrayal of schizophrenia had the opposite impact on participants as they did not endorse these attitudes and, overall, felt more positive towards people diagnosed with schizophrenia. Furthermore, participants in the fear-based group tended to believe they were viewing an accurate portrayal of schizophrenia.

Implications

Research implications. An abundance of social psychological literature suggests that films are more likely to present negative, inaccurate depictions of people with mental illness (Corrigan, 1998; Sief, 2003; Wahl, 2003; Wahl et al., 2003; Wahl et al., 2002). Previous researchers have indicated that accurate film portrayals decrease stigmatizing attitudes and can increase knowledge of severe mental illness (Laroi & Van der Kerby et al., 2008; Linden, 2009; Penn et al., 2003). However, the immediate impact of negative, inaccurate film portrayals of mental illness on viewers' knowledge, attitudes, and behaviors towards those with a severe mental illness has not been clearly examined in the literature until now. The findings of the current study indicate that viewing a fear-based, inaccurate film depiction of a character with schizophrenia has a stigmatizing impact on viewer attitudes and their potential behavior. Follow-up research, using a similar methodology, would be beneficial in potentially providing a strengthened sense of reliability. However, the current study provides empirical support to researchers, mental health advocacy groups, and government organizations that have insinuated that the media is, at least, partially responsible in exacerbating mental illness stigmatization via negative depictions in popular film.

Individual, social, and clinical implications. The current study did not directly

address the potential stigmatizing effects that fear-based, inaccurate film depictions of schizophrenia may have on people diagnosed with a severe mental illness. Researchers have *proposed* that negative, inaccurate media depictions may intensify aspects of internalized stigma such as low self-esteem (Corrigan, 2004), increased stress, isolation, and feelings of hopelessness, embarrassment, and shame (Link & Phelan, 2010) for those diagnosed with a severe mental illness, but empirical evidence is lacking. However, given the current results, it is reasonable to expect that these films are having a stigmatizing effect on people diagnosed with a severe mental illness. It is also reasonable to expect that negative, inaccurate film depictions are influencing children, adolescents, and young adults who are, for the first time, experiencing psychological symptoms. The stigmatizing impact of these films may be increasing hopelessness, embarrassment, and shame as previous researchers have noted thereby impeding the likelihood that these individuals will actively seek necessary treatment. Furthermore, the increase in stigmatizing attitudes and behaviors of those in the general population will also impede treatment seeking of those diagnosed with a severe mental illness (Brown & Bradley, 2002), potentially due to a lack of social support, which is instrumental in the initiation of psychological treatment.

On the other hand, viewing accurate film depictions may afford hope for those experiencing symptoms related to severe mental illness. Individuals experiencing psychiatric symptoms may be more inclined to seek treatment by simply viewing images of hope and success in coping with mental illness. These images may be normalizing and evoke a sense of relief for viewers who are currently experiencing severe psychological symptoms. In regards to the general population, accurate portrayals have the ability to promote more positive feelings and less social distance towards individuals with a severe

mental illness.

The current study also provides support for the use of film as a primary, secondary, and tertiary intervention for decreasing stigmatizing attitudes towards mental illness in the general population. Specifically, these results support the idea that young adults viewing accurate portrayals of mental illness can, at least temporarily, decrease their stigmatizing attitudes towards those with a severe mental illness. On the other hand, identifying inaccurate depictions of severe mental illness, and labeling them as such, may provide parents, teachers, and mental health clinicians the opportunity to educate the general population on the inaccuracies of the media's portrayal of severe mental illness. Incorporating accurate portrayals, and identifying inaccurate portrayals, of severe mental illness within youth academic curriculums (e.g., elementary, high school, college) has the potential to decrease stigmatizing attitudes towards those with a mental illness.

