

PERCEPTION OF MENTAL ILLNESS BASED UPON ITS PORTRAYAL IN
FILM

by

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ABSTRACT

Perceptions can be influenced by the media concerning different groups of people. As a result of the importance of the media in how individuals obtain information and formulate opinions, how different groups are presented whether negatively or positively is important. This research examines the portrayal of mental illness in films and the impact that such portrayals have on the perceptions of mental illness of the viewers. Mental illness representations can be found quite prevalently among film and the way in which it is represented can be important as to how populations perceive those with mental disorders. This thesis looks to explore perceptions of mental illness and beliefs from those who have viewed films that portray characters with mental disorders. Through the use of an online survey, one hundred and ninety five participants provided data for this study. Based on previous research, it was hypothesized that individuals who had seen more films portraying mental illness would have more knowledge and sympathy regarding mental illness compared those who had seen less films portraying mental illness. It was also hypothesized that social stereotypes surrounding mental disorders would be present in the knowledge that individuals had more so than factual data about mental disorders. Women were predicted to express more sympathy than men. A statistical analysis program was used to analyze the resulting data including the use of correlations and t-tests. Evidence indicated that the amount of films viewed portraying mental illness did not have an impact on knowledge or sympathy regarding mental illness. Perceptions of mental illness are still a relevant topic and the awareness of facts surrounding mental disorders should continue to be spread.

DEDICATION

For those battling daily against the confines of mental illness, may your voices be heard and your mind one day free,

For Abu and Lela, who showed grace and courage in the face of adversities and inspired me to be the woman I am,

And for my parents, who have gone above and beyond to ensure I have the platform to succeed and encouraged me to pursue happiness.

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INTRODUCTION

Since the 1920s, whether directly or indirectly, mental illness has made its way into the plots, subplots, and characters of films (Livingston 2004). Tagged as “bait” for film awards, 10% of the 317 Academy Awards between 1929 and 2009 were awarded to films either depicting a character with a mental disorder or to films that had mental illness as a topic (Byrne 2010).

While these films have enjoyed relative success and many have earned achievements, the question still remains as to how the depictions of various mental disorders have influenced the perception of mental illness outside of the fictional realm. Are these films, revered by critics and audiences alike, providing their viewers with accurate information about mental illness? Are stereotypes that are salient in the nonfictional public sphere presented and perpetuated in these films? Do these films change the behavior of the viewers towards those with mental illness?

The current study addresses this last question. While there has been a lot of research to date examining the content of films themselves, much less research has been done examining the potential impact viewing these films has on those who watch them. This study addresses this gap by comparing people’s views on mental illness to the films that they have seen that depict mental illness in some way.

LITERATURE REVIEW

Nearly one in every five Americans suffers from a mental illness in any given year (Klin and Lemish 2008). Nevertheless, there continues to be an almost taboo reaction to the topic of mental illness as it is surrounded by stereotypes, or a set of negative and commonly unfair beliefs that a society or group of people have about a topic. Sieff's (2003) research eluded that media representation of mental illness may be a contributing factor to the negative perception especially considering media-based perceptions are dependent on media frames used in communicating information about mental illness. Media frames, a concept put forth by Goffman (Goffman 1986), refer to the way in which information is presented and organized by the media for viewer consumption and understanding (Sieff 2003).

The way mental illness is portrayed in the media is important because most of the information that individuals receive about mental illness come from different facets of the media (Sieff 2003). Mental illness in media frames are typically linked to violence. It is often more common for the small percentage of violent behavior involved with mental disorders to be exaggerated in contrast to a more holistic understanding of the characteristics and behaviors of those with mental illnesses. (Sieff 2003). Media frames are constructed in whatever way is beneficial for a media outlet to relay their information and attract consumers. An example used in the research done by Sieff (2003) was films or television portraying a character with mental illness in a negative way in order to maintain their viewers and provide entertainment.

Within film and television, common mental disorders that are portrayed include schizophrenia, major depressive disorder (depression), manic depressive disorder (bipolar),

obsessive compulsive disorder, dissociative identity disorder (multiple personality), post-traumatic stress disorder, anxiety disorders, eating disorders, autism spectrum disorders, and personality disorders. With the media showing more favor towards anything that can garner attention and provide entertainment, there is a tendency for disorders that have the potential for violence to be more common within film or television, such as schizophrenia, manic depressive disorder, anti-social personality disorder, and post-traumatic stress disorder. Beyond the aspect of violence, some disorders are common in film and television because of the possibility to exaggerate the symptoms associated with the disorder which is seen in depictions of obsessive compulsive disorder, schizophrenia, dissociative identity disorder, and eating disorders.

Hollywood and Mental Illness

The Negative

Past research has agreed that the media has done a disservice to the population living with mental disorders, often describing people with mental disorders as problematic or using them for entertainment (Klin and Dafna 2008; Kondo 2008; Sieff 2003; Hyler 2003; Owen 2012; Corrigan, Kerr, and Knudsen 2005; Byrne 2010). Films have taken cues from various media frames that pose people with mental illness as violent, uncontrollable, and volatile (Klin and Dafna 2008; Kondo 2008; Hyler 2003) and have created characters based upon these stereotypical associations of behavior.

In his exhaustive review of the stereotypes of people with mental disorders in film, Hyler (2008) outlined the five most common character-types of people with mental illness: “the homicidal maniac”, “narcissistic parasite”, “female patient as seductress”, “rebellious free spirit”,

and “specially gifted.” The concept of “homicidal maniac” is one of the longest running stereotypes of those with mental disorders dating back to early one-reel films (Hyler 2008).

Mental disorders and those who suffer from them are often paired with violence and madness; in actuality the percentage of people with mental disorders who are also violent is quite low (Kondo 2008; Sieff 2003; Corrigan, Kerr and Knudsen 2005). The “narcissistic parasite” stereotype is based around characters that are mental patients shown with the need to seek attention. Patient’s issues could be seen as trivial if their self-centered behavior is the focus and there is also the possibility that individuals in real life situations would feel uncomfortable continually voicing their concerns or frequenting therapist’s sessions because they could be pegged as narcissistic.

“Female patients as seductresses” display women who are seeking treatment as overtly sexual and ignoring the seriousness of their mental disorder in favor of displaying them as sex objects as well as portraying male health care workers as unable to be professional and looking to act out “fantasies” (Hyler 2008; Kondo 2008). “Rebellious free spirit” constructs mental patients as just wishing to seek adventure and thrills within their life, downplaying the severity of their mental disorder as a quirk of a person’s character that encourages them to engage in reckless behavior. Lastly, the “specially gifted” trope has recently made a surge in films when depicting a character with a mental disorder. The belief is that although a character might have some type of mental disorder, they have a special talent or increased intelligence in some area and in turn discourages receiving treatment in fear of losing this “gift” (Hyler 2008; Owen 2012).

