



Department of Psychological Science

**How Schizophrenia Is Portrayed
In Films Purportedly About Schizophrenia**

Honors in Psychology Project

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How Schizophrenia is Portrayed in Films Purportedly About Schizophrenia

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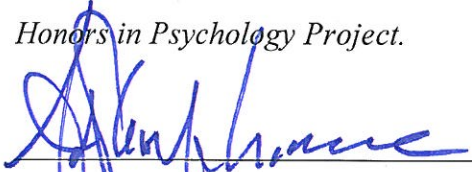
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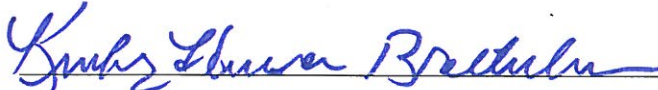
Project Title: How Schizophrenia is Portrayed in Films Purportedly about Schizophrenia

Signatures below signify that the student has successfully completed the requirements of the Honors in Psychology Project.


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Abstract

The portrayal of different aspects of psychology has been inconsistent in films for decades. Research illustrates that mental disorders have continuously been portrayed as violent and inaccurate. This project was a content analysis of the portrayal of schizophrenia in feature films released between 2001 and 2017. Two trained coders, blind to the specific purpose of the study, independently watched 23 films identified in popular sources as being about schizophrenia. Coders completed a 3-page coding sheet about each movie. Results of descriptive statistics indicated that most of the characters who supposedly had schizophrenia were Caucasian males between 25 and 50 years old and that 22% of the films that were purportedly about schizophrenia did not meet the criteria necessary for diagnosing schizophrenia. Also, in almost all of the films (95.7%) the characters exhibited some sort of violence or aggression. Over one-third (34.8%) of the characters with schizophrenia were depicted as having a special ability. Lastly, the biological causation of schizophrenia was only evident for 21.7% (5) films.

Each year billions of dollars are spent on movie production and movie viewing. In 2016, the global box office reached \$38.6 billion dollars and the quantity of cinema screens increased to roughly 164,000 (MPAA, 2017). This continuous increase in cinematic releases and ticket purchases are, at least partially, a result of the media's promotion of feature films with trailers that draw viewers in with creative and innovative plots. A variety of movie genres -- comedy, drama, thriller, documentary -- have been developed to meet everyone's entertainment preference. Plots are consistently needed to keep the audience from getting burnt out on the same idea, therefore, movie producers are constantly seeking new suggestions for their films. Frequently, producers have looked to psychology for interesting and complex plot concepts.

Filmmakers first turned to psychology over 100 years ago, with the release of *Dr. Dippy's Sanitarium* in 1906 which, as its name implies, was about a mental institution. This was followed by *The Case of Becky* in 1921, which was about a young girl with a split personality, and *The Man Who Saw Tomorrow* in 1922, which was about a psychologist hypnotizing his clients to enable them to see into the future (Gabbard & Gabbard, 1999). The use of psychology has continued, and today there are dozens of films with psychological themes and topics released each year.

For scholars, questions have emerged both about the accuracy of these portrayals of psychology and about cultivation effects. *Cultivation*, refers to how mass media affect constructions of social reality -- how movies and television affect the way people perceive the world. The term is most-associated with communication researcher George Gerbner (see, for example, Gerbner 1998). Gerbner wrote about a number of cultivation effects, such as how television violence causes viewers to see the world as a more dangerous place. With regard to

psychology, researchers have pondered how mass media affect the perception of the field, the profession, and of psychological disorders.

Gabbard and Gabbard (1999) have examined how the portrayal of psychology in film has changed over time. During what they have deemed *The Golden Age*, in the 1950s, the field was portrayed in a positive light with an authoritative psychiatrist. However, due to historical and cultural shifts both before and after *The Golden Age*, negative stereotypes of psychology professionals have prevailed throughout films. Prior to *The Golden Age*, psychiatrists were portrayed unrealistically and were depicted as quacks. Then, after World War II, psychiatrists were portrayed, although still inaccurately, as competent and useful because more psychiatrists were being needed. Gabbard and Gabbard noted that from the 1950s to the 1960s, psychiatrist and psychological disorders were most often found in detective, comedy, and what used to be called, "Women's Films." Then, after *The Golden Age*, the psychiatrists and psychologists went back to being portrayed as quacks, except even worse than before. Gabbard and Gabbard (1999) categorized movie psychiatrists into one of three groups: the healer, the lunatic, and the incompetent. With two out of the three of these categories being negative, it is not surprising that the general image of psychology was negative.