Limitations

The current study provides support for the stigmatizing effects of fear-based inaccurate portrayals of schizophrenia, as well as confirms the destigmatizing effects of educational, accurate portrayals of schizophrenia. However, the current study has a number of noted limitations. Undergraduate students at a specific university participated in this study. This is a common issue within sociological and psychological literature. Future research could potentially include a more diverse sample such as varying ages and socioeconomic statuses. Utilizing a similar methodological approach across varying ages may lend cross sectional information regarding the ages at which people are more or less vulnerable to a film's impact on their knowledge, attitudes, and behaviors towards people with a severe mental illness. For example, children may be more or less vulnerable to

having their attitude influenced by watching a film, whereas older adults may be less influenced from watching a film.

Another potential limitation is that a selected 45-minute excerpt of each film was used due to time limitations and research credits available to undergraduate students. On average, this leaves half of the fear-based, likeable, and control films unseen. Having said that, participants viewing the fear-based, likeable, and control films may have missed redeeming or non-redeeming qualities in the film's portrayal of the character diagnosed with schizophrenia. For example, participants were unable to see Donnie Darko, the main character in the fear-based film, protect others by fighting off bullies. However, while the entire fear-based and likeable films were not viewed in their entirety, each film as a whole has been cited in the literature as either inaccurate or accurate portrayals of schizophrenia. Moreover, the study was about the impact a portrayal has on viewers and it was not necessary to see the whole film. However, future researchers may want to explore the impact of showing full-length films to participants, when time permits.

Last, a possible limitation of the current study is a lack of follow-up data. Specifically, this study did not gather data to confirm or disconfirm the lasting impact of the viewed films. Previous research has shown that the destigmatizing values of accurate portrayals can have lasting effects on attitudes and knowledge acquisition. The lasting effects of negative portrayals have yet to be established in the literature. However, films' impact on mental illness stigma may be more of a cumulative effect. Research indicates that children understand the concept of mental illness by the first grade. Negative portrayals of mental illness are documented in films geared towards children, adolescents, and adults alike. Therefore, negative depictions of mental illness have been

reinforced throughout most of our lives. While it is important to measure the lasting effects of each film, it is also important to assess the impact of a lifetime of viewing.

Conclusions

According to the U.S. Department of Health and Human Services (2000) mental illness stigma is one of, if not the most, powerful constructs that hinders treatment seeking among those experiencing mental illness symptoms. The social psychological literature suggests that negative portrayals of mental illness in the media exacerbates the stigmatization of the mentally ill by encouraging social distance from people with mental illness (Sief, 2003), as well as discourages housing, employment, and funding opportunities for people with mental illness diagnoses (Corrigan, 1998; Corrigan & Cooper, 2005; Corrigan & Kleinlein). Ultimately, individual and structural discrimination due to stigma leave people with severe mental illness largely underserved and untreated.

Ideally, the media would simply use its power to educate the general population on the accuracies of severe mental illness. However, inaccurate portrayals are what the general population consider entertaining and ultimately yield more money for film industries (Benbow, 2007). Social change can seem daunting when confronting an entity as powerful and pervasive as media. However, it is an ethical obligation for psychologists and other mental health clinicians to systemically intervene in a culturally competent manner above and beyond the therapeutic relationship. Cultural competence is underpinned by seeking social justice and equality for groups of people who are oppressed and underserved (Vera & Speight, 2003), which includes people diagnosed with severe mental illness. It is imperative that all mental health professionals attempt to utilize information gained from the current study to counterbalance stigmatized views of

people with mental illness by publically advocating for the equitable treatment and a fair media portrayal of this minority group in the same way that the Gay and Lesbian Alliance Against Defamation (GLAAD) and the National Association for the Advancement of Colored People (NAACP) affiliated “Hollywood Bureau” has done for years. Continued familiarity with accurate film depictions, advocacy for social equality, and the continued education of individuals, clients, families, classrooms, communities, and organizations are the ways in which the U.S. culture can overcome the established impact of film on mental illness stigmatization.

Appendix A

Please check this box if you have previously viewed the film being shown today

Demographics

Please complete the following demographic questionnaire by filling in the most accurate answer in the space provided.

