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Attitudes toward mental illness: the effects of electronic media and the social desirability bias

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Attitudes toward Mental Illness: The Effects of the Electronic Media and the Social Desirability Bias

This study examined the effects of mental illness portrayal in film and the social desirability bias on participants' attitudes toward mental illness. Participants watched video clips of a mentally ill character acting either normally or abnormally, and were given either anonymous or confidential questionnaires. Participants who viewed abnormal behavior reported more negative attitudes toward mental illness than participants who watched normal behavior ($p < .001$) on the Beliefs Toward Mental Illness Scale (Hirai & Clum, 2000). No difference was found between the anonymous and confidential conditions, and these scores did not vary by the viewed behavior. These results suggest that the electronic media influenced participants' attitudes toward mental illness, but participants were not influenced by the social desirability bias.

There are a wide variety of definitions about mental illness, but they all seem to have several things in common. Mental illness is an encompassing term that can refer to a wide variety of psychological disorders from those that cause mild stress to those that leave a person unable to function as a normal member of society. People who are mentally ill experience disturbance of their thoughts, emotions, or behavior ("Mental Illness," 2005).

Unfortunately, the mentally ill can be negatively stereotyped and stigmatized. For instance, Link, Phelan, Bresnahan, Stueve, and Pescosolido (1999) conducted a study in which participants felt that there was a strong connection between mental disorders and dangerousness. The belief that mentally ill people are more dangerous than the general population led to a desire for social distance from the mentally ill. A different study conducted by Read and Harré (2001) found that participants would not like to live next door to a mentally ill person or become romantically involved with a mentally ill person, in addition to the belief that the mentally ill are more dangerous and unpredictable. Both of these studies concluded that the public's view of mental illness at the present time does not create a healthy environment for the mentally ill, who could be adversely affected by fear and rejection.

It has been suggested that the media helps to frame the public's opinions about mental illness

(Sieff, 2003). Mental illness is frequently portrayed in the media in the form of news stories, television, movies, cartoons, advertising, books, and many other forms. According to Wahl (as cited in Sieff, 2003), adults in the United States rated the mass media as their primary source of information about mental illness. Media coverage of mental illness has been consistently negative and inaccurate, often portraying the mentally ill as dangerous, childlike, jobless, and lazy (Sieff, 2003). Many people do not have direct experience with mentally ill people, so the information that they "know" about mental illness comes from what they see on television and read in the newspaper.

Wahl, Wood, and Richards (2002) searched six top newspapers for stories related to mental illness throughout the year 1999. They randomly selected 50 articles from each paper, for a total of 300 articles. Of these 300 articles, 26% were accounts of violence and crime committed by a mentally ill person. Overall, negatively framed articles were twice as likely to occur as positively framed articles. They also found that stories of recovery and accomplishment of mentally ill people were rare. Even when stories about mentally ill people were not discussing violence and crime, they were discussing some other negative aspect, such as dysfunction or disability.

Wahl (1992) discusses the frequency, accuracy, and effects of mental illness portrayals in the media. He cites many instances of mental illness coverage in the mass media, and concludes that depictions of mental illness are very frequent and that they are spread relatively equally over different forms of media (magazines, movies, and television). He also goes on to cite many studies that depict mental illness inaccurately. The media is biased towards presenting the very severe, psychotic disorders, and even these disorders are exaggerated with a strong emphasis on the more bizarre symptoms. A result of the inaccurate portrayal of mental disorders in the media is that violence and dangerousness have become the rule rather than the exception. He then discusses the effects of these frequent and inaccurate media portrayals of mental illness. While studies of the effects of the media on people's attitudes toward mental illness are rare, they do support the belief that media influences public knowledge and attitudes toward mental illness.

The direct influence of newspaper articles on peoples' attitudes toward the mentally ill was shown in a study conducted by Thornton and Wahl (1996). They divided their participants into three different groups: the first group read an article about a violent crime that was committed by a mentally ill person, the second group read corrective information about mental illness prior to reading the newspaper article about a violent crime that was committed by a mentally ill person, and the third group read an unrelated article. Participants who only read the violent crime article reported harsher attitudes toward the mentally ill than did participants who read an unrelated article or who first read corrective information. Those who only read the violent crime article were more likely to support the need for restriction of the mentally ill, and also more likely to endorse statements of fear and perceived danger than the other two groups. These findings support the prevailing belief that negative media reports contribute to negative attitudes toward mentally ill people.