In his book *Psychology at the Movies*, now in a third edition, Young (2002) focused on the representations of psychological disorders, psychologists, and the treatment of disorders within films. He claimed that the portrayals of these psychological aspects of films are mostly inaccurate and that they affect the perceptions of those with and without a psychological disorder, as well as those who work in the mental health field. One example that Young insisted was an inaccurate portrayal is that of dissociative identity disorder through the character of Norman Bates in *Psycho*. Other examples Young included are the Joker in *The Dark Knight*,

Michael Myers in *Halloween*, and Lisa in *Girl, Interrupted*. From these faulty depictions, Young claimed that, “While these films heighten the *dramatic* reality of psychological disorders, they distort *physical* reality” (pg. 47). However, Young also gave examples of movies that seemed to portray psychology accurately such as *Requiem for a Dream*; *Fatal Attraction*; and *Paris, Texas*. Nevertheless, negative expressions of psychology still prevail in films, and these portrayals of disorders, treatment, and psychology professionals negatively influence society’s perception of psychology overall. Although there is no requirement to portray the components of psychology accurately, Young’s analysis of psychology in films emphasized the importance of accurate depictions.

Psychology, specifically issues regarding mental health, has also been portrayed on television. Diefenbach and West (2007) conducted both a television content analysis and community survey to assess the attitudes towards and portrayal of mental health. For the content analysis, twelve undergraduate students independently coded 84 hours of television programming using the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). They coded for behavior, symptoms, quality of life, and the impact on society using a 5-point Likert scale. In over one-third of the television programs viewed, the mentally ill were depicted as being dangerous and violent. Diefenbach and West a conducted survey via telephone to assess attitudes towards mental health. Ultimately, their findings concluded that the television programs’ influence and attitudes towards mental health were positively correlated; the more a participant watched the television programs, the more negative his or her attitude towards mental health became.

More recent research has continued to assess how psychology is portrayed in the cinema. For example, researchers have analyzed specific genres of films. Goodwin (2014) examined how

psychosis is treated in modern horror films. He wanted to determine stereotypes and misconceptions of both psychosis and mental healthcare practices in horror films. His content analysis consisted of 55 films that he found by searching for movies associated with the terms “mental/psychiatric patient,” “psychosis/psychoses,” and “mental/psychiatric hospital.” All films were released between 2002 and 2012. Based on previous literature, Goodwin created a checklist of about 40 stereotypes, dominant themes, and misconceptions revolving around psychosis and mental health care portrayal. Included in his coding criteria were categories such as homicidal maniac, narcissistic parasite, dishonest excuses, and qualities of staff/doctor/nurse, just to name a few. Goodwin coded for and analyzed the data himself -- this is a questionable practice due to potential experimenter bias -- concluding that these horror films did create stigmas about psychosis and mental health care environments due to the inaccuracy of mental health portrayal. The most shared stereotype for psychosis in these horror films was homicidal maniac. Characters were also predominately portrayed as pathetic, sad, or murderers. Psychosis was also commonly viewed the same as a dissociative identity disorder. Regarding the mental health care environments, these films negatively depicted mental health practitioners. The practitioners were portrayed as dangerous, evil, unhygienic, and unprofessional (violating protocol). Overall, Goodwin concluded that horror films with a focus of mental illness are discriminative towards and stigmatize both disorders and the mental health professionals who work to treat the disorder.