_____ **Sex**

0 = Female

1 = Male

_____ **Age**

_____ **Sexual Orientation**

0 = Heterosexual

1 = Lesbian or Gay

2 = Bisexual

3 = Other _____

_____ **Current Academic Year**

0 = Freshman

1 = Sophomore

2 = Junior

3 = Senior

_____ **Race/Ethnicity**

0 = Native American

1 = Black or African American

2 = Hispanic/Latino

3 = Asian

4 = White Caucasian

5 = Alaska Native

6 = Native Hawaiian or Other Pacific Islander

7 = Other _____

_____ **Education/Degree**

0 = High School Degree

1 = Some College Credit

2 = Two-year Associate

3 = Bachelor's Degree

4 = Master's Degree

5 = Professional Degree

6 = Doctorate Degree

_____ **Marital Status**

0 = Married

1 = Single

2 = Widowed

3 = Divorced

4 = Separated

5 = Non-married relationship

_____ **Religion**

0 = Protestant Christian

1 = Roman Catholic

2 = Evangelical Christian

3 = Jewish

4 = Muslim

5 = Hindu

6 = Buddhist

7 = Atheist

8 = Agnostic

9 = Pagan

Appendix B

SD-A

Please read the following statements carefully. In the space provided after each statement, indicate how much you “Disagree” or “Agree” using the scale below.

1	2	3	4	5
Completely Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Completely Agree

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
7. _____ People with schizophrenia need to be supervised at all times
8. _____ I don't want to deal with people who have schizophrenia or other mental problems
9. _____ Having schizophrenia means to be totally different than anybody else
10. _____ Healthy people should not become romantically involved with somebody who has schizophrenia
11. _____ People with schizophrenia should try to be more in control of themselves
12. _____ I understand why companies don't want to offer jobs to people with schizophrenia
13. _____ I would agree to invite somebody from a psychiatric institution to celebrate a holiday with my family and me

14. _____ I can understand why nobody would like to have somebody with schizophrenia as a co-worker
15. _____ I would never hire somebody with a history of schizophrenia as a babysitter

Appendix C

KAST

- _____ 1. Schizophrenia is most likely caused by:
- A. Brain problem
 - B. Drug use
 - C. Evil spirits
 - D. Pollution
 - E. Stress
- _____ 2. A common symptom of schizophrenia is:
- A. Being overly happy and having extra energy
 - B. Overeating and weight gain
 - C. Sudden anxiety attacks
 - D. Thinking that others are watching or following
 - E. Violence, theft, or physical attacks towards others
- _____ 3. The best person to decide if someone has schizophrenia is a(n):
- A. Emergency room doctor
 - B. Family member
 - C. Preacher or Minister
 - D. Psychiatrist
 - E. School teacher
- _____ 4. With treatment, the most common long-term outcome for schizophrenia is:
- A. Complete cure
 - B. Dementia
 - C. Mild to moderate mental retardation
 - D. Relief of symptoms, with possibility of relapse
 - E. Severe mental deterioration
- _____ 5. Medicines that are used for hearing voices are called:
- A. Antibiotics
 - B. Anti-depressants
 - C. Anti-psychotics
 - D. Sedatives
 - E. Tranquilizers
- _____ 6. The best place to get information about schizophrenia is from:
- A. Books or websites
 - B. Friends
 - C. Neighbors
 - D. Newspapers
 - E. Preachers or ministers
- _____ 7. To help deal with stress, most patients with schizophrenia benefit from:
- A. Alcohol use
 - B. Counseling or psychotherapy
 - C. Cutting back on social activities