Hyler’s five categories of mental illness stereotypes in film have been interpreted by other researchers as well, many looking into the excessive use of stereotypical interpretations

when characters with a mental illness are portrayed in a movie. Kondo (2008) and Owen (2012) focused solely on the depiction of one specific type of mental illness, schizophrenia, and the inaccurate ways in which it had been displayed in popular film. Kondo (2008), having had personal experience with schizophrenia, based her reviews of schizophrenic performances in film on her understanding of her own diagnosed schizophrenia.

Like Hyler eluded with the concept of “homicidal maniac,” those with mental disorders having a link with violent behavior and those who are in mental health institutions being perceived as “crazy” and uncontrollable was a popular discussion topic (Kondo 2008; Owen 2012). Kondo was unimpressed with the relationship between mental illness and violence she saw in many films as she has not displayed violent behavior while living with schizophrenia nor has she witnessed it when among others with mental disorders either.

Owen (2012) also expressed dissatisfaction at the way in which the supposed correlation between violence and mental disorders was pushed as a plot point in the films she reviewed for content. Most notably, of the 42 schizophrenic characters that were coded and analyzed, 35 displayed some type of violent behavior (Owen 2012). Compared with the roughly 83% of individuals involved in violent behaviors in those specific movies, only 18% of those diagnosed with a mental disorder in real life also participate in violent behavior (Owen 2012; Sieff 2003). There was also dissatisfaction with the way in which self-harm and suicide was presented by films. 24% of the characters analyzed by Owen (2008) were involved in self-harming and suicide; however the actual percentages in reality are 10% and 16%, respectively.

Violence and erratic behavior have not been the only issues present in film when mental illness is a subject. The role of therapist, psychiatrists, and other health service workers, and their relationship with mental health patients in movies, has also been called into question. Therapists, psychiatrists, and other health service workers often receive a skewed portrayal as manipulative and deceiving when dealing with their patients (Kondo 2008). This perspective flips the role of people with mental illness from one extreme to the other, as they are not seen as violent perpetrators but rather sorrowful victims reliant on their twisted health service worker.

Kondo (2008) also spoke about how some films depict relationships between patients and therapists that become romantic in nature and the tendency for mental illness to be romanticized to make for a more interesting story rather than a factual one, bringing about some of the Hyler (2008) concept of “female patient as seductress.” Within her concluding statements, Kondo (2008) expressed that her experiences with therapists had been nothing but professional and her belief was that any relationship beyond that could hinder treatment progress.

There lies an ongoing pressure in the film industry to not only entertain but to receive credibility from peers and varying film associations for what has been created. While using the topic of mental illness or incorporating a character with mental illness provides for new creative outlets and interpretations, often the experiences of people with mental disorders are skewed to reflect entertainment and shock as opposed to accuracy (Kimmerle and Cress 2013).

The Positive

Despite the abundance of misgivings concerning mental illness in film, there have been some recent efforts made by some film makers to reflect more enlightened views on mental

illness. While not perfect, there seems to be a vast improvement among the portrayal of those with mental disorders with less focus on mentally ill criminals and victims and more on their normal human lives with the added struggle of coping with a mental disorder (Kondo 2008). Not only have reviews of recent films found that more sympathy-inducing rather than mocking has been used, but there is also factual information regarding mental illness within the characterizations of different roles in films. Owen (2008) found that in the over 70 movies that were viewed as a part of her research, many films did not support some of the common stereotypes. Many characters have been portrayed as living in low socioeconomic situations, few have displayed “special abilities”, and a lack of traumatic events being the sole factor in the development of schizophrenia have been some of the portrayals of characters with mental illness in film that have proven to be factual in comparison to recent psychological and sociological information (Owen 2008).

Ideas of the Perceptions of Mental Illness

The current study examines if the portrayal of mental disorders in films influences the perceptions of and attitudes towards mental illness. While little research has been done concerning the influence that cinematic portrayals of mental illness have on the viewer’s knowledge and perception of people with mental illness, Kimmerle and Cress (2013) did conduct similar research looking at the effects of television and film exposure on knowledge about, and attitudes toward, mental disorders. Kimmerle and Cress’ (2013) research consisted of two empirical studies which examined whether or not the portrayal of mental disorders in television and film affected the attitudes towards the mentally ill. In study one, 77 participants were recruited and instructed to take a questionnaire which solicited biographical information, the

amount of time spent watching television, and knowledge about mental disorders. In study two, 39 participants were recruited and assigned into one of two experimental conditions. One which required them to watch a documentary-film on schizophrenia patients and the other which required them to watch a fiction-film about schizophrenia patients. The participants filled out a questionnaire before the start of each film which asked biographical information and assessed their knowledge of schizophrenia. After viewing the film, the participants completed another questionnaire which measured knowledge of schizophrenia to assess changes from viewing the film.

Kimmerle and Cress (2013) concluded that people's knowledge about mental illness was affected by the amount of television watched and the type of film that was consumed. While there was no relationship between television consumption and negative attitudes toward mentally ill individuals, there was a relationship between people's knowledge about the disorders and their assessment of violence associated with the disorder. They found that the more knowledge participants had about a disorder, the more they believed people with that disorder would be violent. Participants also felt confident about their knowledge of schizophrenia subsequent to viewing the films on schizophrenia. Specifically, there was higher confidence in those participants that had viewed the documentary film (Kimmerle and Cress 2013). Higher confidence concerning knowledge about schizophrenia after viewing the documentary was attributed with the documentary showcasing real individuals who were living with schizophrenia. In contrast, the fictional films were penned by writers who may or may not have had experiences with schizophrenia albeit making the believability of a character's portrayal lower.(Kimmerle and Cress 2013).

While Kimmerle and Cress did find information that suggested that there was influence from film and television on what was known about mental illness, this research was conducted after the implementation of stigmas and previous knowledge in adults. The effect of mental illness depictions on knowledge and following of stigmas is often thought to be more salient during adolescent years, when individuals are taking in new information. Wahl and his colleagues (2003) were interested in the formation of attitudes toward the mentally ill in adolescents and conducted a content analysis on the subject.

In the analysis, 49 children's films released between 2000 and 2001 and rated G and PG were viewed by three independent raters. During the first viewing, raters were to identify whether or not a character had a mental illness. For films that did contain a character with mental illness, raters were to watch for a second time and provide ratings for demographics (i.e. age, gender, marital status), attributes (i.e. physical and personality characteristics), association with violence, response of others to the character, treatment (psychological or biological), and overall impression of the character (positive or negative).