The portrayal of mental illness has also been analyzed in children's films. Children's films are less violent and crude than adult films, and they also tend to be more sensitive to certain topics. Wahl, Wood, Zaveri, Drapalski, and Mann (2003) wondered if this was also true for psychological disorders. Predicting that these films would hold the same negative stereotypes that are found in adult content, the researchers gathered 49 G- and PG-rated

children's films and constructed a coding system. Three raters independently coded each film. These raters first looked at the film to determine if there was a *target character* with a mental illness. If this was true, they watched the film a second time to rate the film. Mental illnesses were determined by the use of slang terms "crazy" and "psycho." Raters coded character demographics, attributes of the target character, the association of mental illness with violence, other supporting characters' responses to the target character, treatment, and overall impressions. Of the 49 films, 12 were found to have a character with a mental illness, resulting in a total of 14 characters with a mental illness (two movies each had two characters with a mental illness). It was concluded that children's films with characters who have a mental illness are similar to adult films with characters portraying a mental illness. The children's films did portray mental illnesses more positively than adult films through the physical and social appearance of the characters. However, similar to adult films depicting mental illnesses, the characters in the children's films were also displayed as being aggressive, violent, and having others being afraid of them. Also, even in positive depictions, the characters were described or spoken to poorly. This sends the message to the viewers that negative language is acceptable for referring to people who have a mental disorder.

Researchers have also examined the portrayal of specific disorders in film and television. Fennell and Boyd (2014) analyzed the portrayal of obsessive-compulsive disorder (OCD) in the media to examine obsessions, compulsions, and how these are interpreted by viewers. First, people with self-identified OCD were recruited to analyze how they are personally affected by movies and television shows that portray OCD. Then, the researchers used a coding sheet to examine fictional representations of OCD in movies. They located the films through the Internet Movie Database (IMDb) and searched for "obsessive compulsive" in the keywords. Their

content analyses showed that the portrayal of OCD in television shows is not always uniform or obvious. Through their qualitative interviews and content analyses, Fennell and Boyd also determined that the portrayal of OCD in films results in the stigmatization of the disorder by viewers.

Similarly, Owen (2012) analyzed contemporary films for the presence of stereotypes and misinformation of schizophrenia. In her content analysis, Owen's and her graduate assistant independently rated 41 theatrical films from 1990-2010 and recorded the schizophrenic character's demographics, symptoms, stereotypes, causation and treatment. These films were located using online movie databases and movie guides while searching for keywords such as "schizophrenia," "hallucinations," and "psychosis." The films were identified as being about schizophrenia if a character was described as having schizophrenia or if he or she met *DSM-IV-TR* criteria. Owen's results indicated that characters were predominantly Caucasian males with a low socioeconomic status. Additionally, many of the characters were depicted as being violent and aggressive. A majority of the characters also displayed delusions and hallucinations recurrently, however, negative symptoms such as alogia, avolition, and flat affect were not commonly portrayed. Nearly one-third of the films did not explain the onset of schizophrenia, but the causation that was identified the most was a traumatic event occurring in character's life. Lastly, in over half of the films, psychotropic medications were used for treatment, and in 24% of the films, love cured schizophrenia. Overall, Owen's concluded that these movies were adequately accurate in the portrayal of schizophrenia. However, the inconsistencies in the characterizations of schizophrenic symptoms, stereotypes, and treatment still leave space for schizophrenia to be misinterpreted. Her findings further suggest how misinformation and negative portrayals of schizophrenia influence can society.

The purpose of this study was to conduct a content analysis of the portrayal of schizophrenia in more recent films. This study differed from Owen's (2012) investigation in several ways. First, it covered a different range of years. Her study covered 1990-2010, whereas this one covered 2001-2017. Secondly, Owen coded her own films, which was a potentially biasing factor in her study. In addition, the current study was not limited to films shown only in movie theatres. In recent years, more movies and television series have been released straight to video, such as the popular Netflix series *Stranger Things* and *13 Reasons Why*. Finally, this study was not limited to characters that *have* schizophrenia. One of the purposes was to determine whether film databases mislabel films as being about schizophrenia when they are not, so films *identified* as being about schizophrenia were analyzed, whether they were actually about schizophrenia or not.

