Mental Illness in the Media: How Biased and Realistic Media Portrayals of Mental Illness Affect Stigma in Society

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Abstract

This research study outlines an experiment that examined how realistic and biased portrayals of American television affected social stigma towards mental health in American society. This study was a 2x2x3 mixed factorial design and measured the levels of stigma each participant has after viewing video clips of popular television shows depicting characters with the mental illnesses major depressive disorder and bipolar disorder - type I. Each participant watched a realistic depiction of mental illness and a biased depiction of mental illness and completed the Attitudes to Mental Illness Scale (AMIS) after each video. The overall aim of the proposed research was to explore the damaging effects that biased depictions of mental illness in the media have on people in particular, levels of stigma towards individuals with mental illnesses. Results showed that participants who could accurately identify which videos were biased versus realistic had lower stigma levels than those who could not ($F(2,108) = 6.03$, $p < .05$). There was a significant interaction between video order, identification and video content: participants who watched the realistic video first and accurately identified the content of the video had significantly lower social stigma levels after watching the realistic video ($F(1,107) = 5.29$, $p < .05$). Overall, this research found some evidence to support the hypotheses that stereotyped content in media and accurate identification of mental illness relate to social stigma levels.

Keywords: stigma, mental health, media

Mental Illness in the Media: How Biased and Realistic Media Portrayals of Mental Illness affect Stigma in Society

Media portrayals of individuals with mental illness are frequently characterized by negative stereotypes, inaccurate information, and tropes about psychological disorders. Characters depicting mental illnesses can often be shown with villainous attributes, seen as a form of comic relief, or played as simple-minded fools (Rubin, 2012). This portrayal can lead to increased stigma towards those who have a mental illness (Rubin, 2012). One example of stigma faced by individuals with mental illness include the belief that one only needs to apply minimum effort in order to become a "normal" or fully functioning member of society (Horch & Hodgins, 2008). Another example is that those with mental illness are inherently "lazy" and use their illness as an excuse for their actions and behaviors (Rubin, 2012). This ideology is counterproductive to the recent efforts to raise awareness and tolerance towards those suffering from a mental illness.

Television is the primary source of information about mental illness for many Americans (Stout, Villegas, & Jennings, 2004). Stout, Villegas, and Jennings (2004), summarize and expand on all the recent research done on mental illness in the media. Particularly they focus on research around how mental illness is portrayed, how it can affect stigma, and how to prevent negative attitudes from forming. Broadcasting these stigmatized characters with mental illnesses, can leave a damaging effect on viewers. By watching these types of depictions people may learn to fear those with mental illnesses, or they might be afraid to seek help if they are suffering from one (Svensson, et al., 2011; Zhao, et al., 2015). Svensson and colleagues (2011) explored the associations between internalized stigma and how it effects empowerment, self-esteem, and recovery time. While Zhao and colleagues (2015), looked into the effects that stigma has on

adolescents, particularly how internalized stigma prevents adolescents from reaching out and getting help. Both of these researchers portrayed how stigma affects people who have a mental illness and how this can lead to that illness getting worse from lack of treatment. In particular the research done by Zhao and colleagues (2015) found that when an adolescent feels secure in their relationships and had support from their peers, internalized stigma of seeking help for mental illnesses was reduced as well as the need to separate one's self from society.

Stigma and the Media

Mental health stigma consists of the stereotypes and negative attitudes that people have towards individuals who have a mental illness (King, et al., 2007; Svensson et al., 2011). Some stereotypes include thinking that people with mental illness are more likely to commit crimes, act out in violence, and cannot be trusted (Ritterfeld & Jin, 2006; Ruben, 2012). One research study supported the findings that one of the leading causes of stigma was ignorance and the lack of understanding towards the issue (Corrigan, et al., 2001). Corrigan and colleagues' (2001) study showed that the more familiar people were with individuals with mental illness, the lower the levels of stigma they had, in a process akin to exposure therapy. In other words, knowledge of and familiarity with people with mental illnesses help to counteract stigma associated with mental illness.