While the effects of print media are certainly far-reaching and significant, a study conducted by Granello, Pauley, and Carmichael (1999) found that one third of their participants obtained their knowledge of mental illness primarily from electronic media (e.g., television, movies, videos). Their study was conducted to determine if attitudes toward the mentally ill differed depending on their primary source of information about mental illness. In all cases, participants who indicated that they received their mental illness information primarily from electronic media were less tolerant of the mentally ill than any other condition (i.e., those who work with the mentally ill, those who have a mentally ill family member, those who receive their information from classes, and those who receive their information from the print media).

A striking example of the extent to which people are influenced by the media was shown in Wahl's (2003) article discussing depictions of mental illness in children's media. He argues that the stigma of mental illness is established in early childhood through the media. The stereotypes of the mentally ill that are present in children's media are remarkably similar to the stereotypes in adult media, with most mentally ill characters being presented as violent, aggressive, and fear-inducing. Childhood is a convenient time for people to develop stereotypes of the mentally ill because their perceptions of the world are still forming. Wahl, Wood, Zaveri, Drapalski, and Mann (2003) conducted a study on this topic. They viewed forty-nine children's films, and rated each of them with respect to mental illness. Thirty-three of the films contained material related to mental illness. Twelve of these films contained characters with mental illnesses, and of these 12, eight of the characters were violent, and they were identified by slang terms rather than psychological terms. Two thirds of these movies with mentally ill characters showed fear of the character. This study suggests that mental illness is a common depiction in children's films, and that children are taught that it is appropriate to fear the mentally ill.

Wahl and Lefkowits (1989) studied the direct effects of the electronic media (film) on peoples' attitudes toward mental illness. They showed participants one of three films: a film where a psychiatric patient murders his wife, the same film with three trailers informing participants that violence is not characteristic of mentally ill people, and a film involving murder but not mental illness. All participants who saw the film with the psychiatric patient murdering his wife expressed significantly more negative attitudes toward the mentally ill than did participants who saw the control film, regardless of whether or not they saw the informative trailers. The results of this study suggest that corrective information about mental illness may not be enough to counteract the negative portrayals of mental illness in the media.

The first part of the current study was designed to examine the effects of electronic media (film) on people's attitudes toward mental illness in a slightly different manner. All participants will view clips of "mental illness" from the same film, *Sybil* (Babbin & Petrie, 1977), but half of the participants will view the lead actress acting "normal," meaning that she does not do anything stereotypical of the mentally ill, and half of the participants will view her acting "abnormal," meaning that she will do many things stereotypical of the mentally ill. Participants' attitudes toward the mentally ill will be assessed using the Beliefs Toward Mental Illness Scale (BMI, Hirai & Clum, 2000) which will determine their attitudes on three different dimensions: dangerousness, poor social and interpersonal skills, and incurability. The second part of the study will focus on the effects of the social desirability bias.

A significant factor that could influence how participants respond on a questionnaire such as the BMI is the social desirability bias. The social desirability bias occurs when people are unwilling to report their attitudes that deviate from the prevailing norms because those attitudes are not considered acceptable (Folz as cited in Snir & Harpaz, 2002). The social desirability bias has the largest effects when social norms identify a certain attitude as desirable and acceptable while many people actually hold a different attitude (Delamater as cited in Snir & Harpaz, 2002). Other conditions in which the social desirability bias is most likely to occur are if the measure has high face validity, if the attitude is well understood by the general public, and if the attitude has almost exclusively negative associations (Furnham as cited in Snir & Harpaz, 2002).

These conditions were met in an experiment conducted by Sigall and Page (1971) in which they examined the attitudes of White Americans toward African Americans. The participants were asked to indicate how characteristic 22 traits were for either "Americans" or "Negroes." Half of the participants were connected to a sort of "lie detector" machine; therefore, they believed

that the experimenter knew their true attitudes, so there was no point in lying. The "lie detector" was not present for the other half of participants, so they were free to respond as they normally would to such questions. The results of this study indicate that the second group's responses were tainted by the social desirability bias. "Negroes" were rated more favorably under the normal conditions than when the lie detector was present, and "Americans" were rated more favorably when the lie detector was present than under the normal conditions. Since it is not socially acceptable to voice negative attitudes toward African Americans, the participants in the "normal" condition adjusted their responses so that their negative attitudes would not be exhibited. Participants in the condition with the lie detector felt that their true attitudes were being measured anyway, so they did not lie to cover up their true attitudes.