Although the main purpose of this investigation was descriptive, based on previous research, several predictions were made about how the movie characters with schizophrenia would be portrayed. The first hypothesis was that a large proportion of characters with schizophrenia would be portrayed as violent or aggressive towards others. Based on previous research, this has been a common theme in movies about mental disorders. However, people with schizophrenia are more likely to be violent and harmful to themselves rather than be violent towards others (Kring, Johnson, Davison, & Neale, 2013). The second prediction was that some of the characters with schizophrenia would possess a significant gift or special talent. Although there have been instances where an individual with schizophrenia did have a special gift or talent, it is more likely that someone with schizophrenia does not have special ability due to the symptoms of the disorder and the natural decline in functioning that occurs. The third hypothesis was that although schizophrenia has a strong genetic foundation, the character's mental illness

will often be portrayed as being caused by environmental factors such as past events such as trauma of parental neglect. Yet, the concordance rates for schizophrenia between related individuals illustrates its biological background. Lastly, it was hypothesized that movies that are labeled in databases as being about schizophrenia will not necessarily be about this disorder (they will not meet DSM-5 criteria), and that some films may confuse schizophrenia with dissociative identity disorder (DID). The DSM-5 criteria for schizophrenia states that an individual must have two out of the five symptoms: hallucinations, delusions, disorganized speech, grossly disorganized or catatonic behavior, and negative symptoms. However, the DSM-5 criteria for DID consists of having two or more personality states, amnesia, and the individual is distressed because of the other symptoms.

Method

Materials. The method used in this investigation was a content analysis. The 25 films (2001-2017) that were initially included in the analysis appeared in a Wikipedia search using the keyword, "films about schizophrenia" and in at least one of the following sources: Internet Movie Database (IMDb), Rotten Tomatoes, Roger Ebert's movie review website, or *VideoHound's Golden Movie Retriever*. If the film was not listed on the Wikipedia webpage, then the film had to be found in two or more of the other sources. Movies were found through IMDb, Rotten Tomatoes, and Roger Ebert's movie review website by using the coding words "schizophrenia," "schizophrenic," "psychosis," and the movie title itself, or the *VideoHound's Golden Movie Retriever* (2017) categories "shrinks," "psychotic/psychopaths," and "mental hospitals." To be included, films had to be in English, not merely an episode of a television series, and had to be obtainable by the researcher (located in a local or university library, ordered through interlibrary loan, on Netflix, or purchased on Amazon). There also had to be a major

character with schizophrenia. After the initial 25 films were gathered, two of the films had to be dropped from the list because one film contained only a minor character with schizophrenia, and the other movie was not available in English as originally suggested. A list of the 23 films that were included in the analysis can be found in Appendix A.

Procedure. Two Northern Kentucky University undergraduate students, who had previously taken an abnormal psychology course, independently watched all 23 films and completed a coding sheet on each. These coders were blind to the specific purpose of the study, and they were trained to code with practice films. The coding sheet contained items defining what a “major character” is and asked if there is major character with a mental disorder in the film. The coding sheet also contained items about the character’s demographics, source of treatment, symptoms, and behavior. The entire coding form is found in Appendix B. The researcher also answered several additional questions about each film; these can be found in Appendix C.

Coders watched three to four movies a week for nine or ten weeks. Each week the two coders and the researcher met to exchange films and coding sheets. The coders were instructed to code only based on what is shown in the film and not to base coding on film packaging, online resources, etc. They were also asked not to talk with each other about the films.

Results

Coder reliabilities were calculated for each variable. Only variables meeting a reliability of .74 will be discussed here. In cases where reliability was met but less than 100%, the

researcher broke the tie to determine the final percentage. A list of reliable variables is provided in Table 1.

Character Demographics. The 23 characters who purportedly had schizophrenia in these films consisted of 15 males and 8 females and were predominantly white (20, 87%). The age of these characters mostly ranged from 17-50 years old: 21.7% (5) of the characters were 17-24 years old and 65.2% (15) of the characters were 25-50 years old.

Symptoms and Causation. Although the coding was not reliable for the disorder depicted in the films, there was reliability about whether two of the five schizophrenic symptoms were present. Of the films, 78% (18) had a character display two out of five symptoms (hallucinations, delusions, disorganized speech, grossly disorganized or catatonic behavior, and negative symptoms). This means that a little over 20% of the films that purportedly had something to do with schizophrenia did not meet the DSM-5 criteria for schizophrenia. Also, only 21.7% (5) of the characters' causation of schizophrenia was understood to have been caused by biology (versus a specific event, upbringing, or having no cause mentioned). Of the films with characters who met the DSM-5 criteria for schizophrenia, only 17.4% (4) implied a primary causation of biology.