There are two communication theories that support this theory of familiarity through mass media exposure. Cultivation theory states that consistent exposure to recurrent messages on television helps shape and nourish certain values and perspectives, conforming these ideals into social reality (Stout, et al., 2004; Gerbner, et al., 2002). In the research done by Gerbner and his colleagues (2002), they found evidence that supported the theory that participants who spend a lot of their time in front of a screen, will in turn hold the same values and beliefs of the people

they are watching. With the increased use of smart phones and portable computers, these beliefs and values can be viewed all day (Becker & Connor, 1981; Sarwar & Soomro, 2013).

Another related theory is social learning theory (Stout, et al., 2004; Bandura 1986). According to Bandura, when people watch other people, in real-life and on television, they are able to gain new knowledge about how to act in social settings. They learn what acceptable behavior is and what it is not. Based on social learning theory, exposure to people with mental illness on television and the ways that media portrayals define and describe individuals with mental illness can result in differential treatment of those with mental illnesses (Stout, et al., 2004).

Stigma and these types of beliefs come in two forms, social and perceived stigma. Social stigma of mental illness can be defined as negative behaviors or actions directed towards people who suffer from mental health problems (Davey, 2013; WonPat-Borja, Yang, Link, & Phelan, 2010). Perceived stigma, or "internal stigma", is the internalization of the discrimination someone with a mental illness faces (Brohan, Slade, Clement, & Thornicroft, 2010). It is this type of stigma that prevents people with mental illnesses from getting help (Chronister, Chou & Liao, 2013). Internalized stigma can also be a main factor in the self-blame and guilt that accompanies mental illness, often keeping people from seeking treatment or speaking out about their illnesses (Stull, et al., 2013; Sickel, Seacat, & Nabors, 2016). Due to the effects of stigma, people sometimes do not seek treatment because of the negative attitudes towards individuals with mental health problems (Chronister, Chou & Liao, 2013). In some cases, internal and social stigma can be detrimental enough that people with a mental illness may see themselves as less than human, and that there is something wrong with them (WonPat-Borja, Yang, Link, & Phelan,

2010). This thought process can be damaging, especially since one out of five people in the United States report having a mental illness (National Alliance on Mental Illness, n.d.).

One example of stigma in the media is the Netflix television drama, *13 Reasons Why.* The show dramatically depicts suicide as a way to exact revenge on those who have done a person wrong. The show received mixed reviews from critics who stated that it depicts mental illness in a negative light (Greenstein, 2017). One article stated that the show depicted a graphic suicide without first warning the audience, therefore causing people with mental illnesses to be triggered (Greenstein, 2017). The National Alliance on Mental Illness (NAMI) states that the main issue with the show is that it never depicts the character reaching out for help and instead suggests that suicide is the only option to the viewers of the show (Greenstein, 2017).

On the other hand, media can also be used as a tool when it comes to promoting mental illness awareness. One study showed that the increase in educational and realistic depictions of mental illness can actually lower stigma levels because it increases knowledge of the issue and decreases ignorance (Buila, 2009). This especially works for rural areas, where decreased exposure to individuals with mental illness and lack of knowledge and awareness of mental health concerns may be more prevalent (Buila, 2009). Angermeyer, Matschinger, and Corrigan (2004) found that people who are more familiar with the mental illnesses schizophrenia and depression are less likely to fear someone who is expressing those symptoms. In fact, those with high familiarity expressed less of a desire to have social distance from the person in question. Through media, television shows can depict a person going through a mental health episode (manic, depressive, etc.) in a way that does not bring further damage to the stigmatized group. But through a way that brings the symptoms and the realness of the disorder into focus, rather than dramatizing the mental health episodes for “entertainment value”.

Stereotyped Content and Manner of Portrayals: Realistic vs. Biased and Serial Presentation

This research will focus on the social stigma surrounding major depressive disorder (i.e. depression) and bipolar disorder - type I. Both of these mental illnesses are mood disorders. Symptoms of depression include excessive sleeping, a feeling of worthlessness and hopelessness, diminished concentration and thoughts of death/suicide (American Psychiatric Association, 2013; Ciccarelli & White, 2014). Bipolar disorder - type I manic episodes are characterized by symptoms of increased talking, racing thoughts, increased self-esteem, decreased need for sleep, high energy, risky behaviors, and racing thoughts (American Psychiatric Association, 2013; Ciccarelli & White, 2014). The depressive episodes in bipolar disorder – type I meets the same criteria as major depressive disorder.