Presser and Stinson (1998) conducted a study in which they tried to determine if the social desirability bias affected self-reported religious attendance. Previous measures of church attendance were interviewer-administered surveys. For instance, if the church was trying to figure out how many people attended on a regular basis, then the church would send out a survey. This elicited feelings of social desirability because there is a stigma attached to not attending church services. Presser and Stinson found that when they changed the survey administration technique from interviewer-administration to self-administration or a time-use survey, self-reported religious attendance dropped by one third, thereby giving a more accurate estimate.

Taking this concept further, Lobel (1988) measured the effects of American attitudes toward other ethnic groups using either personal or impersonal rater instructions. Half of the participants were asked to indicate their own personal beliefs about each ethnic group, and the other half of the participants were asked to indicate the "typical American's" beliefs about each ethnic group (p. 30). The social desirability bias came into play when participants were asked to express their own personal beliefs—they claimed a more favorable attitude toward ethnic groups in this condition. This finding was especially large with regards to stereotypes of Blacks and Russians. This finding suggests that it is socially inappropriate to harbor negative attitudes towards Blacks and Russians, but it is not socially inappropriate to harbor negative attitudes towards Iranians or Turks because they received low ratings on both the "personal beliefs" and the "beliefs of the typical American" conditions (Lobel, 1988, p. 30).

A different way of assessing the affects of the social desirability bias is through the use of anonymous versus identifiable questionnaires. Malvin and Moskowitz (1983) employed this technique in their study of adolescent drug attitudes, intentions, and use. In the anonymous condition, there was no way of connecting the participants to their responses, and in the identifiable condition, the questionnaires had a number on them that would allow the researcher to link the responses to the participant, although it would be kept confidential. Anonymous questionnaires led to higher reported rates of current drug use (cigarettes for girls and marijuana for boys) than the identifiable condition. Self-reported cocaine use was significantly higher for both boys and girls in the anonymous condition. The social desirability bias operated most strongly on "sensitive" items such as illicit drug use because they are not socially sanctioned.

In the current study, college students were randomly assigned to one of four groups as part of a 2 x 2 design. Half of the participants received informed consent forms indicating that the experiment was "anonymous" and the other half of the participants received informed consent forms indicating that the experiment was "confidential." Each participant received a test packet containing a questionnaire consisting of questions of a demographic nature, the BMI, and a final page containing manipulation checks. Half of the participants were shown the film clip with the actress acting normal and half of the participants were shown the film clip with the

actress acting abnormal. The half of participants who received the "confidential" informed consent sheets were asked to write their name on their questionnaire for clarification and follow-up purposes, and the half of participants who received the "anonymous" informed consent sheets were not told to write their name on the form.

The purpose of the present study is to evaluate the effects of the social desirability bias and the electronic media on peoples' self-reported attitudes toward the mentally ill. The goal is to determine if a significant difference exists between participants using anonymous versus confidential questionnaires in assessing their attitudes toward the mentally ill, and to determine if a significant difference exists between participants who see a film scene where an actress is acting normal versus abnormal in assessing their attitudes toward the mentally ill. The attitudes toward the mentally ill will be lower for those in the anonymous condition than those in the confidential condition. Attitudes toward the mentally ill will also be lower for those in the abnormal film portrayal condition than those in the normal film portrayal condition. Overall, participants who are in both the anonymous condition and the abnormal film portrayal condition will have the lowest attitudes toward the mentally ill, and participants who are in both the confidential condition and the normal film portrayal condition will have the highest attitudes toward the mentally ill.

Method

Pilot Study

Participants

Participants in the pilot study were 14 regional liberal arts college students between the ages of 18 and 23. Participants were recruited via email and were asked to sign up for one of two sessions.

Apparatus

All participants watched 10 movie clips of various lengths from the movie *Sybil* (Babbin & Petrie, 1977), which was filmed by Lorimar Productions, Inc., and was aired on television. In 1988 it was released on VHS as a CBS/FOX video. The movie scenes were played on a Panasonic VCR and a JVC television with a 36" screen. Each participant was given two copies of an informed consent document: one to sign and hand in and one to keep. Participants were then given a rating form that contained a rating scale for each movie scene (see Appendix A). Each form contained a total of 10 statements that are responded to on a 5-point Likert scale (1 = *completely normal behavior*, 5 = *completely abnormal behavior*). Descriptive statistics for each movie scene can be found in Table 1.