Treatment. A large portion of the characters received some sort of treatment in the films. Over half (65.2%) of the characters were seen by some sort of psychology professional; 43.5% (10) were shown in a mental hospital; and 30.4% (7) of them were understood to have been in a mental hospital in the past. Also, 39.1% (9) of the characters were shown being administered medication and 30.4% (7) of them were actually shown taking medication. Besides medication, 56.5% (13) of the characters also engaged in other forms of treatment, including insulin shock,

ECT, talk therapy, group therapy, behavior modification, and other forms of therapy (hypnosis, lobotomy, and mirror therapy). Additionally, 34.8% (8) of the characters were also presented as having their schizophrenia improved or cured by love.

Character Behaviors. Almost all of the characters (22, 95.7%) who purportedly portrayed schizophrenia in the films were violent or aggressive towards others. Regarding verbal aggression or violence, 100% of them yelled angrily at another character, and 30.4% (7) of them used profanity or profane names. However, there were also many acts of physical violence, including shooting or stabbing someone (10, 43.5%), strangling someone (2, 8.7%) or other acts of violence (4, 17.4% - kidnapping, grabbing, murder). Even with all of these violent and illegal activities, only two of the characters (2, 8.7%) were shown in jail or prison.

The characters who had schizophrenia were not only violent to others, but they were also violent to themselves: 26.1% (6) of the characters partook in some method of self-harm. Also, 21.7% (5) of the characters attempted suicide, and 13.0% (3) of the characters actually ended their own life through committing suicide.

Of the mentally ill movie characters, about one-third (8, 34.8%) of the characters also displayed some sort of greater than average ability or skill of some type. These abilities included being gifted in music (*The Soloist*, *The Caveman's Valentine*, and *Love and Mercy*), dance (*Black Swan*), acting (*Stateside*), and intelligence (*A Beautiful Mind*, *K-PAX*, and *Sucker Punch*).

Other Behaviors. Supporting characters in the film (other major characters in the film without a mental illness that interacted with the character being coded) treated the character with schizophrenia differently. About one-fifth of the characters with schizophrenia (5, 21.7%) were manipulated by someone else in the film. The schizophrenic characters were manipulated for

research purposes (to gather information on another character) and they were used for their talents, money, fame, or sex.

Discussion

The results of this content analysis suggest that films released in the last two decades continue to portray inaccuracies about schizophrenia. Although all the films analyzed had been described in movie sources as dealing with schizophrenia, in 22% of the films the major character with a mental illness did not display two of the five requisite symptoms for a schizophrenic diagnosis. Also, the depiction of the disorder was so muddled that the two study coders failed to reliably agree on a diagnosis. Perhaps, not surprisingly, the positive symptoms were more frequently portrayed than negative symptoms. Unlike what is often the case, in this set of films, there seemed to be no confusion between schizophrenia and DID.

The purportedly schizophrenic characters were also shown as having an unusual talent or ability 34.8% of the time, when, in reality, those with schizophrenia are less likely to be gifted due to the symptoms of the disorder, the decline in functioning that co-occurs, and the social and occupation dysfunction that results from the latter. A majority of these films that had a character with a special ability were also based on a true story. This makes sense as rare and extreme cases make for more interesting films as opposed to a movie *only* about a typical individual living with schizophrenia.

Consistent with previous research and in support of one of the hypotheses, almost all (95.7%) of the schizophrenic characters were verbally or physically aggressive and violent. This idea of the crazed and murderous character with a mental illness is nothing out of the ordinary

for Hollywood directors. The schizophrenic characters in these films were almost five times more likely to be violent towards someone else than to themselves. Yet, in reality, people with schizophrenia are more likely to harm themselves than to harm other people. In fact, people with schizophrenia are 10 to 13 times more likely to end their life by committing suicide than the general public (Schizophrenia – Fact Sheet 2008). This is something the movies do not portray. The movies, instead, portray people with schizophrenia in a negative light suggesting they are people that the general population should fear

The onset of schizophrenia is typically in the late teens or early adulthood, and this was consistent with the film portrayals. There were almost twice as many male characters with schizophrenia as there were female, although in actuality, schizophrenia only affects men slightly more than women. Almost all the characters with schizophrenia were Caucasian; however, schizophrenia is diagnosed more frequently in African Americans. (Admittedly, there is some question as to whether this is the result of a clinician bias.) Also, a lot of the characters received some sort of treatment (therapy or medication), yet statistics show that 50% of people who are actually diagnosed with schizophrenia have received no treatment whatsoever (About Schizophrenia). This is mostly due to the fact that treatment for schizophrenia is expensive and many individuals with schizophrenia have a low socioeconomic status. Additionally, 24% of the characters were “treated” or were cured by love. Examples include *Love and Mercy*, *Take Shelter*, *A Beautiful Mind*, and *Keane*. While this makes for a more satisfying movie, schizophrenia is unlikely to be cured by love alone.