Results showed that 12 of the films depicted a character with mental illness and 21 films made some kind of reference to mental illness. Overall, two-thirds of the children's films viewed had material about mental illness which does confirm that children can be exposed to learning about mental illness through entertainment media (Wahl et al. 2003). While many of the films did have some positive portrayals of characters with mental illness by showing them as successful, helpful, and sympathetic, a majority of the characters in the films were associated with violence and feared by others (Wahl et al. 2003).

Overall, the literature concerning mental illness in not only film but in the media has pointed towards negative perceptions and stereotypes about individuals living with a mental disorder. The current literature consists primarily of content analyses of the films themselves, as well as other forms of qualitative methodologies. The current study builds on this literature by relying on quantitative data to measure the impact, if any, viewing films that feature mental illness has on peoples' perceptions of mental illness. The goal of the current research is to expand upon what is already known about how the media impacts peoples' beliefs about metal illness and those living a mental illness.

THEORETICAL ORIENTATION

Albert Bandura (1974) believed that human behavior was shaped by the environment through observational learning known as the social learning theory. The belief was that through observing other's behavior, individuals would replicate what they had seen from the modeled behavior (Bandura 1974). Individuals, especially in the modern era, learn and observe a great deal from media outlets. In the case of mental illness, if the media were to portray mental disorders in a negative way, according to the social learning theory, those observing would have the possibility of attributing negative thoughts towards mental disorders. This brings about the harm in perpetuating stereotypes concerning mental illness as there is more opportunity for individuals to be exposed to opinions or information that could or could not be true regarding mental illness.

After conducting a study that examined college students and their perceptions of minority groups based upon their exposure to different television genres, Shciappa, Gregg, and Hewes (2005) coined the parasocial contact hypothesis. The parasocial contact hypothesis is the concept that people come to have more knowledge of other people parasocially (through media outlets, like television or film) rather than through personal contact (Shciappa, Gregg, and Hewes 2005). The idea is that if individuals were exposed to a diverse range of people through media outlets they would have exposure to groups they might not come into contact with personally. If individuals have had little to no interaction with people with mental disorders however have seen a character with mental illness in television or film, the parasocial contact hypothesis says that individual's knowledge of people with mental illness will mirror what they have seen in that film or television program. This makes the portrayal of mental illness in the media vastly important

especially if that media exposure is the only interaction some individuals will have with specified groups.

THE CURRENT STUDY

The current study examined the correlations between watching films that portray mental illness and the perceptions of mental illness the viewers hold. Past research concerning mental illness in film has reviewed whether stereotypes have been perpetuated in the portrayal of the disorders in the film. While these reviews can provide a guideline for which films have accurately, or inaccurately, displayed mental disorders, outline which stereotypes are continually being perpetuated, and suggest ways in which stereotypes can be combated, there has been little quantitative research to date on the impact that these portrayals have on those who choose to view them.

The objective of the current study was to analyze how depictions of mental illness correlated with the knowledge that viewers took away from the films using a quantitative method. This research is important because it can provide a deeper understanding into how the media affects the education of topics such as mental illness that are often misconstrued for entertainment purposes. It will delve into just how much the perceptions of different people are shaped by what we are consciously and unconsciously exposed to. Overall, the hope is that research such as this will spread the awareness of stereotypes that may be prevalent and inspire new ways in which they can be combated with factual and accurate information as well as individual education of mental illness.

RESEARCH QUESTION

Does watching the portrayal of mental illness in film correlate to the perception of mental illness of the viewers?

HYPOTHESES

H₁: Individuals who had seen more films portraying mental illness were more likely to have knowledge about mental illness compared to those who had seen less films portraying mental illness.

H₂: Stereotypes surrounding mental disorders were more likely to be agreed with than factual data about mental disorders.

H₃: Women were predicted to express more sympathy than men towards mental illness and people with mental illness.

H₄: Individuals who had seen more films depicting mental disorders were predicted to sympathize more with people with mental illness than those who had seen less.

METHOD

The data for the current study was acquired from an anonymous, online survey examining how the portrayal of mental illness in film shapes the perception of mental illness of the viewers among college students. The survey was supported on an online surveying system, Qualtrics, to which respondents were directed to via a link. In order to construct the survey, films needed to be chosen that represented a variety of mental disorders. These films would be one of the bases for examining how what they have consumed through this media outlet has shaped a possible perception of mental illness. Each film chosen had to have either a character depicting symptoms of a mental disorder and/or mental illness had to be a topic of the film. Symptoms of characters within the film were compared to those symptoms of mental disorders that could be found within the *Diagnostic and Statistical Manual of Mental Disorders*.

Aforementioned, the most common mental disorders that are portrayed within the media include schizophrenia, major depressive disorder (depression), manic depressive disorder (bipolar), obsessive compulsive disorder, dissociative identity disorder (multiple personality), post-traumatic stress disorder, anxiety disorders, eating disorders, autism spectrum disorders, and personality disorders. Films were also chosen to follow this commonality; each of the mental disorders listed being depicted by at least one film within the survey. Examples of disorders depicted within the chosen films include: major depressive disorder found within *Melancholia* (2011), *The Beaver* (2011), and *It's Kind of a Funny Story* (2010), schizophrenia found within

Shutter Island (2010), *A Beautiful Mind* (2001), and *Black Swan* (2010), and manic depression disorder (bipolar) found within *Silver Linings Playbook* (2012) and *American Hustle* (2013)¹.

Along with a variety of disorders being within the film choices, the films themselves ranged from widely-promoted studio films to smaller cultivated independent films. To clarify, studio films are often supported monetarily by a large production company (Paramount Pictures or Sony Pictures are examples) whom can allow for a larger amount of funding to create the film as well as promote it; the main characteristic of studio films being that they can be distributed across more theaters (Nash Information Services 2015). Examples of studio films used within the survey include *The Hunger Games: Mockingjay Part I* (2014) or *Aviator* (2004)¹. Independent films are those films that aren't supported by a larger production company but by either smaller companies or by independent investors; the main characteristic being a more limited release within movie theaters (Nash Information Services 2015). Examples of independent films used within the survey include *The Beaver* (2011) or *Melancholia* (2011).¹

The link to the survey was distributed on the internet via email, announcement posts on the UCF affiliate student network Webcourses, and announcement posts on various social media platforms. Professors at UCF were sent a formal email explaining the details of the survey and providing the link with a gentle request that they share this with their students and encourage their participation. After respondents completed the survey, the data was downloaded and

¹ Appendix B expands upon each film chosen for the survey along with their depicted mental disorder(s), classification of studio or independent film, and budget.

analyzed through the statistical computer program SPSS. The sample size of the study was 195 respondents. The targeted sample was university students and while there was not a strict preference for the respondents to be UCF students, there was a convenience factor in that the survey was mostly distributed to UCF students.