- D. Pain-relief medications
 - E. Physical therapy
- _____ 8. The cause of schizophrenia is most likely related to:
- A. Biology
 - B. Environment
 - C. Family
 - D. Personality
 - E. Society
- _____ 9. A person strongly believes that the FBI has put a computer chip in his/her body. This symptom is called a:
- A. Daydream
 - B. Delusion
 - C. Hallucination
 - D. Phobia
 - E. Worry
- _____ 10. A doctor usually makes a diagnosis of schizophrenia by a(n):
- A. Blood test
 - B. CAT scan
 - C. Interview
 - D. Reading test
 - E. Urine test
- _____ 11. Most people who have schizophrenia need to be in some sort of treatment for:
- A. Days
 - B. Weeks
 - C. Months
 - D. Years
 - E. Not at all
- _____ 12. The best treatment for the symptoms of schizophrenia is:
- A. Medicine
 - B. Operation
 - C. Relaxation
 - D. Strict diet
 - E. Vitamins
- _____ 13. People with schizophrenia most benefit from:
- A. Being put into a hospital for years
 - B. Having fun or exercising
 - C. Strict schedules with full-time employment
 - D. Support from family/friends and low stress
 - E. Vitamins, minerals, or herbs
- _____ 14. A 19-year-old begins to hear voices and act paranoid several months after graduating from high school. The most likely cause of his symptoms is:
- A. Drinking alcohol
 - B. Genetic tendency toward developing an illness
 - C. Graduating high school

- D. Personality weakness
 - E. Puberty and adolescence
- _____ 15. The symptoms of schizophrenia usually begin in which stage of life?
- A. As a baby
 - B. Elementary school years
 - C. Late teen-age years or young adulthood
 - D. 40 -50 years old
 - E. 60 -70 years old
- _____ 16. Which of the following is one of the new “atypical” medicines for schizophrenia?
- A. Chlorpromazine (Thorazine)
 - B. Haloperidol (Haldol)
 - C. Fluphenazine (Prolixin)
 - D. Trifluoperazine (Stelazine)
 - E. Quetiapine (Seroquel)
- _____ 17. Which group is the best source of information and support for family members of people with schizophrenia?
- A. American Medical Association (AMA)
 - B. Association of Psychologists and Psychiatrists (APAP)
 - C. Center for Disease Control and Prevention (CDC)
 - D. National Alliance for the Mentally Ill (NAMI)
 - E. Schizophrenia Family Association (SFA)
- _____ 18. After hospitalization, a patient with schizophrenia would benefit most from:
- A. Constant observation by family
 - B. Eating more meats and breads
 - C. Follow-up with a preacher or minister
 - D. Follow-up with an outpatient psychiatrist
 - E. Getting a full-time job and staying busy

Appendix D

Behavioral Mental Health – Community Volunteer Application

We are asking for a brief commitment of your time in order to benefit people diagnosed with schizophrenia. The following activity is without payment and is completely voluntary. We are asking you to give **two hours** of your time, on a single day, in order to provide an individual diagnosed with schizophrenia assistance with recreational activities. You will be matched up with a diagnosed individual based on **your preference** for particular activities. Activities include going for walks, arts and crafts, sports, reading, and playing pool or board games. People diagnosed with schizophrenia often lack peer relationships and your assistance will afford these individuals an opportunity to interact with you on a **one-on-one basis**. Volunteering your time to help others can be a **highly rewarding experience!**

If you are interested in volunteering two-hours of your time, on a single day, providing one-on-one recreational assistance to an individual diagnosed with schizophrenia, please fill in the box marked “Yes, I am interested in volunteering” below. Otherwise, please mark the box labeled “No thanks.” Include this sheet with your other completed forms and the experimenter will provide you with further information.

- Yes, I am interested in volunteering.**
- No thanks.**

Appendix E

I-PANAS-SF

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent these items reflect your current mood. Use the following scale to record your answers.

1	2	3	4	5
Not at all	A little	Moderately	Quite a bit	Extremely

_____ Upset	_____ Nervous	_____ Ashamed
_____ Hostile	_____ Determined	_____ Afraid
_____ Alert	_____ Attentive	_____ Inspired
_____ Active		

Appendix F

LOC-Report

Please read each of the following statements carefully. After you have read all the statements below, place a check by the statement that best depicts your exposure to persons with a severe mental illness.