There are a number of directions for future research. For example, researchers could use some of the films in this analysis to study experimentally how movies influence the perception of

schizophrenia. Even though this search was not initially limited to films with theatrical releases, further studies could also explore other sources to locate films that are released beyond theaters, since more television and online streaming movies are becoming more readily available.

Additionally, it would also be interesting to compare older films with schizophrenic characters to newer ones to see if there has been an overall shift in the portrayal of schizophrenia. All of this is important because these inaccurate portrayals of schizophrenia in films will lead to inaccurate perceptions and assumptions of the disorder by the viewers which then will lead to the continued stigmatization of schizophrenia.

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Table 1
Adjusted Percentages for Reliable Variables

Variable	Reliability ^a	Percentages ^b
Character Demographics		
Gender	100%	65.2% - Male 34.8% - Female
Race	100%	87.0% - White 8.7% - Black 4.3% - Other (Indian) 0% - Hispanic 0% - Asian
Age	80%	0% - Under 17 21.7% - 17 to 24 65.2% - 25 to 50 13.0% - Over 50
Treatment		
Seen by a psychology professional	91.3%	65.2%
Shown in a mental hospital	95.7%	43.5%
Understood to have been in a mental hospital in the past	82.6%	30.4%
Psychology professional prescribing or administering medication	91.3%	39.1%
Character taking prescribed medication	91.3%	30.4%
Non-medication treatment	95.7%	56.5%
Insulin Shock	91.7%	4.3%
ECT	100%	4.3%
Talk Therapy	75%	39.1%
Group Therapy	100%	4.3%
Behavior Modification	83.3%	4.3%
Other (lobotomy, hypnosis, mirror therapy)	91.7%	21.7%

Note: ^a All variables were dichotomous. A simple agreement between the two coders was

^b For variables with reliability less than 100%, the researcher's coding was used to determine final percentages.

Table 1 (Continued)
Adjusted Percentages for Reliable Variables

Variable	Reliability ^a	Percentages ^b
Symptoms		
Hallucinations	91.3%	82.6%
Delusions	74.0%	73.9%
Chronic Anxiety	87.0%	39.1%
Depressed Mood	78.3%	30.4%
Substance Abuse	87.0%	17.4%
Forgetting Large Pieces of Time	91.3%	8.7%
Compulsions	74.0%	13.0%
Distinct Personality States	87.0%	17.4%
Disorganized Thinking/Speech	78.3%	73.9%
Non-Normative Sexual Behaviors	91.3%	0.0%
Self Harm	91.3%	26.1%
Verbal Expression of Suicidal Thoughts	91.3%	13.0%
Suicide Attempt	87.0%	21.7%
Suicide (ended own life)	95.7%	13.0%
Lack of Eye Contact, Minimal Speech Intonation, or Minimal Emotional Expression	78.3%	26.0%
Lack of Purpose or Interest in New Activities	95.7%	13.0%
Nightmares	78.3%	26.1%
Mania	95.7%	4.3%
Causation	87.00%	21.7% - Biology 17.4% - Other (specific event, upbringing, or no cause mentioned)

Note: ^a All variables were dichotomous. A simple agreement between the two coders was used to determine reliability. Only variables meeting a .74 agreement were considered reliable.

^b For variables with reliability less than 100%, the researcher's coding was used to determine final percentages.