MEASUREMENTS

Demographics

There were five demographic variables involved in this research. The measure for age was fill-in as the respondents will be able to give an accurate answer. The measure for class standing had the options of freshman, sophomore, junior, senior, or graduate student so as to incorporate the various levels of education at a university level. The measure of race was similar to census options for race although respondents are given the option to select more than one option so as to garner accurate information and include those of multiple races. Hispanic/Latino option was given separately as to adhere to the culture surrounding ethnicity and it's separation from the concept of race as well as allowing respondents to give the most accurate answer regarding their demographic information. The gender option provided choices of "man", "woman", and "other" with a fill-in option as well as an option to choose multiple answers as to ensure inclusion for any respondent's gender identity.

Independent Variables

In order to attest for the independent variable of how many films respondents have seen, there is a question with 25 film options with photographs of the film's poster. Respondents selected all of the films to which they had seen. The independent variable of knowledge about mental illness was tested by a likert scale question and a multiple answer selection question. The specific likert scale questions involved with the variable of knowledge required respondents to relay their agreement toward a given statement. An example of a factual statement provided was "mental disorders are as a result of biological, psychological, and social causes." Respondents were given five agreement choices including "strongly disagree", "disagree", "neutral", "agree", and "strongly agree". The other question regarding knowledge of mental illness asked individuals to

select which options they feel described a person who is mentally ill with some options being “someone who has hallucinations” and “someone with a split personality”.

Dependent Variables

In order to examine the dependent variables of knowledge of mental illness, perception of mental illness, and sympathy towards mental illness, there were multiple likert scale questions and a few multiple answer selection questions. The specific likert scale questions involved with the variable of knowledge required respondents to relay their agreement toward a given statement. The others regarding knowledge of mental illness asked individuals to select which options they felt described a person who is mentally ill with some options being “someone who is prone to violence” and “someone who has serious bouts of depression”. The questions dealing with the dependent variable of perceptions of the mentally ill included multiple likert questions asking respondents to rate their agreement with statements that were both general (i.e. “People with mental disorders are frequently portrayed accurately in film”) and specific (i.e. People with antisocial personality disorder are typically violent and inhumane”) regarding mental illness, mental illness in film, and mental disorder facts with the options of “strongly disagree”, “disagree”, “neutral”, “strongly agree”, and “agree”. The dependent variable of level of sympathy towards those with mental illness was also dealt with by way of likert scale questions with respondents rating their level of agreement with statements about their interaction and feelings about those with mental disorders (i.e. “People with mental illness deserve respect “) with the options of “strongly disagree”, “disagree”, “neutral”, “strongly agree”, and “agree”.

Control Variables

Many of the statements given in the likert scales were stereotypes that were usually attached to mental illness. A few statements however were true facts regarding mental illness in order to control for those who may or may not have more knowledge and to deter away from continuously asking about stereotypes. An example included “Mental disorders are common”.

RESULTS

Using the statistical analysis program SPSS, the data collected from the 195 respondents was analyzed. First, frequencies and descriptive statistics were observed. The univariate analyses allowed for information regarding the amount of respondents who had seen each of the twenty-five movies provided within the survey and the average response of agreement per likert scale statement. Bivariate analyses were used in conjunction with the data from the univariate analyses in order to test the hypotheses. Correlations as well as a t-test were used in order to determine the significance of the hypotheses.

The demographics of the respondents for the survey are listed in Table 1. As a result of many of the respondents being from the University of Central Florida, as that was the main outlet to which promotion was done for the survey, the demographics from the University of Central Florida have been provided in Table 2 for comparison to those survey respondents. Similarities between that of the survey respondents and demographics from the university included a larger population of women, the most common race being white, and a higher population of juniors and seniors.

Table 1. Demographics of Survey Respondents

Characteristic	<i>N</i>	%
Gender		
Man	32	16.4
Woman	120	61.5
Other	9	4.6
Class Standing		
Freshman	16	8.2
Sophomore	23	11.8
Junior	44	22.6
Senior	58	29.7
Graduate	17	8.7
Race		
White	133	68.2
African American	19	9.7
Asian	9	4.6
American Indian or Alaska Native	6	3.1
Native Hawaiian or Other Pacific Islander	2	1.0
Other	5	2.6
Do you consider yourself Hispanic/Latino?		
Yes	30	15.4
No	130	66.7

Table 2. Demographics of UCF Students

Characteristic	<i>N</i>	%
Gender		
Man	26, 236	44.6
Woman	32, 512	55.3
Class Standing		
Freshman	3, 410	5.8
Sophomore	6, 128	10.4
Junior	15, 391	26.2
Senior	25, 548	43.5
Graduate	7, 533	12.8
Race		
White	31, 825	54.2
African American	6, 302	10.7
Asian	3, 279	5.6
American Indian or Alaska Native	123	0.2
Native Hawaiian or Other Pacific Islander	122	0.2
Other	2, 751	4.7
Ethnicity		
Hispanic/Latino	12, 838	21.9

To test hypothesis 1, individuals who had seen more films portraying mental illness are more likely to have knowledge about mental illness compared to those who had seen less films portraying mental illness, frequencies provided the number of respondents who had seen each of the twenty five movies (Table 3). A correlation was also conducted (Table 5).

Table 3. Variable Frequency of Film Viewing (N=195)

Films	Respondents who have viewed this film
The Hunger Games: Mockingjay Part 1	59.5%
Black Swan	53.3%
Shutter Island	52.3%
Silver Linings Playbook	51.3%
Silence of the Lambs	46.2%
Fight Club	45.1%
Perks of Being a Wallflower	39.5%
Radio	36.4%
A Beautiful Mind	33.3%
American Psycho	32.3%
Rain Man	30.3%
Me, Myself and Irene	26.7%
One Flew Over the Cuckoo's Nest	24.6%
Girl, Interrupted	24.6%
American Hustle	23.1%
Psycho	22.1%
It's Kind of a Funny Story	20%
The Soloist	14.9%
Clockwork Orange	14.4%
Aviator	12.8%
Speak	12.8%
Reign Over Me	6.2%
Melancholia	5.1%
Shame	2.1%
The Beaver	0.5%