During the study, participants will be shown realistic and biased portrayals of mental illness in popular television shows and then they will be measured for social stigma levels after each video. A video's "realistic" portrayal refers to whether the video depicts the mental illness in fair, complex, and humanizing ways showing the individuals' symptoms and experiences with the mood disorders according to the symptoms of the DSM-5. By guaranteeing the authenticity of the portrayal in question, the symptoms of the mood disorder will come into focus, and not depict the character in a way that makes them sound or act "crazy", "irrational", "violent", or "dangerous." It is these actions and inaccuracies of mental illness that add to the stigma shown in the media, particularly around the mental illnesses discussed in this research (Rubin, 2012).

As for the term "biased", this research is referring to the damaging images of people with mental illness, particularly where they are shown being violent, rude, cunning, and dangerous to society in general. The term "biased" is used because the depiction being shown is one-sided

with negative or dramatic behaviors being highlighted. These characters' violent, erratic, criminal, and irrational behaviors add to the stigma surrounding mental illness (Rubin, 2012). In fact, people with mental illnesses are more likely to be the victims of crimes than to actually commit crime (Rueve & Welton, 2008).

In addition to the content of portrayals of mental illness, the serial positioning of messages in the media may also impact attitudes. Serial positioning effects include the recency effect and the primacy effect. The recency effect is defined as the phenomenon of remembering items more efficiently because they were seen or heard most recently (Crano, 1977). An example of this is memorizing a list of words. The recency effect suggests that one would remember the end of the list better than the beginning because it was the most recently seen section of the list. On the other hand, the primacy effect is defined as the phenomenon of remembering items because they were seen or heard first (Crano, 1977). Again, an example can be a list of words, and according to the primacy effect, one might remember the beginning of the list, better.

In a study done by Cong Li (2009) these effects were used to demonstrate the memorization and recognition of Super Bowl commercials. The study supported the notion that the frequency of advertising affected brand recall and recognition (Li, 2009). In particular, the study found evidence to support the primacy theory, with commercials at earlier positions generating better memory of the brand being advertised (Li, 2009). Two other studies looked into the effects of negative attitudes and how it effects first impressions (Forgas, 2011; Carlson, 1971). The research study by Forgas (2011) found evidence supporting the theory of primacy effects in relation to first impressions. By giving a negative impression in the beginning of a conversation, people are more likely to stay away from something or someone. However, if they were to experience a negative impression at the end of a conversation, the impact would be less

significant. With this in mind, it could be suggested that by exposing someone to a biased portrayal first, leaving a negative impression, overall stigma levels might increase. Therefore, b showing a realistic video first, keeping the negative impression for the middle of the study, it could lower the stigma levels for participants moving forward.

The purpose of the present study is to explore the damaging effects that biased depictions of mental illness in the media have on people in particular, levels of stigma towards individuals with mental illnesses. The hypotheses of the proposed study are as follows:

Hypothesis 1: Participants who view a realistic video first will have less stigma towards mental illness than those who view the biased video first. This prediction has been made because of the serial positioning primacy effect. By showing a realistic depiction of mental illness first, the research predicts that participants will remember the depiction moving forward and be able to carry the realistic depiction with them while answering the survey questions.

Hypothesis 2: Participants will report less stigma following the realistic video compared to the biased video. The realistic videos depict the symptoms of the disorder as they occur and not in a way that dramatizes the symptoms. After seeing a realistic depiction, the participant is expected to carry a more tolerant view towards mental illness.

Hypothesis 3: Participants who are able to identify which video is realistic and/or which is biased will have a lower level of stigma towards mental illness (e.g. Participants who believe the biased video is realistic will have a higher level of stigma). If a participant is able to identify each video correctly, then participants may be already knowledgeable of and familiar with mental illness. Participants who accurately identify the content of the video may also possess more awareness of stigmatizing portrayals of individuals with mental illness.

Hypothesis 4: (interaction) Participants who view a realistic video, watch the realistic video first and correctly identify at least one video or both videos, will have the lowest levels of stigma. This prediction is based on the primacy effect: the positive first impression of the realistic video will stay with the participant when answering the survey questions. This prediction is also made due to the idea that those who can correctly identify which video is realistic and which is biased have a basic understanding of what mental illness is.