Table 1 (Continued)
Adjusted Percentages for Reliable Variables

Variable	Reliability ^a	Percentages ^b
Schiz. Character's Behaviors		
Aggressive or violent behavior	95.7%	95.70%
Yelling angrily	91.3%	100%
Profanity/profane names	74.0%	30.40%
Shot or stabbed someone	82.6%	43.50%
Strangled or attempt to strangle someone	82.6%	8.70%
Other acts of violence		17.40%
In jail or prison	100%	8.70%
Greater than average ability	78.30%	34.80%
Other Character's Behaviors		
Love (treated/cured by)	95.7%	34.80%
Manipulation	78.30%	21.70%

Note: ^a All variables were dichotomous. A simple agreement between the two coders was used to determine reliability. Only variables meeting a .74 agreement were considered reliable.

^b For variables with reliability less than 100%, the researcher's coding was used to determine final percentages.

Appendix A

Movie List

1. *15 Park Avenue* (2005)
2. *A Beautiful Mind* (2001)
3. *Black Swan* (2010)
4. *Bug* (2006)
5. *Canvas* (2006)
6. *Donnie Darko* (2001)
7. *Keane* (2004)
8. *K-PAX* (2001)
9. *Legend* (2015)
10. *Love and Mercy* (2014)
11. *Maps to The Stars* (2014)
12. *Mirrors* (2008)
13. *Mr. Brooks* (2007)
14. *Shutter Island* (2010)
15. *Spider* (2002)
16. *Stateside* (2004)
17. *Sucker Punch* (2011)
18. *Take Shelter* (2011)
19. *The Caveman's Valentine* (2001)
20. *The Dark Knight* (2008)
21. *The Soloist* (2009)
22. *The Uninvited* (2009)
23. *The Voices* (2014)

Appendix B

Film Coding Sheet for Haley Day Study: Final Version

1. Coder _____
 2. Date Watched _____
 3. Time Watched _____
 4. Name of Film _____
 5. Had you ever seen all or part of this movie previously?
☐ Yes, all of it ☐ Yes, part of it ☐ No, I had not seen it
- A **major character** is a character who appears in at least four scenes, averages at least five lines of dialogue per scene, and whose actions are integral to the plot. (Note: If the character has a significant mental/emotional impairment, the dialogue does not have to make sense. It can be gibberish, moans, or continuous screams.)*
6. Was there a major character in this film who had a mental disorder?
☐ Yes ☐ No
 7. What was this character's name? _____
 8. What mental disorder did the character have? It was _____
☐ Not sure what disorder this was
 9. How did you know the character had a mental disorder? (check as many as apply)
☐ The character said or implied that he or she had the/a disorder
☐ Another character said that the character had the/a disorder
☐ From the behaviors and symptoms of the character
☐ It was written on something (what? _____)
☐ Other (specify _____)
 10. What was the character's gender?
☐ Male ☐ Female ☐ Unclear / Ambiguous
 11. What appeared to be the character's primary race/ethnicity?
☐ Asian ☐ Black ☐ Hispanic ☐ White ☐ Other
 12. Into which age range does the character fall? (If the character was shown at different ages, check the current or most recent age.)
☐ Under 17 ☐ 17 - 24 ☐ 25 - 50 ☐ Over 50
 13. Was the age explicitly stated?
☐ Yes, it was _____ ☐ No
 14. Which best describes the character's current socioeconomic status (SES)?
☐ lower income ☐ middle income ☐ upper income

15. Was the character with a mental illness ever seen by a psychology professional? (*Psychology professional, in this case, includes psychiatrist, psychologist, psychiatric nurse, therapist or counselor of unknown background, social worker*)

___ Yes ___ No

16. If yes to #15, what type of psychology professional? _____

(Note: Answer this based ONLY on what you saw or heard in the actual film.)

17. How did you know this? (e.g., from badge, name plate on desk, sign on door; character was addressed in this way) _____

18. Was the character with the mental disorder ever *shown* in a mental hospital or in psychiatric ward of a regular hospital?

___ Yes ___ No

19. Was the character with the mental disorder ever *understood to have been* in a mental hospital or in psychiatric ward of a regular hospital *in the past*?