Procedure

Participants signed up for this pilot study via email. During each session, each participant watched 10 different movie scenes and was asked to rate the behavior of the main character in each scene on a rating form. When all participants were finished, they were orally debriefed and given the opportunity to ask any questions that they may have pertaining to the pilot study. They were then thanked for their participation and dismissed.

Experimental Study

Participants

Participants for this study were 120 regional liberal arts college students (32 male, 88 female) between the ages of 18 and 26. Participants were recruited in various social science and education classes, and were asked to sign up for one of several sessions outside of class. Some students were offered extra credit for their participation.

Apparatus

All participants watched roughly five minutes of movie clips (which were determined by the pilot study) from the movie *Sybil* (Babbin & Petrie, 1977), which was filmed by Lorimar Productions, Inc., and was aired on television. In 1988 it was released on VHS as a CBS/FOX video. The movie scenes were projected onto a screen using an Epson 3LCD projection system

connected to a Samsung V4600 DVD/VCR player. Each participant was given two copies of an informed consent document: one to sign and hand in and one to keep. Half of the participants received informed consent documents saying that their responses were anonymous, and the other half of the participants received informed consent documents saying that their responses were confidential (see Appendixes B and C).

Each participant was given a packet of papers containing all of the information that they will need for their session. The first paper was a paper and pencil questionnaire of demographic data containing five questions (see Appendix D). The next page of the packet was the paper and pencil BMI (Hirai & Clum, 2000) (see Appendix E). This is a 21-item questionnaire that assesses participants' attitudes toward the mentally ill on negatively stereotyped dimensions such as dangerousness, poor social and interpersonal skills, and incurability. Five items on the BMI assessed perceived dangerousness, six items assessed perceived incurability, and 10 items assessed perceived interpersonal and social skills. The BMI contains a total of 21 statements that are responded to on a 6-point Likert scale (0 = *completely disagree*, 5 = *completely agree*). Scores range from 0 to 105 with higher scores reflecting more negative beliefs about mental illness. The reliability of the BMI is .89, and the validity of the BMI ranges between .39 and .80 for individual questions (Hirai & Clum, 2000). The last page of the packet was a separate questionnaire containing several manipulation checks (see Appendix F). The first manipulation check asked whether the participant had seen the movie that the video clips were taken from; if so, the participant was asked to write the name of the movie on the line provided. Another manipulation check asked the participant to name the psychological disorder portrayed by the main character in the film. If the participants had not seen the movie, there should have been no way to determine from the clips that the main character had Dissociative Identity Disorder.

Procedure

Students interested in participating in the study signed up during class for a session that would take place outside of class. At the beginning of the session, participants were given either an anonymous or confidential informed consent document. Participants were then administered a packet containing all of the materials that they would need to complete the study. After filling out the demographic information, participants were told that they were going to "view an example of mental illness," and they watched roughly five minutes of movie scenes with the lead actress acting either normally or abnormally. After the scenes, participants in the confidential condition were asked to write their name on top of the BMI, and they were told: "For the purposes of my study, I will need to be able to connect your responses to you, but your responses will remain confidential." Participants in the anonymous condition were not asked to write their name on the BMI, and they were told: "Your responses will remain completely anonymous, and there will be no way to connect your responses to you." All participants then read the instructions for and completed the BMI and the last page of the packet that contained several manipulation checks. When all participants were finished, they were orally debriefed and given the opportunity to ask any questions that they might have had pertaining to the study. They were then thanked for their participation and dismissed.

Results

As can be seen in Table 1, results of the pilot study indicated that scenes 1, 4, 7, and 8 were viewed as relatively abnormal behavior, and scenes 2, 3, 5, 6, 9, and 10 were viewed as relatively normal behavior. Scene 8 was dropped from the experimental study because a character used the main character's name (Sybil), and this might have triggered specific expectations in the participants' minds if they had heard of the title character before. Scenes 3 and 10 were also dropped in order to ensure that participants in the

normal and abnormal behavior conditions in the experimental study watched a reasonably equal amount of movie footage, and also because these two scenes were the most "abnormally" rated of the "normal" scenes.