_____ I have watched a movie or television show in which a character depicted a person with mental illness.

_____ My job involves providing services/treatment for persons with a severe mental illness.

_____ I have observed, in passing, a person I believe may have had a severe mental illness.

_____ I have observed persons with severe mental illness on a frequent basis.

_____ I have a severe mental illness.

_____ I have worked with a person who had a severe mental illness at my place of employment.

_____ I have never observed a person that I was aware had a severe mental illness.

_____ My job includes providing services to persons with a severe mental illness.

_____ A friend of the family has a severe mental illness.

_____ I have a relative who has a severe mental illness.

_____ I have watched a documentary on the television about severe mental illness.

_____ I live with a person who has a severe mental illness.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Revised 4th ed.). Washington, DC: Author.
- Anderson, M. (2003). 'One flew over the psychiatric unit': Mental illness and the media. *Journal of Psychiatric and Mental Health Nursing*, 10, 297-306.
- Angermeyer, M. C., Dietrich, S., Pott, D., & Matschinger, H. (2005). Media consumption and desire for social distance towards people with schizophrenia. *European Psychiatry*, 20, 246-250.
- Anglin, D. M., Link, B. G., & Phelan, J. C. (2006). Racial differences in stigmatizing attitudes toward people with mental illness. *Psychiatric Services*, 57, 857-862.
- Brown, K., & Bradley, L. J. (2002). Reducing the stigma of mental illness. *Journal of Mental Health Counseling*, 24, 81-87.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37-46.
- Corrigan, P. W., & Kleinlein, P.. (2005). The impact of mental illness stigma. In P.Corrigan (Eds.), *On the stigma of mental illness: practical strategies for research and social change* (pp. 11-44). Washington: American Psychological Association.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59, 614-625.
- Corrigan, P. W. (1998). The impact of stigma on severe mental illness. *Cognitive and*

Behavioral Practice, 5, 201-222.

Coverdale, J. H., & Nairn, R. N. (2006). A research agenda concerning depictions of mental illness in children's media. *Academic Psychiatry, 30, 83-87.*

Dalton, M. A., Sargent, J. D., Beach, M. L., Titus-Ernstoff, L., Gibson, J. J., Ahrens, M. B., et al. (2003). Effect of viewing smoking in movies on adolescent smoking initiation: A cohort study. *The Lancet, 362, 281-285.*

Derogatis, L. R., & Fitzpatrick, M. (2004). The SCL-90-R, the brief symptom inventory (BSI), and the BSI-18. In M. E. Maruish (3rd eds.), *The use of psychological testing for treatment planning and outcomes assessment: Volume 3: Instruments for adults* (pp. 1-41). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Diefenbach, D. L. (1997). The portrayal of mental illness on prime-time television. *Journal of Community Psychology, 25, 289-302.*

Federal Trade Commission. Marketing violent entertainment to children: A review of self-regulation and industry practices in the motion picture, music recording & electronic game industries. Washington, DC: Federal Trade Commission, 2000.

Flanagan, J. S., & Flanagan, R. S. (2003). *Clinical interviewing*. Hoboken, N.J: John Wiley & Sons, Inc.

Garrett, J. L. (2008). *Social outcast cinema* (Doctoral dissertation). Retrieved from ProQuest Dissertation & Theses. (1495948691).