Method

Participants and Design

This study recruited 111 participants (N=21 men, N=90 women). Out of all of the participants, 68.5% identified as white, while 31.5% identified as non-white. The average age of the participants was 20.84 years old (min: 18, max: 47, SD: 4.69). The participants were Stockton University students and were recruited using the SONA system. Out of all the majors of the participants, 39.6% were psychology majors, 18.9% were criminology majors, 16.2% were health sciences majors and 25.2% were other majors including duel majors. No stipend was provided, though some participants received extra credit or course participation credit. The proposed study was approved by the Stockton University Institutional Review Board in October 2018.

This study is a 2x2x3 mixed factorial design (See Appendix B Flow Chart). The first independent variable is the depiction of mental illness (biased vs realistic) in popular television shows. The first independent variable was a within-subjects variable: each participant viewed both biased and realistic depictions. The second independent variable is the presentation order of the videos (biased first vs biased second). The third independent variable is the correct identification of the realistic and biased videos (identified both videos correctly, identified one

video correctly, identified neither videos correctly). The dependent variable was the level of stigma indicated by participants after each video. The dependent variable was operationalized using the Attitudes to Mental Illness Subscales (AMIS). All materials and surveys were presented using the Qualtrics online survey platform. Google Docs and YouTube were also used for the viewing of the videos. Three of the videos were viewed using YouTube, and one was viewed using a screen recoding present via Google Docs.

Video Stimuli

All shows were produced and broadcast on an American television network or streaming service. The reason this is important to the research is because the factors of production-quality, access to viewing, viewing ratings/popularity of show, and language should be as similar as possible across the portrayal conditions.

Depression. The two depression videos from the shows *BoJack Horseman* and *One Day at a Time* are both on the streaming site Netflix. They both received praise from critics, both span 20-30 minutes of air time per episode, and both of these shows feature main characters that have depression (Salmon, 2017; del Rio & Moran, 2019). While both characters show the internal and external struggles of this disorder, they also show how the characters handle them in a very different light.

In *One Day at a Time*, the main character, Penelope, is a war veteran, recently divorced, and struggling to raise her two adolescent children. She receives anti-depressant medication treatment for her depression, but still shows the struggles of everyday management. The story revolves around a single mother and her two children. During the show, Penelope has depressive episodes with symptoms like hopelessness, guilt, and worthlessness being exhibited.

When Penelope gets better, she does not cure her depression overnight. Instead she finds ways to cope with her depression and take it "one day at a time." The show also explores the options of attending therapy, taking medication for one's mental health problem, and being honest and open about one's experiences with depression. The way this show depicts depression may be able to help lower levels of stigma.

In the show *BoJack Horseman* the character BoJack, is presented as a damaged actor past his prime who is trying to make a comeback. The character BoJack also has depression, however, some aspects of the portrayal of mental illness contain biased elements. This is exhibited by BoJack's constant self-sabotaging in his relationships with others. It is also seen when he becomes addicted to alcohol and drugs, as well as his rude and derogatory behavior to everyone he meets. He states multiple times that he is allowed to be this way because of his disorder.

Despite the depictions of real struggles of depression, *BoJack Horseman* also shows a side of depression that adds to stigma. By depicting someone with alcoholism who hurts everyone and cannot be trusted to even carry out a simple task, it can add to the stigma that people with mental illnesses cannot be trusted. It also makes it seem that people with depression intentionally hurt the ones they care about, and do not need to feel remorse. *BoJack Horseman* often exhibits graphic and violent depictions of mental illness that can potentially add to social stigma.

Bipolar disorder. The present study used two shows to portray bipolar disorder - type I: *Shameless* and *Homeland*. Both of these shows are an hour long and on the same network, Showtime. The characters of these shows that have bipolar disorder – type I are both main characters as well.

Shameless revolves around a dysfunctional, poor family in Chicago. The show depicts drug abuse, alcoholism, abuse, violence, and even suicide attempts in its episodes. Most of these elements revolve around one character in particular, Ian. Ian suffers from bipolar disorder – type I; however, his manic episodes send him into violent rages where he kidnaps his lover's child and then leaves the child in a hot car to engage in prostitution (O'Hern, 2017).