The manipulation checks that were added at the end of the experimental study determined that 18 out of 120 participants had seen the movie *Sybil* (1977). Of those 18 participants, 15 were able to name the title of the movie, and 10 were able to recall the psychological disorder of the main character. Overall, 17 participants correctly guessed the psychological disorder of the main character.

The data from the experimental study were analyzed using a 2 x 2 factorial ANOVA for independent groups. Participants who watched movie scenes depicting abnormal character behavior expressed a significantly more negative attitude towards mental illness ($M = 47.70$, $SD = 10.60$) than participants who watched movie scenes depicting normal character behavior ($M = 39.12$, $SD = 13.36$), $F(1, 116) = 15.07$, $p < .001$, $\eta^2 = .12$. No significant difference was found between participants who received anonymous informed consent documents and questionnaires ($M = 43.15$, $SD = 12.66$) and participants who received confidential informed consent documents and questionnaires ($M = 44.12$, $SD = 12.81$) on the BMI, $F(1, 116) = 0.08$, $p = .78$. Descriptive statistics for the interaction between type of viewed character behavior (abnormal versus normal) and type of informed consent (anonymity versus confidentiality) can be found in Table 2. The difference in BMI scores between participants viewing movie scenes depicting abnormal character behavior and participants viewing movie scenes depicting normal character behavior did not vary by the use of anonymous versus confidential informed consent documents and questionnaires, $F(1, 116) = .23$, $p = .63$.

The scores on the subscales of the BMI (dangerousness, poor social and interpersonal skills, and incurability) were also analyzed using 2 X 2 Factorial ANOVA's for independent groups. Descriptive statistics for the main effects can be found in Table 3, and descriptive statistics for the interactions can be found in Table 4. On the dangerousness subscale, participants who viewed abnormal character behavior reported significantly more negative attitudes toward mental illness than participants who viewed normal character behavior, $F(1, 116) = 13.18$, $p < .001$, $\eta^2 = .10$. Significant effects were also found on the poor social and interpersonal skills subscale, with participants who viewed abnormal character behavior reporting significantly more negative attitudes toward mental illness than participants who viewed normal character behavior, $F(1, 116) = 11.97$, $p = .001$, $\eta^2 = .094$. On the incurability subscale, no significant difference was found between participants who viewed abnormal character behavior and participants who viewed normal character behavior, $F(1, 116) = 3.24$, $p = .075$. No significant difference was found on any of the three subscales (dangerousness, poor social and interpersonal skills, and incurability) between participants who received anonymous and confidential informed consent documents and questionnaires, $F(1, 116) = .33$, $p = .56$, $F(1, 116) = .13$, $p = .72$, and $F(1, 116) = .17$, $p = .68$, respectively. The difference in BMI scores between participants who viewed abnormal character behavior and participants who viewed normal character behavior did not vary by the use of anonymous versus confidential informed consent documents and questionnaires on any of the three subscales, $F(1, 116) = .088$, $p = .77$, $F(1, 116) = .95$, $p = .33$, and $F(1, 116) = .004$, $p = .95$, respectively.

Discussion

As predicted, participants who viewed clips of abnormal character behavior reported significantly more negative attitudes toward mental illness than participants who viewed clips of normal character behavior. This finding suggests that the electronic media did indeed influence participants' immediate attitudes

toward mental illness. Although it was predicted that participants who were given anonymous informed consent documents and questionnaires would report more negative attitudes toward mental illness, no difference was found between participants given anonymous informed consent documents and questionnaires and participants given confidential informed consent documents and questionnaires. This finding suggests that although participants knew that their responses would be connected to them, they did not feel the need to respond in a socially desirable manner.

The results of this study support the findings of Wahl and Lefkowits (1989), that the electronic media does indeed influence people's attitudes toward the mentally ill. Just as their participants reported significantly more negative attitudes toward mental illness after viewing a film clip of a psychiatric patient murdering his wife as opposed to a regular person murdering his wife, the participants of the current study also reported significantly more negative attitudes toward mental illness after viewing a character who was exhibiting the more abnormal symptoms of mental illness as opposed to a character who was exhibiting normal behaviors. Also, because of the significantly more negative attitudes reported on the BMI dimensions of dangerousness and poor social and interpersonal skills, the findings of Link et al. (1999) are supported by the current study. They found that people believed that the mentally ill were significantly more dangerous than the general population. In their study, this faulty belief led to a desire for social distance from the mentally ill. The results of these studies provide evidence for why the mentally ill are stigmatized in today's society.