Granello, D. H., & Pauley, P. S. (2000). Television viewing habits and their relationship to tolerance toward people with mental illness. *Journal of Mental Health Counseling, 22, 162-175.*

Granello, D. H., Pauley, P. S., & Carmichael, A. (1999). Relationship of the media to

- attitudes toward people with mental illness. *Journal of Humanistic Counseling, Education, and Development*, 38, 98-110.
- Hannigan, B. (1999). Mental health care in the community: An analysis of contemporary public attitudes towards, and public representations of, mental illness. *Journal of Mental Health*, 8, 431-440.
- Hinshaw, S. P., & Stier, A. (2008). Stigma as related to mental disorders. *Annual Review of Clinical Psychology*, 4, 367-393.
- Holi, M. M., Marttunen, M., & Aalberg, V. (2003). The comparison of the GHQ-36, the GHQ-12 and the SCL-90 as psychiatric screening instruments in the Finnish population. *Nordic Journal of Psychiatry*, 57, 233-238.
- Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. A. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, 25, 447-456.
- Jamieson, P. E., Romer, D., & Jamieson, K. H. (2006). Do films about mentally disturbed characters promote ineffective coping in vulnerable youth? *Journal of Adolescence*, 29, 749-760.
- Lawson, A., & Fouts, G. (2004). Mental illness in disney animated films. *Canadian Journal of Psychiatry*, 49, 310-314.
- Levey, S., & Howells, K. (1995). Dangerousness, unpredictability, and the fear of people with schizophrenia. *Journal of Forensic Psychiatry*, 6, 19-39.
- Link, B. G., & Phelan, J. C. (2010). Labeling and stigma. In T. L. Scheid and T. N. Brown (2nd Eds.), *A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems* (pp. 571-587). New York, NY: Cambridge University Press.

- Link, B. G., Yang, L. H., Phelan, J. C., & Collins, P. Y. (2004). Measuring mental illness stigma. *Schizophrenia Bulletin*, 30, 511-541.
- Lopez, L. R. (1991). Adolescents' attitudes toward mental illness and perceived sources of their attitudes: An example of pilot data. *Archives of Psychiatric Nursing*, 5, 271-280.
- Motion Picture Association Worldwide Market Research. (2006). *U.S. movie attendance study*, Washington, DC.
- Motion Picture Association Worldwide Market Research. (2006). *U.S. theatrical market: 2005 statistics*, Washington, DC.
- National Institute of Mental Health. (April, 2007). *The virginia tech tragedy: Distinguishing mental illness from violence*. Retrieved January 3, 2008, from <http://www.nami.org/Template.cfm?Section=April6&Template=/ContentManagement/ContentDisplay.cfm&ContentID=45403>
- National Institute of Mental Health. (2006). *The numbers count: Mental disorders in America*. Retrieved January 3, 2008, from <http://www.nimh.nih.gov/healthinformation/statisticsmenu.cfm>
- National Institute of Mental Health. (1986). *Combating the stigma of mental illness*, (Rev. Ed. Rockville, MD: National Institute of Mental Health.
- Penn, D. L., Judge, A., Jamieson, P., Garczynski, J., Hennessy, M., & Romer, D. (2005). Stigma. In D. Evans, E. Foa, R. Gur, H. Hendin, C. O'Brien, et al. (Eds.), *Treating and preventing mental health disorders: What we know and what we don't know* (pp. 531-543). New York: Oxford University Press.
- Phelan, J. C., Link, B. G., Stueve, A., & Pescosolido, B. A. (2000). Public conceptions of

- mental illness in 1950 and 1996: What is mental illness and is it to be feared?
Journal of Health and Social Behavior, 41, 188-207.
- Phelan, J. C., & Link, B. G. (1998). The growing belief that people with mental illnesses are violent: The role of the dangerousness criterion for civil commitment. *Social Psychiatry and Psychiatric Epidemiology*, 33, S7-S12.
- Rideout, V. J., Foehr, U. G., Roberts, D. F., & Brodie, M. (1999). Kids and media at the new millennium: A comprehensive national analysis of children's media use. Menlo Park, CA: Kaiser Family Foundation.
- Ritterfeld, U., & Jin, S. (2006). Addressing media stigma for people experiencing mental illness using an entertainment-education strategy. *Journal of Health Psychology*, 11, 247-267.
- Robert Wood Johnson Foundation Program on Chronic Mental Illness. (1990, April). *Public attitudes towards people with chronic mental illness: Final report*. (Roper Center for Public Opinion Research, Storrs, CT.)
- Rosenstock, J. (2003). Beyond A Beautiful Mind: Film choices for teaching schizophrenia. *Academic Psychiatry*, 27, 117-122.
- Sargent, J.D., Heatherton, T. F., Ahrens, M. B., Dalton, M. A., Tickle, J. J., & Beach, M. L. (2002). Adolescent exposure to extremely violent movies. *Journal of Adolescent Health*, 31, 449-454.
- Sargent, J. D., Dalton, M. A., Beach, M. L., Mott, L. A., Tickle, J. J., Ahrens, B. M., & Heatherton, T. F. (2002). Viewing tobacco use in movies: Does it shape attitudes that mediate adolescent smoking? *American Journal of Preventive Medicine*, 22, 137-145.