When confronted by the police, he runs from the scene, child in arms, putting himself and the child in danger. It is these kinds of actions that make this show a biased version of bipolar disorder – type I. Most people diagnosed with bipolar disorder - type I are not violent (Pescosolido & Martin, 2015). In fact, some of the most common types of behavior during manic episodes is excessive spending and fast talking, giving the appearance that a conversation one is having is one-sided (American Psychiatric Association, 2013). However, in this show, Ian is seen as a violent person willing to put himself and a child in risk, which potentially adds to the social stigma surrounding bipolar disorder – type I.

As for the next show, *Homeland*, the character who has bipolar disorder – type I is Carrie. Carrie is a homeland security agent and has been critically acclaimed for her portrayal of bipolar disorder – type I (Bevan, 2015). The depiction of Carrie's mental illness features the realistic portrayal symptoms of erratic speech, increased activity, decreased sleep, and racing thoughts (American Psychiatric Association, 2013).

Measures

Attitudes to Mental Illness Scale (AMIS; Department of Health, 2013; See Appendix A). Stigma was assessed by using the Attitudes to Mental Illness Scale (AMIS; United Kingdom Department of Health, 2013; Appendix B). This scale has been used to show levels of stigma in previous studies and was created by the Department of Health in the United Kingdom in order to

measure stigma (DeLuca & Yanos, 2015). Most of the questions use a 1-5 rating scale where 1 indicates “Strongly Agree” indicates 5 is “Strongly Disagree.” Examples of the types of questions asked are, “One of the main causes of mental illness is a lack of self-discipline and will-power” and “Mental hospitals are an outdated means of treating people with mental illness,” (United Kingdom Department of Health, 2013, questions 1-48, Appendix B). The scale was administered after each video manipulation in order to assess the manipulation’s impact on stigma.

The AMIS was split into two separate scales and administered after each video. The entire original AMIS was created using questions that relate to a specific category (fear, understanding of mental illnesses, etc.). To create the two scales used for counterbalancing, the entire AMIS was split by using these categories. (AMIS1 and AMIS2; see Appendix B; United Kingdom Department of Health, 2013). This type of split was previously performed in a study about predictors of mental health stigma based on political attitudes (DeLuca & Yanos, 2015). The scale split was validated in a previous study who used certain sections of the AMIS to look at social and internalized stigma levels. (Kobau, DiIorio, Chapman, & Delvecchio, 2009). The distribution of the two scales was randomized, no one participant was given the same scale twice.

The reasoning behind the split was due to the length of the AMIS in its original form. It would take too long for the participant to take the exam twice at its full length. Another concern was that participants would notice they are answering the same questions twice and they would answer based on what they remembered they indicated earlier. So, to address this, the test was split into two equivalent parts. The parts counterbalanced randomly so that some participants completed the first AMIS scale (AMIS 1) after the realistic video and other participants

completed the first AMIS scale (AMIS 1) after the biased video. Then the participants then watched the corresponding video (if given realistic first, they would see biased second and vice versa). After the second video the participants received the second half of the AMIS (if AMIS 1 was given first, then they would take AMIS 2 next and vice versa). The scales were then scored via the rubric created by the Department of Health in the United Kingdom.

Video Questions (See Appendix B). The video questions that followed the AMIS assessed the thoughts of the participants towards the videos and whether they believed the portrayals to be accurate. The questions were developed by the researcher to assess participant reactions to the videos. Within the video questions was a single item question that assessed if the participant could accurately identify whether the video clip was a biased or a realistic depiction. Participants' answers to this question determined the third IV level to which they were assigned: identified both videos correctly, identified one video correctly, and identified neither video correctly.

Procedure

Participants signed up for the study using the SONA online scheduling system. There, the participants picked a time and date to come to the research lab and participate in the study. Participants were told that the study was about "…. investigating how attention and comprehension related to the enjoyment of television". When first meeting participants, the experimenter introduced herself and gave a brief description of what participants would be doing. Then the experimenter had participants fill out the consent form on Qualtrics. Next, participants were randomly assigned to watch a video clip (biased or realistic).