In relation to the social desirability bias, the results of the current study did not support the findings of Presser and Stinson (1998), that participants report more accurate attitudes when their responses cannot be connected to them. Nor did the results of the current study support the findings of Malvin and Moskowitz (1983), that people reported a more favorable attitude when their answers were identifiable rather than anonymous.

Perhaps the reason that a significant difference was not found between those given anonymous and confidential informed consent documents and questionnaires is that my participants were recruited from education and social science classes. These students presumably take a great deal of psychology-related classes, and perhaps they did not feel the need to inflate their answers in the confidential condition because they really do not have a negative view of mental illness. The social desirability bias shows its largest effects when social norms identify a certain attitude as desirable and acceptable while many people actually hold a different attitude (Delamater as cited in Snir & Harpaz, 2002). If the majority of my participants did not harbor a negative attitude toward mental illness, then they would not feel the need to conform to the prevailing social norm.

Another possibility that lies on the opposite end of the spectrum is that perhaps it has become acceptable in today's society to harbor negative attitudes toward the mentally ill. If many people feel that they can openly express their negative views about the mentally ill without repercussions, then participants would not have felt any "social desirability," and therefore, would not have felt the need to accommodate their answers on the BMI. If this is the case, then the stigma of mental illness has become so engrained into today's culture that participants do not feel any shame in harboring and expressing negative attitudes toward the mentally ill. These engrained negative views could be one of the reasons that it is so hard to reduce the stigma of mental illness.

Of these two possible explanations, the first explanation is probably more likely. Because so many of my participants were recruited from psychology and education classes, it is more likely that my participants did not harbor negative attitudes toward the mentally ill than it is likely that it has become acceptable in today's society to harbor negative attitudes toward the mentally ill. It would be quite a long stretch to say that harboring negative attitudes toward the

mentally ill has become commonplace and acceptable. The general trend in today's society seems to be working toward the acceptance and toleration of differences rather than the rejection of differences. Even though this is the general trend, the stigma of mental illness is still a serious problem that needs to be given a great deal of attention.

Because the results of this study showed that participants' attitudes toward mental illness were swayed by watching merely five minutes film, the mental health community must be aware of the effects that the media has on people's attitudes. If the stigma of mental illness is to be effectively combated, something must be done to persuade the media to portray mental illness in an accurate manner. Portraying mental illness as accurate would include not over-emphasizing bizarre and rare symptoms, not insinuating that mentally ill people are more dangerous than the general population, and not portraying mentally healthy characters as being afraid of mentally ill characters. Because adults in the United States rated the mass media as their primary source of information about mental illness (Wahl as cited in Sieff, 2003), the mass media must change their portrayal of mental illness in order to reduce stigma.

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Appendix A

Rating Normal and Abnormal Behaviors in Movie Scenes

Normal behaviors are common, everyday behaviors that do not seem particularly out of the ordinary. *Abnormal* behaviors are more rare behaviors that a person does not expect to see because it would not be socially sanctioned to act in such a manner.

Please rate the behavior exhibited by the main character in following 10 scenes on the scales provided. A score of 1 means that the behavior was completely *normal*, and a score of 5 means that the behavior was completely *abnormal*.

Please place a dark circle on top of the line that indicates your decision.

	Normal				**Abnormal**
Scene 1:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 2:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 3:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 4:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 5:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 6:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 7:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 8:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 9:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5
Scene 10:	I_____	I_____	I_____	I_____	I
	1	2	3	4	5

Appendix B

CONSENT TO ACT AS A SUBJECT IN A RESEARCH STUDY

Assessing Attitudes Toward Mental Illness
Principal Investigator: Brandi Klein, 814-594-2757
Saint Vincent College

Description:
The purpose of this study is to assess participant's attitudes toward mental illness.

Procedures:

If you choose to participate, you will watch several movie scenes that will give you examples of mental illness. You will then be asked to fill out a questionnaire about mental illness. Participation in this study should take approximately 15 minutes.

Risk and Benefits:
There is no known risk in participating in this research. There will be no direct benefit to you in this investigation although your participation will aid greatly in my research.