Table 4. Variable Descriptive Statistics-Knowledge Index*

Measure	Median	Mean	Std. Dev.
Mental disorders are common.	4.00	3.94	.876
Mental disorders are biological or psychological in nature.	4.00	3.93	.872
Mental disorders are as a result of biological, psychological, and social causes.	4.00	4.31	.781
People who suffer from mental illness could be anyone.	5.00	4.65	.675
Depression can happen to anyone.	5.00	4.59	.626
People with obsessive compulsive disorder have uncontrollable thoughts and feel compelled to perform repetitive actions in an attempt to relieve these thoughts.	4.00	4.13	.932
Psychological or social causes are responsible for the development of mental disorders.	4.00	3.68	.790
Early intervention and early use of new medications lead to better medical outcomes for individuals with schizophrenia.	4.00	3.73	.913

*1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree. Note: Cronbach's Alpha Coefficient=.623

The Knowledge Scale (Table 4) was created by compiling the statements that were related with knowledge of mental illness ($\alpha=.623$). Results showed that there was no statistical significance between amount of films watched and knowledge about mental illness ($r=.020$, $p=.n.s.$), as seen in Table 5.

Table 5. Pearson's Correlations for Films Viewed and Independent Factors*

	Knowledge	Sympathy	Myths	Proximity	Films
Knowledge					
Sympathy	-.419*				
Myths	-.325*	.685*			
Proximity	.315*	-.457*	-.595*		
Films	.020	-.029	-.016	-.138	

Notes: * $p < 0.01$ for all correlations. Sympathy, Myths, Knowledge, and Proximity were scaled from 1-5; 1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree.

To test hypothesis 2, stereotypes surrounding mental disorders were more likely to be agreed with than factual data about mental disorders, a correlation was conducted between the Knowledge Scale and the Myth Scale, a scale composed of statements that covered the myths about mental illness ($\alpha = .922$; Table 6). Results showed that there was a statistical significance between the Knowledge Scale and Myth Scale ($r = -.325, p = .01$).

Table 6. Variable Descriptive Statistics- Myth Index*

Measure	Median	Mean	Std. Dev.
Mental illness is not a very serious problem.	1.00	1.42	.710
People with mental illness tend to be violent and dangerous.	2.00	2.12	.899
Mental illness is a result of drug or alcohol abuse.	2.00	2.06	.998
People with mental disorders cannot communicate and are often disruptive	2.00	2.09	.879
People with mental disorders have nothing to contribute to society	1.00	1.27	.606
The manic state of bipolar is pleasant and fun.	2.00	1.80	.820
People with narcissistic personality disorders are involved in violence and criminal behavior.	3.00	2.56	.843
It is obvious when someone has dissociative identity disorder.	2.00	2.09	.866
People with autism spectrum disorder cannot communicate	2.00	1.88	.878
Dissociate identity disorder and schizophrenia are the same disorder.	1.00	1.69	.827
Autism spectrum disorders are an emotional disturbance.	3.00	2.44	.975
People with mental disorders are almost always suicidal.	1.00	1.55	.776
People with dissociative identity disorder can control their alter-personalities-what they do when they come out.	2.00	1.87	.864
People with narcissistic personality disorder are just selfish and abusive.	2.00	2.21	.975
People with antisocial personality disorder are typically violent and inhumane.	2.00	2.36	1.00
Lying is a characteristic of people with mental disorders.	2.00	2.22	.995
A person with bipolar disorder acts overly energetic and overly emotional.	3.00	3.05	1.037
Schizophrenia involves multiple personalities.	2.00	2.32	1.043
People with mental disorders are extremely sexual.	2.00	1.91	.803
People with obsessive compulsive disorder are neat and tidy.	3.00	2.58	1.069
People who aren't involved in social interaction typically have antisocial personality disorder.	2.00	1.95	.921
People with borderline personality disorder are fickle and manipulative.	3.00	2.41	.945
Depression and sadness are the same thing.	1.00	1.45	.810

Everyone who experiences a life-threatening event will develop post-traumatic stress disorder.	2.00	1.79	.935
People suffering from anxiety should just avoid what is causing their fear.	1.00	1.63	.794
Eating disorders are a lifestyle choice; someone can choose to stop having an eating disorder.	1.00	1.55	.824
Hallucinations (seeing, hearing, or talking about things that appear to be real but are not) and paranoia are the only symptoms of schizophrenia.	2.00	1.97	1.035
Post-traumatic stress disorder only affects war veterans.	1.00	1.33	.732

*1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree. Note: Cronbach's Alpha Coefficient=.922

A t-test was conducted for hypothesis 3 to determine if women expressed more sympathy than men towards mental illness and people with mental illness. Results are shown in Table 7. There were two scales that consisted of sympathy-based statements, the first scale "Sympathy", seen in Table 8, garnered no significant results ($t(152) = .541, p= n.s.$) between men ($M=2.26, SD= .338$) and women ($M=2.14, SD= .388$). The second sympathy-based scale "Proximity", seen in Table 9, also provided non-significant results ($t(152) = .256, p= n.s.$) between men ($M=3.91, SD= .674$) and women ($M=3.96, MD= .761$).

Table 7. Independent Group *t*-test between Sympathy and Respondents' Gender*

	Men		Women		<i>t</i> -test
	M	SD	M	SD	
Sympathy	2.26	.424	2.14	.388	1.484
Proximity	3.91	.674	3.96	.761	-.348

$p < .01$, $N=152$ *Note. M= Mean. SD= Standard Deviation. 1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree.

To test the final hypothesis, individuals who have seen more films depicting mental disorders were predicted to sympathize more with people with mental illness than those who have seen less, the frequencies of films viewed by the respondents were ran through correlations with two sympathy-based scales. The first, Sympathy, was a scale composed of statements that were in regards to how respondents felt about mental illness and people with mental illness depicted in Table 8 ($\alpha = .695$). Results indicated that there was no statistical significance between the amount of films watched and levels of sympathy ($r = -.029$, $p = n.s.$). The second scale, Proximity, was composed of statements that required respondents to relate their willingness to participate in different levels of proximity and contact with people with mental illness, seen in Table 9 ($\alpha = .877$). Results were also not statistically significant between the amount of films watched and levels proximity ($r = -.138$, $p = n.s.$).