The randomization of the study was chosen beforehand by using a randomizing sequence generator. The participant was unaware of the randomization. The participants would then sit at

their assigned computer and were given a pair of headphones. There were 1-6 participants in the room per study session. They then watched their own video clip on their designated computer.

Participants then filled out one half of the Attitudes towards Mental Illness Scale (AMIS; United Kingdom Department of Health, 2013; see Appendix B), which was programmed to randomly present via Qualtrics. Participants then answered a Video Questions survey that asked participants questions about the video and video's depiction of mental illness (See Appendix B).

Participants then watched the second video clip in the corresponding mental illness category. For example, if they watched a biased video about depression, first, then they watched the realistic depression video, second; if they watched the realistic video, first, then they watched the biased video, second. Participants then filled out the second half of the AMIS. Participants answered the Video Questions survey (see Appendix B). Then the participants filled out a demographics form. The questions on this form asked about the participant's age, gender, race/ethnicity, and major. The participants were debriefed as a group and given a debriefing form. The debriefing form described the overall aim of the research as well as provided information on counseling centers and different mental illness resources. The entire study took approximately 30 minutes.

Results

This study is a 2x2x3 mixed factorial and was analyzed using a different test for each hypothesis. The independent variables are depiction of mental illness (biased, realistic), order of videos (biased video first, biased video second), and identification score (identified both videos correctly, identified one video correctly, identified neither video correctly). The dependent variable was the total AMIS score following each video (AMIS Realistic, AMIS Biased).

To test the first hypothesis, participants who view a realistic video first will have less stigma towards mental illness than those who view the biased video first, a MANOVA was used. The analysis was done to compare the video order variable against the AMIS Realistic (Biased Video 1st M = 54.97, SD = 7.32; Biased Video 2nd M = 54.92, SD = 7.99) and AMIS Biased (Biased Video 1st M = 54.85, SD = 9.63; Biased Video 2nd M = 56.71, SD = 9.10) dependent variable. There was no significant difference found based on the video order, Wilk's $\Lambda = 0.985$, $F(2,108) = 0.805$, $p > .05$; partial $\eta^2 = 0.450$. This can be seen in Figure 1 in Appendix A. This shows that there is no significant difference in stigma levels as a result of viewing a realistic video first or biased video first.

To test the second hypothesis, that stigma would be lower after viewing a realistic video compared to a biased video, a paired-samples t-test was used to compare AMIS scores by depiction level. There was no significant difference found in the scores for the AMIS Realistic (M = 54.95, SD = 7.61) and AMIS Biased (M = 55.72, SD = 9.39) conditions; $t(110) = -0.995$, $p > 0.05$, Cohen's $d = 0.006$. This shows that there was no significant difference in stigma levels following the realistic videos compared to the biased videos. This can be seen in Figure 2 in Appendix A.

The third hypothesis was that participants who correctly identified both or one of the videos would have lower stigma than participants who identified neither of the videos. For this hypothesis a one-way ANOVA was conducted to look at the effect that identification had on stigma (AMIS Realistic: Identified both videos correctly M = 54.5, SD = 8.38, Identified one video correctly M = 54.99, SD = 7.12, Identified neither video correctly M = 60.15, SD = 6.23; AMIS Biased: Identified both videos correctly M = 55.41, SD = 10.25, Identified one video correctly M = 55.51, SD = 8.96, Identified neither video correctly M = 57.36, SD = 10.77). The

one-way ANOVA showed that the effect of the identification on AMIS Realistic scores was significant, $F(2,108) = 6.03$, $p < .05$. This can be seen in Figure 3 in Appendix A. For the AMIS Biased scores, there was no significant difference in stigma levels found, $F(2,108) = .241$, $p > .05$. Based on the Tukey's post hoc test, the participants for AMIS Realistic who identified both videos correctly had lower stigma than those who identified neither videos correctly (p=.002) and participants who identified one video correctly had lower stigma than participants who identified neither video correctly (p=.044).