Anonymity:

Your name will only appear on the informed consent document, not on any other testing materials and there will be no other way to connect your responses to you.

Right to Participate or Withdraw from Participation:

Participation is completely voluntary and you may withdraw your consent to participate at anytime without penalty or loss of benefits to which you are otherwise entitled. To withdraw your consent, write the word "withdraw" at the top of the first page of your materials.

Voluntary Consent:

"All of the above has been explained to me and all my questions have been answered. I understand that I am encouraged to ask questions about any parts of this research study during the course of the study, and that future questions will be answered by the researchers listed on the first page. Any questions I have about my right, as a research participant will be answered by the Saint Vincent College IRB Chairperson, Dr. Mark Rivardo (724-805-2375). My signature means that I have freely agreed to participate in the research study entitled Assessing Attitudes Toward Mental Illness being conducted by Brandi Klein. I also certify that I am at least 18 years of age.

_____

Participant's Name (Print) Participant's signature

_____

Date

Appendix C

CONSENT TO ACT AS A SUBJECT IN A RESEARCH STUDY

Assessing Attitudes Toward Mental Illness
Principal Investigator: Brandi Klein, 814-594-2757
Saint Vincent College

Description:
The purpose of this study is to assess participant's attitudes toward mental illness.

Procedures:

If you choose to participate, you will watch several movie scenes that will give you examples of mental illness. You will then be asked to fill out a questionnaire about mental illness. Participation in this study should take approximately 15 minutes.

Risk and Benefits:
There is no known risk in participating in this research. There will be no direct benefit to you in this investigation although your participation will aid greatly in my research.

Confidentiality:
The identity of all participants will remain completely confidential. Only the investigator and her research advisor will have access to information linking the participant's data with his or her identity.

Right to Participate or Withdraw from Participation:

Participation is completely voluntary and you may withdraw your consent to participate at anytime without penalty or loss of benefits to which you are otherwise entitled. To withdraw your consent, write the word "withdraw" at the top of the first page of your materials.

Voluntary Consent:

"All of the above has been explained to me and all my questions have been answered. I understand that I am encouraged to ask questions about any parts of this research study during the course of the study, and that future questions will be answered by the researchers listed on the first page. Any questions I have about my right, as a research participant will be answered by the Saint Vincent College IRB Chairperson, Dr. Mark Rivardo (724-805-2375). My signature means that I have freely agreed to participate in the research study entitled Assessing Attitudes Toward Mental Illness being conducted by Brandi Klein. I also certify that I am at least 18 years of age.

Participant's Name (Print) Participant's signature

Date

Appendix D

Please circle or write the correct answer:

What is your sex? Male Female

What is your age? _____

What is(are) your major(s)? _____

What is your academic year? Freshman Sophomore Junior Senior

Have you, a close family member, or a close friend ever been diagnosed with a psychological disorder? Yes No

Appendix E

Beliefs Toward Mental Illness Scale

Directions: In the blank space next to each item, indicate your degree of agreement or disagreement with that statement. Use the following scale:

5 = Completely Agree
4 = Moderately Agree
3 = Slightly Agree
2 = Slightly Disagree
1 = Moderately Disagree
0 = Completely Disagree

_____ 1. A mentally ill person is more likely to harm others than a normal person.

_____ 2. Mental disorder would require a much longer period of time to be cured than would other general diseases.

_____ 3. It may be a good idea to stay away from people who have psychological disorder because their behavior is dangerous.

_____ 4. The term "Psychological disorder" makes me feel embarrassed.

_____ 5. A person with psychological disorder should have a job with minor responsibilities.

_____ 6. Mentally ill people are more likely to be criminals.

_____ 7. Psychological disorder is recurrent.

_____ 8. I am afraid of what my boss, friends, and others would think if I were diagnosed as having a psychological disorder.