Table 8. Variable Descriptive Statistics- Sympathy Index*

Measure	Median	Mean	Std. Dev.
Only people who are weak and extremely sensitive let mental illness affect them.	1.00	1.43	.677
I have little in common with people with mental illness.	2.00	1.79	.840
“Psycho”, “crazy”, and “maniac” are good terms to use to describe mental disorders.	1.00	1.37	.766
One of the main causes of mental illness is lack of self-discipline or will-power.	1.00	1.48	.816
As soon as a person shows signs of mental disturbance, they should be hospitalized.	2.00	1.69	.809
We need to adopt a far more tolerant attitude toward people with mental illness in our society.	5.00	4.47	.800
People with mental illness should not be given any responsibility.	2.00	1.69	.744
People with mental illness are far less of a danger than most people suppose.	4.00	3.83	.965
Less emphasis should be placed on protecting the public from people with mental illness.	4.00	3.52	1.113
Increased spending on mental health services is a waste of money.	1.00	1.47	.725
There are sufficient existing services for people with mental illness.	2.00	2.06	1.068
Anyone with a history of mental problems should be excluded from taking public office.	2.00	1.94	1.007
People with mental illness don't deserve our sympathy.	1.00	1.28	.560

*1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree. Note: Cronbach's Alpha Coefficient=.695

Table 9. Variable Descriptive Statistics-Proximity Index*

Measure	Median	Mean	Std. Dev.
I would be willing to live with someone with a mental disorder.	4.00	3.71	1.048
I would be willing to work with someone with a mental disorder.	4.00	4.17	.833
I would be willing to live nearby someone with a mental disorder.	4.00	4.26	.795
I would be willing to continue a friendship with a friend with a mental disorder.	5.00	4.41	.686
I would be willing to enter a relationship with someone with a mental disorder.	4.00	3.48	1.13

*1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree. Note: Cronbach's Alpha Coefficient=.877

Additional results from a correlation conducted between the Knowledge Scale and Sympathy Scale indicated statistical significance as indicated in Table 5 ($r = -.419, p = .01$). Also, significant results were garnered from a correlation between Knowledge and Proximity ($r = .315, p = .01$).

DISCUSSION

Mental disorders have always been commonplace yet it has often been preferred for individuals to keep the details of their experiences quiet so as to keep their realities away from what the media chooses to portray. The film industry in particular uses mental distress as the cornerstone of their projects in hopes that their work results in awards recognition and it works (Byrne 2010). During the 2015 Academy Awards, of the eight films nominated for Best Picture, five had a character that showed symptoms of a mental disorder. Of the ten actors nominated for Best Actor and Best Actress, eight of those actors played characters with a mental disorder. The pain is raw and in showing these characters struggle, film makers hope to depict a reality that many viewers may not live. However, what is the effect of these major pictures utilizing these real issues? The current research was motivated to look at how film, as a major media outlet, affected people's view of mental disorders and whether stereotypes would be prevalent among thought or if this aspect of the media wasn't as influencing among individual's education.

In one empirical study it was found that there was no significant relationship between amount of films seen depicting mental illness and knowledge of mental illness which could allude to respondents possibly being able to indicate the differences between what was embellished in a fictionalized sense and truthful aspects of mental illness. As indicated by the comparison of knowledge-related statements and myth-related statements, the more knowledge respondents had about mental illness, the less they were to agree with statements that were related to stereotypes about mental illness and vice versa. The hypothesized belief of stereotypes being more likely to be prevalent within respondents was not supported as respondents were on average more likely to disagree with statements related to stereotypes. There is the possibility

that respondents were aware of information regarding mental illness that has nothing to do with film watching or media depictions.

Respondents could have personal experience or the opportunity for research because their status as college students allows for contact with more diverse ranges of people and they have resources at their disposal. This displaces some of the theory surrounding the parasocial contact hypothesis because while respondents may come into contact with mental illness, there is no indication that it is specifically by the media or that this contact has an effect on knowledge. There is also an aspect of contact hypotheses that describes improved relations among different groups of people based upon their contact. As indicated earlier, the vast diversity respondents are afforded by being on a college campus could allow for more interaction with different types of people and information, possibly providing for less of an inclination towards believing stereotypes if they have witnessed people's behaviors in person. Also, films writers, as of late, have adapted more real-life biographies of people who have struggled with a mental illness, providing for a bit more realism in symptoms and portrayals of mental disorders on screen.

Based upon research done in the past regarding gender differences in empathetic or emotion-inducing situations (Eisenberg, Fabes, Schaller, and Miller 1989), it was hypothesized that women would show more sympathy towards those with mental illness. While research done by Eisenberg, Fabes, Schaller, and Miller alluded to more responsiveness in women towards empathetic scenarios, gender within the current research did not have a significant effect on sympathy or knowledge related to mental illness. However, the large population of women and small population of men could have had an effect on the results as there were not enough men to

compare to responses from women. Overall, the data indicates a majority of opinions from women.

The amount of films viewed depicting mental illness and likeliness to sympathize with individuals with mental illness were not significant. This suggested that whether or not respondents had seen films, it did not have an effect on whether they were sympathetic or not towards those with a mental illness. An explanation could be that respondents felt emotions and formed opinions towards people with a mental illness outside of what they may see in the media. In comparing the proximity information as well, which looked to see people's comfort with being in different social situations with those with mental disorders, film viewing also did not have an effect. Interestingly enough, there were indications from the data that those respondents with more knowledge about mental illness had less sympathy towards people with mental illness and vice versa. An explanation for this finding could be that those who know more about mental illnesses may feel more guided by logic and fact than emotion. Those with less knowledge regarding mental illness may find themselves guided by emotion as they are unaware of what is true or not true regarding mental illness and act with a basic human process. What they could witness by senses could be how they determine their stance on mental disorders in contrast to knowledge or facts about mental disorders.

CONCLUSIONS

This study is the first of its kind to analyze the impact of viewing particular films on peoples' views towards mental illness. The analyses conducted within the current study were correlational, which does not imply causation. Longitudinal studies on mental illness representation in the media and its effects on perceptions may be helpful in this regard. Correlationally-based studies such as this one may be used to form hypotheses in future research.

The validity of this study (and as a result its generalizability) may be threatened by the low sample size, vast underrepresentation of men, and reliance of respondent memories. A consistent piece of feedback received from respondents indicated the tendency to lose focus when reaching the end of the survey. This could be an indication as to why there were a low number of respondents. However, it was through the need for an array of data concerning knowledge, stereotypes, and sympathy along with additional measures for future research that the length of the survey increased. Future research could choose to focus on one aspect of knowledge, stereotypes, or sympathy and expand upon that research while eliminating the focus on other facets in order to overcome the survey length issue and increase the possibility for more respondents.

In the case of this study, only data from respondents enrolled in college, both undergraduate and graduate students, was obtained. This provides a significant problem because the data relies on perceived knowledge from one group of people. The data may be skewed based upon the college student's access to more resources to obtain knowledge regarding mental illness. For future research, incorporating more groups of people beyond college affiliated

individuals could allow for not only more respondents but possibly more diversity in terms of opinions and data.