Lastly, the fourth hypothesis states that after viewing a realistic video first, and correctly identifying both videos, the stigma scores will be decreased for the realistic video. For hypothesis four, or the interaction hypothesis, a mixed factorial ANOVA was conducted to compare the interaction effect of identification score and video order on the AMIS Realistic and AMIS Biased scores. The identification score is made up of three categories (both correctly identified, one correctly identified, neither correctly identified) and the video order includes two categories (biased video first, biased video second). The interaction effect was found to be significant, $F(1,107) = 5.29$, $p < .05$; partial $\eta^2 = .047$. This means that the hypothesis for the interaction has been supported and that order plus correct identification do lower stigma levels. This can be seen in Figure 4 and 5 in Appendix A.

Discussion

This experiment was created to examine whether mental illness stigma is affected by the depictions of mental illness in the media. The groundwork for this research primarily focused on the ideas of familiarity with mental illness and how damaging representations of mental illness affect stigma. Research done by Corrigan (2001) supports the notion that exposure to what mental illness really is can help lead to lowering stigma levels. The more people are aware of

what mental illness is, how it affects people, and how it can be represented, the less people will fear those with mental illnesses. This is supported by the cultivation theory and social learning theory that were mentioned in the beginning of this study (Bandura, 1986; Gerbner, et al., 2002; Stout, et al., 2004). Cultivation theory states that through a consistent exposure to recurrent messages on television, someone's values and perspectives are influenced by what they are seeing (Gerbner, et al., 2002; Stout, et al., 2004). Social learning theory can be defined as people watching other people, in real-life or on television, and imitating what they see in real-life. By doing this, they are able to gain new knowledge about how to act in social settings providing guidelines to what acceptable behavior is and what it is not (Bandura, 1986; Stout, et al., 2004).

The present study found support for the hypothesis that people who can identify a mental illness in the media will have lower stigma levels than those who cannot. Through correct identification of both or one videos, people are able to have significantly lower levels of stigma than people who cannot identify either. By using this information, one can predict that by educating people on the symptoms and realistic behaviors of those with mental illness, they could lower stigma surrounding depression and bipolar disorder - type I. If people were educated before watching biased depictions, stigma levels around the mental illness being depicted might decrease due to the increased knowledge of the viewer. Television can be used as a powerful tool to reach a large audience (Stout, Villegas, & Jennings, 2004). By using a tool like this to educate people on mental illness awareness or mental illness symptoms, one can hypothesize that social stigma levels might decrease.

This study also found evidence of an interaction occurring between realistic videos, the order they are presented, and identification of the video. If a participant watches a realistic video first, and correctly identifies both of the videos they watch, their stigma levels are significantly

lower than any others. This decrease in stigma levels can be due to a multitude of variables. One can be the primacy effect, and that the order of video (particularly the realistic video first) leaves the participant with a better understanding of mental illness when answering the AMIS. This could also be due to the identification of both videos. Correctly identifying both videos suggests that the participant has a basic understanding of mental illness and can see a biased depiction in media when one is presented.

Limitations

There were some limitations to this study that could be used to help improve it in the future. One such limitation was the participant pool. Since the participants were from Stockton University, over 96.4% were between the ages of 18 and 30, while only 3.6% were over the age of 30. This age range is not a representative sample of the overall population. A way to help improve the age representation in the research is to expand the population pool beyond a college setting. There is also the limitation of an unequal gender pool within the participants (90 females, 21 males). Thirdly, there is a limitation due to the number of psychology majors (or psychology related majors) in the study. There were 56 participants who identified as a psychology major and 55 participants who did not. Due to this margarine, the sample in this study was not a representative sample of the overall student population based on gender and major. Lastly, there was a limitation due to an error in the survey. Under demographics – race, the option for "Hispanic/Latino" was missing and therefore there is no accurate number for how many participants in the research were Hispanic/Latino. Another limitation of the study was the number of participants. The total number of participants was 111. Because the study is a 2x2x3 design, there was a small sample size in each category. (Range of N: 5-41).

Another limitation was the manipulation of the videos. The videos were selected from similar networks, with similar budgets and production quality. The videos were comprised of differing actors (different sex, age, ethnicity/race), pace and number of people per scene. There were also different sets, locations, and dialogue. However, one of the more substantial differences was the show *BoJack Horseman. BoJack Horseman* is animated while the other three videos are all shot in real-life. In future analysis, it may be best to control for this by making all the videos the same format (animated or real-life) or even by creating the videos. Due to this lack of experimental control, some confounding variables that can be created are how participants react to the biased depictions of the animated show verse the shows with real people. One confounding variable is the fact that both characters depicting realistic mental illnesses were women (Penelope and Carrie) and both characters depicting biased mental illnesses were male (BoJack and Ian). This could affect the results because participants might view the character differently due to their gender and not their depiction of the mental illness. Since 90 of the participants were female, they may have resonated more with the female characters which could have led to lower stigma levels instead of the actual depictions.