___ Yes ___ No (When? What Type? _____)

20. Which of the following symptoms or behaviors did the character with the mental disorder display?

- a. ___ hallucinations (What kind? Specify _____)
- b. ___ delusions (What kind? Specify _____)
- c. ___ chronic anxiety (Not just one anxious moment; General, or a specify worry? _____)
- d. ___ depressed mood understood to have lasted two weeks or more
- e. ___ excessive drinking or substance abuse (Specify _____)
- f. ___ forgetting large pieces of time (not due to blackout, alcohol or substance abuse, accident, or medical condition)
- g. ___ obsessions (Specify _____)
- h. ___ compulsions (Specify _____)
- i. ___ trouble sleeping (persistent, not just one night)
- j. ___ one or more distinct personality states (multiple identities, not simply mood changes)
- k. ___ disorganized thinking (trouble maintaining order in thoughts or trouble filtering out stimuli; NOT simply having trouble concentrating as when tired or stressed from a long day) or disorganized speech (changing topics rapidly, loose associations, "word salad," making communication difficult)
- l. ___ extremely abnormal motor movement (excessive movement, pacing, total absence of movement, odd repetitive behaviors, silliness)
- m. ___ hyper- or non-normative sexual behaviors (e.g., frequent sexual activity with large number of partners, masturbating in public) (Specify _____)
- n. ___ self-harm (but not a suicide attempt; Specify _____)
- o. ___ verbal expression of suicidal thoughts
- p. ___ suicide attempt
- q. ___ suicide (ended own life)
- r. ___ prolonged lack of eye contact, minimal speech intonation or minimal emotional expression
- s. ___ complete lack of purposeful activity or interest in new activities
- t. ___ nightmares
- u. ___ mania (abnormally elevated mood, energy; high distractibility; decreased sleep need, grandiosity)

21. Was a psychology professional ever shown prescribing or administering medication for the character with the mental disorder?

☐ Yes ☐ No

22. Was the character with the mental disorder ever shown taking prescribed medication for the disorder by him- or herself?

☐ Yes ☐ No

23. Was the character with the mental disorder shown engaging in any other type of treatment besides medication?

☐ Yes ☐ No (skip to question 25)

24. If *yes* to #23, what kind of treatment?

☐ Insulin Shock

☐ ECT

☐ Individual "Talk Therapy" with therapist

☐ Group Therapy

☐ Behavior Modification (either administered by professional or used by character)

☐ Specify _____)

☐ Other; Specify _____)

25. Did the character with a mental illness ever exhibit aggressive or violent behavior toward others?

☐ Yes ☐ No (skip to 27)

26. If *yes* to #25, what types of aggressive behavior? For each behavior checked, indicate if the aggression or violence was in self-defense or the result of provocation?

<input type="checkbox"/> Yelled angrily at someone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Used profanity; called someone profane names	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Hit or kicked someone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Shot or stabbed someone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Strangled or attempted to strangle someone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Engaged in destruction of property	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Other (Specify: _____)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

27. Was the character with the mental illness ever in jail or prison?

☐ Yes ☐ No

28. What was implied as the cause of the character's mental illness? Put a "1" by the primary cause implied. Put a "2" by a secondary implied cause if there was one.

☐ No cause mentioned

☐ Biology (genetics, chemical imbalance, etc.)

☐ Upbringing (e.g., parents, community, etc.) Specify _____

☐ Specific event (e.g., car accident; witnessing disturbing event) Specify _____

29. Did the character with the mental illness have a much greater than average ability or skill of some type? (e.g., genius IQ, exceptional artistic, mechanical, or engineering talent)

☐ Yes ☐ No (Specify _____)

30. How did other characters closest to the character with the mental illness generally react toward him or her. (Check all that apply.)

- ☐ with support
- ☐ with frustration, anger or resentment
- ☐ with worry (for character's well-being)
- ☐ with fear (for themselves)
- ☐ with romantic attraction

31. Was the character with mental illness ever manipulated by others for some purpose?

☐ Yes ☐ No (Specify _____)

32. Was the character's illness healed or improved by love?

☐ Yes ☐ No

Appendix C

Additional Coding Items for Researcher

1. Name of Film _____
2. Was this movie ever shown in theatres?
_____ Yes _____ No
3. In what year was this movie released? _____
4. Was this movie based on a true story?
_____ Yes _____ No
5. Did the character meet DSM criteria for schizophrenia?
_____ Yes _____ No
6. Based on the DSM, did the character have DID?
_____ Yes _____ No
7. Was the character referred to as having either DID or split/multiple personality?
_____ Yes _____ No
8. Were schizophrenia and DID confused in film?
_____ Yes _____ No