Future research could look to include more specific questions regarding mental illness or could focus on one specific mental illness and how it is represented and perceived. Another factor that could have also provided a hindrance for the study was the reliance on the respondent's memories of the films they had seen. Respondents could have truly seen the films they had indicated watching, however it could have been years prior to taking the survey and details regarding the mental disorder depicted within the film could be nonexistent or very basic. A suggestion for future research could be to have participants view any media related to what was to be studied directly before testing their knowledge in order for researchers to maximize the most potential from their participants.

There is also the possibility of incorporating other media, such as television or news outlets, in order to see how far reaching the effects of the framing of mental illness is within the media. While films are a popular source of entertainment and are widespread in order to reach more audiences, there are other facets of the media that could provide more information about the effects of mental illness depictions have on those who view them. Films at the most basic sense are fictionalized. Future research can look into how new outlets relating nonfictional information cover mental illness and how they relay facts regarding cases involving mental illness.

Most recently, mental disorders have been linked heavily to violence, despite the smaller percentage of those with mental illness who have violent tendencies (18% of those diagnosed). It

is often used as the reasoning behind the actions of those who have committed heinous crimes even if their health history does not point to any indications of mental health. Often mental disorders are used as the tag for a breaking story, diminishing the struggles of those dealing with their pain.

The study of mental health and its relationship with society can go about in a variety of ways, creating the opportunity to truly research and find solutions as to how to combat stereotypes and how to go about education. It's time that mental illness stop being used as a scapegoat for entertainment value and be recognized as a real struggle that one in five Americans face every day.

**APPENDIX A: QUESTIONNAIRE USED IN “PERCEPTION OF MENTAL
ILLNESS BASED UPON ITS PORTRAYAL IN FILM”**

Questionnaire Used in “Perception of Mental Illness Based Upon its Portrayal in Film”

Mental Illness in FilmQ17



Perception of Mental Illness Based Upon its Portrayal in Film

Principal Investigator: Amy [Donley](#), PhD

Other Investigators: Erika [Hanley](#)

You are being invited to take part in a research study. Whether you take part is up to you.

- The purpose of this research is to examine the portrayal of mental illness in films and the impact that such portrayals have on the perceptions of mental illness of the viewers.
- You are being asked to take an online survey.
- This survey will take between five and seven minutes to complete.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints [Erika Hanley](#), Undergraduate Student, Department of Sociology, College of Sciences, erikahanley@knights.ucf.edu or Dr. Amy [Donley](#), PI, Department of Sociology at (407) 823-1357 or by email at amy.donley@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

Q19 Are you 18 years of age or older?

Yes (1)

No (2)

If No Is Selected, Then Skip To End of Survey

Q18 Do you consent to take this survey?

Yes (1)

No (2)

If No Is Selected, Then Skip To End of Survey

Q11 What is one word you would use to describe mental illness?

Q10 Which of these movies have you seen? Select those that apply.

- Black Swan (2010) (1)
- Speak (2004) (2)
- Melancholia (2011) (3)
- Girl, Interrupted (1999) (4)
- It's Kind Of A Funny Story (2010) (5)
- Radio (2003) (6)
- One Flew Over the Cuckoo's Nest (1975) (7)
- The Soloist (2009) (8)
- Shutter Island (2010) (9)
- Reign Over Me (2007) (10)
- Clockwork Orange (1971) (11)
- Aviator (2004) (12)
- The Beaver (2011) (13)
- American Hustle (2013) (14)
- American Psycho (2000) (15)
- Perks of Being a Wallflower (2012) (16)
- Rain Man (1988) (17)
- Silence of the Lambs (1991) (18)
- Psycho (1960) (19)
- Silver Linings Playbook (2012) (20)
- Shame (2011) (21)
- Fight Club (1999) (22)
- A Beautiful Mind (2001) (23)
- The Hunger Games: Mockingjay Part 1 (2014) (24)
- Me, Myself, and Irene (2000) (25)

Q6 How much do you feel you know about the following mental disorders?

	None (1)	Little (2)	Some (3)	A Lot (4)
Depression (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post-Traumatic Stress Disorder (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bipolar (Manic Depressive) Disorder (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schizophrenia (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety Disorder (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Antisocial Personality Disorder (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Obsessive Compulsive Disorder (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissociative Identity Disorder (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Borderline Personality Disorder (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Narcissistic Personality Disorder (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eating Disorders (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autism Spectrum Disorders (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 Which of these do you feel usually describes a person who is mentally ill? (Please select all that apply.)

Someone who has serious bouts of depression (1)

Someone who is incapable of making simple decisions about his or her own life (2)

Someone who has a split personality (3)

Someone who is born with some abnormality affecting the way the brain works (4)

Someone who cannot be held responsible for their own actions (5)

Someone who is prone to violence (6)

Someone who has hallucinations (7)

Someone who has to be kept in a psychiatric or mental hospital (8)

None of the above (9)