_____ 9. Individuals diagnosed as mentally ill will suffer from its symptoms throughout their life.

_____ 10. People who have once received psychological treatment are likely to need further treatment in the future.

_____ 11. It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises.

_____ 12. I would be embarrassed if people knew that I dated a person who once received psychological treatment.

_____ 13. I am afraid of people who are suffering from psychological disorder because they may harm me.

_____ 14. A person with psychological disorder is less likely to function well as a parent.

_____ 15. I would be embarrassed if a person in my family became mentally ill.

_____ 16. I do not believe that psychological disorder is ever completely cured.

_____ 17. Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities.

_____ 18. Most people would not knowingly be friends with a mentally ill person.

_____ 19. The behavior of people who have psychological disorders is unpredictable.

_____ 20. Psychological disorder is unlikely to be cured regardless of treatment.

_____ 21. I would not trust the work of a mentally ill person assigned to my work team.

Appendix F

Please circle or write the correct answer:

Have you ever seen the movie that the scenes you just watched are from? Yes No

If so, what is the title of that movie? _____

Which psychological disorder does the main character in the movie have?

_____

Table 1

Means and Standard Deviations for Ratings of Normality and Abnormality in 10 Selected Movie Scenes

Movie Scene	Normal or Abnormal	Running Time	Mean	Standard Deviation
Scene 1	Abnormal	1:11	4.79	.43
Scene 2	Normal	2:21	1.14	.36
Scene 3	Normal	:50	2.07	1.00
Scene 4	Abnormal	1:28	4.79	.43
Scene 5	Normal	:24	1.79	1.05
Scene 6	Normal	:57	1.93	.73
Scene 7	Abnormal	2:47	5.00	.00
Scene 8	Abnormal	1:47	4.86	.36
Scene 9	Normal	:36	1.35	.63
Scene 10	Normal	1:01	2.21	1.19

Note. Scores ranged from 1 to 5 with a score of 1 meaning *completely normal* behavior and a score of 5 meaning *completely abnormal* behavior.

Table 2

Means and Standard Deviations for the Interactions between Viewed Character Behavior and the Type of Informed Consent

Type of Informed Consent	Abnormal Character Behavior	Normal Character Behavior
Total BMI Score[a]		
Anonymous	46.84 (8.98)	39.33 (14.78)
Confidential	48.53 (12.05)	38.89 (11.84)

Note. Standard deviations are in parentheses.

[a]Total BMI scores range from 0 to 105 with higher scores reflecting more negative attitudes toward mental illness.

Table 3

Means and Standard Deviations for the Main Effects of Viewed Character Behavior and the Type of Informed Consent on the BMI Subscales

Dangerousness[a]	
Type of Informed Consent	
Anonymous	8.77(4.13)
Confidential	9.28(4.49)
Viewed Character Behavior	
Abnormal	10.33(4.06)
Normal	7.60(4.08)
Poor Social and Interpersonal Skills[b]	
Type of Informed Consent	
Anonymous	18.08(7.47)
Confidential	18.72(6.49)
Viewed Character Behavior	
Abnormal	20.40(5.65)
Normal	16.16(7.41)
Incurability[c]	
Type of Informed Consent	
Anonymous	16.25(4.32)
Confidential	15.97(4.57)
Viewed Character Behavior	
Abnormal	16.80(4.44)
Normal	15.34(4.40)

Note. Standard deviations are in parentheses.

[a]Scores for "Dangerousness" range from 0 to 25 with higher scores reflecting a more negative attitude toward mental illness.

[b]Scores for "Poor Social and Interpersonal Skills" range from 0 to 50 with higher scores reflecting a more negative attitude toward mental illness.

[c]Scores for "Incurability" range from 0 to 30 with higher scores reflecting a more negative attitude toward mental illness.

Table 4

Means and Standard Deviations for the Interactions between Viewed Character Behavior and the Type of Informed Consent on the BMI Subscales

Type of Informed Consent	Abnormal Character Behavior	Normal Character Behavior
Dangerousness[a]		
Anonymous	10.22(3.37)	7.26(4.35)
Confidential	10.43(4.74)	7.93(4.08)
Poor Social and Interpersonal Skills[b]		
Anonymous	19.58(5.20)	16.53(9.09)
Confidential	21.22(6.11)	15.78(5.73)
Incurability[c]		
Anonymous	16.94(4.33)	15.53(4.26)
Confidential	16.66(4.55)	15.15(4.55)

Note. Standard deviations are in parentheses.

[a]Scores for "Dangerousness" range from 0 to 25 with higher scores reflecting a more negative attitude toward mental illness.

[b]Scores for "Poor Social and Interpersonal Skills" range from 0 to 50 with higher scores reflecting a more negative attitude toward mental illness.

[c]Scores for "Incurability" range from 0 to 30 with higher scores reflecting a more negative attitude toward mental illness.