- Sargent, J. D., Beach, M. L., Dalton, M. A., Mott, L. A., Tickle, J. J., Ahrens, M. B., & Heatherton, T. F. (2001). Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. *British Medical Journal*, *323*, 1394-1397.
- Sieff, E. M. (2003). Media frames of mental illness: The potential impact of negative frames. *Journal of Mental Health*, *12*, 259-269.
- Sirey, J., Bruce, M. L., Alexopoulos, G. S., Perlick, D. A., Friedman, S. J., DeBenedetto, A., & Meyers, B. S. (2001). Perceived stigma and patient-related illness severity as predictors of adherence. *Psych Services*, *52*, 1633-1638.
- Smith, A., & Cooper, S. J. (2006). Hollywood schizophrenia. *Student British Medical Journal*, *14*, 309-352.
- Stout, P. A., Villegas, J., & Jennings, N. A. (2004). Images of mental illness in the media: Identifying gaps in the research. *Schizophrenia Bulletin*, *30*, 534-561.
- Strasburger, V. C. (2005). Adolescent and the media: why don't pediatricians and parents "get it"? *The Medical Journal of Australia*, *183*, 425-426.
- Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, *7*, 225-240.
- Tickle, J. J., Hull, J. G., Sargent, J. D., Dalton, M. A., & Hatherton, T. F. (2006). A structural equation model of social influences and exposure to media smoking on adolescent smoking. *Basic and Applied Social Psychology*, *28*, 117-129.
- U.S. Public Health Service. (2000). *Report of the surgeon general's conference on children's mental health: A national action agenda*. Washington, DC: Department of Health and Human Services.

- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the surgeon general*. Rockville, MD: U.S. Department of Health and Human Services.
- Vera, E. M., & Speight, S. L. (2003). Social justice, and counseling psychology: Expanding our roles. *The Counseling Psychologist*, 31
- Wahl, O., Hanrahan, E., Karl, K., Lasher, E., & Swayne, J. (2007). The depiction of mental illnesses in children's television programs. *Journal of Community Psychology*, 35, 121-133.
- Wahl, O. F. (2003). Depictions of mental illnesses in children's media. *Journal of Mental Health*, 12, 249-258.
- Wahl, O. F. (2003b). News media portrayal of mental illness. *American Behavioral Scientist*, 46, 1594-1600.
- Wahl, O., Wood, A., Zaveri, P., Drapalski, A., & Mann, B. (2003b). Mental illness depiction in children's films. *Journal of Community Psychology*, 31, 553-560.
- Wahl, O. F. (2002). Children's views of mental illness: A review of the literature. *Psychiatric Rehabilitation Journal*, 6, 134-158.
- Wahl, O. F., Wood, A., & Richards, R. (2002). Newspaper coverage of mental illness: Is it changing? *Psychiatric Rehabilitation Skills*, 6, 9-31.
- Watson, D., Clark, L. A., & Tellegan, A. (1987). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Wood, W., Wong, F. Y., & Chachere, J. G. (1991). Effects of media violence on viewers

aggression in unconstrained social-interaction. *Psychological Bulletin*, 109, 371-383.