Q12 The following section contains statements related to general information about mental illness. Relate your agreement with the following statements. (1 indicates a strong disagreement with the statement while 5 indicates strong agreement with the statement.)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Mental disorders are common. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Films often use mental illness as a topic for added drama and entertainment (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental disorders are biological or physiological in nature (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental illness is not a very serious problem (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with mental disorders are frequently portrayed accurately in films. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with mental illness tend to be violent and dangerous (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental illness is a result of drug or	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>alcohol abuse (7)</p> <p>Mental disorders are as a result of biological, psychological, and social causes. (8)</p> <p>Mental illness is often shown in a negative way in films and TV shows. (9)</p> <p>People who suffer from mental illness could be anyone. (10)</p> <p>Movies do not display people with mental disorders accurately. (11)</p> <p>Psychological or social causes are responsible for the development of mental disorders. (12)</p> <p>People with mental disorders cannot communicate and are often disruptive.</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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<p>(13) People with mental disorders have nothing to contribute to society. (14)</p>	<p>○</p>	<p>○</p>	<p>○</p>	<p>○</p>	<p>○</p>
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Q13 The following section contains statements related to specific information about mental illness. Relate your agreement with the following statements. (1 indicates a strong disagreement with the statement while 5 indicates strong agreement with the statement.)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The manic state of bipolar disorder is pleasant and fun. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with narcissistic personality disorder are involved in violence and criminal behavior (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is obvious when someone has dissociative identity disorder. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Depression can happen to anyone. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with autism spectrum disorder cannot communicate. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissociative identity disorder and schizophrenia are the same	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>disorder. (6)</p> <p>Autism spectrum disorders are an emotional disturbance. (7)</p> <p>People with mental disorders are almost always suicidal. (8)</p> <p>People with dissociative identity disorder can control their alter personalities-what they do and when they come out. (9)</p> <p>People with narcissistic personality disorder are just selfish and abusive. (10)</p> <p>People with antisocial personality disorder are typically violent and inhumane. (11)</p> <p>Early intervention and early use of new</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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medications lead to better medical outcomes for individuals with schizophrenia. (12)					
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Q15 The following section contains statements related to specific information about mental illness. Relate your agreement with the following statements. (1 indicates a strong disagreement with the statement while 5 indicates strong agreement with the statement.)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Lying is a characteristic of people with mental disorders. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with bipolar disorder acts overly energetic and overly emotional. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schizophrenia involves multiple personalities. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with mental disorders are extremely sexual. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with obsessive compulsive disorder are neat and tidy. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People who aren't involved in social interaction typically have antisocial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>personality disorder. (6)</p> <p>People with borderline personality disorder are fickle and manipulative. (7)</p> <p>Depression and sadness are the same thing. (8)</p> <p>Everyone who experiences a life-threatening event will develop post-traumatic stress disorder. (9)</p> <p>People suffering from anxiety should just avoid what is causing their fear. (10)</p> <p>People with obsessive compulsive disorder have uncontrollable thoughts and feel compelled to perform repetitive actions in an attempt to relieve these</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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thoughts. (11) Eating disorders are a lifestyle choice; someone can choose to stop having an eating disorder. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hallucinations (seeing, hearing, or talking about things that appear to be real but are not) and paranoia are the only symptoms of schizophrenia. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post-traumatic stress disorder only affects war veterans. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Relate your agreement with the following statements. (1 indicates a strong disagreement with the statement while 5 indicates strong agreement with the statement.)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I would be willing to live with someone with a mental disorder. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be willing to work with someone with a mental disorder. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be willing to live nearby someone with a mental disorder. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be willing to continue a friendship with a friend with a mental disorder. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be willing to enter a relationship with someone with a mental disorder. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 The following section contains statements related to feelings about people who are mentally ill. Relate your agreement with the following statements. (1 indicates a strong disagreement with the statement while 5 indicates strong agreement with the statement.)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
People with mental illness deserve respect (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Only people who are weak and extremely sensitive let mental illness affect them (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have little in common with people with mental illness (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
“Psycho”, “crazy”, and “maniac” are good terms to use to describe mental disorders (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
One of the main causes of mental illness is lack of self-discipline or will-power (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As soon as a person shows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>signs of mental disturbance, they should be hospitalized (6)</p>					
<p>Virtually anyone can become mentally ill (7)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>We need to adopt a far more tolerant attitude toward people with mental illness in our society (8)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>People with mental illness should not be given any responsibility (9)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>People with mental illness are far less of a danger than most people suppose (10)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>Less emphasis should be placed on protecting the public from people with mental illness (11)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>Increased spending on mental health services is a waste of money (12)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>There are sufficient existing services for people with mental illness (13)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>Anyone with a history of mental problems should be excluded from taking public office (14)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>People with mental illness don't deserve our sympathy (15)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q1 Age

Q2 Class Standing

- Freshman (1)
- Sophomore (2)
- Junior (3)
- Senior (4)
- Graduate Student (5)

Q5 Do you consider yourself Hispanic/Latino?

- Yes (1)
- No (2)

Q3 What is your racial background (Select those that apply)?

- White (1)
- African American (2)
- Asian (3)
- American Indian or Alaska Native (4)
- Native Hawaiian or Other Pacific Islander (5)
- Other (6) _____

Q4 Gender (Select those that apply)

- Man (1)
- Woman (2)
- "Other" (3) _____

**APPENDIX B: FILMS USED IN QUESTIONNAIRE AND THEIR
DEPICTED MENTAL DISORDER**

Films Used in Questionnaire and Their Depicted Mental Disorders

Film	Disorder(s)	Studio or Independent	Production Budget Estimate
Black Swan (2010)	Dissociative Identity Disorder, Eating Disorder, Schizophrenia, Obsessive-Compulsive Personality Disorder	Studio	\$13,000,000
Speak (2004)	Post-Traumatic Stress Disorder	Independent	\$1,000,000
Melancholia (2011)	Depression	Independent	\$9,400, 000
Girl, Interrupted (1999)	Eating Disorder, Borderline Personality Disorder, Depression	Independent	\$24,000, 000
It's Kind of a Funny Story (2010)	Depression	Independent	\$ 8,000, 000
Radio (2003)	Autistic Spectrum Disorder	Studio	\$35,000,000
One Flew Over the Cuckoo's Nest (1975)	Antisocial Personality Disorder	Studio	\$4,400,000
The Soloist (2009)	Schizophrenia	Studio	\$60,000,000
Shutter Island (2010)	Schizophrenia, Dissociative Identity Disorder	Studio	\$80,000,000
Reign Over Me (2007)	Post-Traumatic Stress Disorder	Studio	\$20,000,000
Clockwork Orange (1971)	Antisocial Personality Disorder	Studio	\$2,200,000
Aviator (2004)	Obsessive Compulsive Disorder	Studio	\$110,000,000
The Beaver (2011)	Depression	Independent	\$21,000,000
American Hustle (2013)	Bipolar (Manic Depressive) Disorder	Studio	\$40,000,000
American Psycho (2000)	Borderline Personality Disorder, Narcissistic Personality Disorder	Independent	\$8,000,000
Perks of Being a Wallflower (2012)	Post-Traumatic Stress Disorder, Depression	Independent	\$13,000,000
Rain Man (1988)	Narcissistic Personality Disorder, Autistic Spectrum Disorder	Studio	\$25,000,000
Silence of the Lambs (1991)	Antisocial Personality Disorder	Studio	\$20,000,000
Psycho (1960)	Dissociative Identity Disorder	Studio	\$807,000
Silver Linings Playbook (2012)	Bipolar (Manic Depressive) Disorder, Anxiety Disorder, Obsessive Compulsive Disorder, Borderline Personality Disorder	Independent	\$21,000,000
Shame (2011)	Borderline Personality	Independent	\$6,500,000

	Disorder		
Fight Club (1999)	Dissociative Identity Disorder	Studio	\$65,000,000
A Beautiful Mind (2001)	Schizophrenia	Studio	\$78,000,000
The Hunger Games: Mockingjay Part 1 (2014)	Post-Traumatic Stress Disorder, Anxiety Disorder	Studio	\$125,000,000
Me, Myself, and Irene (2000)	Borderline Personality Disorder, Dissociative Identity Disorder	Studio	\$51,000,000

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