One way to control for this in the future is by filming the videos. This could control for editing, production, format, even actors and gender. However, this option was not a realistic one for this research currently but is something that should be explored into the future. The reason that the shows were not all animated or not all real-life, is because there is not a large quantity of television shows that show mental illness, no matter the realness of the depiction. There is a lack of shows who meet the criteria of having a diagnosed character with enough screen time to use for the research. This is something that also needs to be improved on by the media in general. The reasoning however behind using real TV shows was to add ecological validity to the

experimental stimuli. By showing videos of television shows one would see in everyday life, this research can achieve validity when comparing to society as a whole because the videos were pulled from society.

Another limitation to this research can be the splitting of the Attitudes towards Mental Illness Scale (AMIS). The AMIS was not originally intended to be split into two scales. One way to test the results of this research and its validity with the splitting of the Attitudes towards Mental Illness Scale is to conduct a future research with the portrayal of a single video followed by the entire AMIS.

Lastly, one more limitation is the laboratory setting. When people consume TV shows, it is usually not in a laboratory setting, so this may also impact how they process the shows. Often it is seen that people who watch television at home or in a comfortable setting it is called "mindless watching" or watching without absorbing the information (Langer & Chanowitz, 1988; Ruben, 2012). However, since the participants were told the study was about "attention" they could have been watching the videos "mindfully" or with their full attention (Langer & Chanowitz, 1988; Ruben 2012). This could affect the results and how they carry in a naturalistic setting verses a laboratory setting. For example, by watching the videos is a laboratory setting, the participants are forced to pay attention to the videos in a way they are not use to. They are actively watching which can allow them to focus on details the participant might have missed when "mindlessly" watching the videos. This could have led to an error in validity because the type of watching the participants were engaging in.

Future Directions and Implications

Some implications of this study can be used towards raising awareness of mental illness. As mentioned before, the AMIS was used to help promote mental illness awareness via

commercials and PSA's. By using this information of how correct identification of mental illness can lead to less stigma, perhaps the increase of educational advertisements in the media can encourage less overall social mental illness stigma. This can also help people get help if they are suffering from a mental illness. By counteracting social stigma with commercials and PSA's, one can also counteract internalized stigma. With promoting awareness, more people will hopefully come forward and engage in the mental health services in their community.

Another future implication could be promoting the creation of more characters in television shows who have mental illness. Mental illness should not be used for dramatic effect or romanticized to make it look like the character is "misunderstood" (Ruben, 2012). By exhibiting how the misunderstandings of what mental illness is can lead to an increase in social stigma levels; hopefully more characters in the media will express the authenticity and accuracy in their depictions of mental illness. Also, by promoting how to help people with mental illnesses, as well as teach people how to help someone they know or live with who has a mental illness, certain behaviors and overall negative attitudes towards people with mental illness may decrease as a whole (Stout, et al., 2004; Bandura, 1986).

Lastly, by using the results of this study, future research could look into how different depictions of mental illness can lead to other changes in someone's attitudes and behaviors towards people with mental illness. One future research could revolve around the question of how different depictions of mental illness in the media affect emotions (sympathy or indifference) towards that depiction or character. Through watching someone struggle with mental illness in a realistic manner, it is possible that one can manipulate another's attitudes towards the idea of being more sympathetic towards that person. On the other hand, maybe by

watching someone who is depicting a biased version of mental illness, one can manipulate their feelings to be sympathetic or even indifferent towards that person.

The purpose of this study was to explore the damaging effects that biased depictions of mental illness in the media have on people, in particular, levels of stigma towards individuals with mental illnesses. This experiment found that people who can correctly identify biased and realistic depictions of mental illness in television shows have lower stigma levels. It also supported the idea that through the interaction of seeing a realistic video first and correct identification of videos, one can lower stigma levels. By applying what has been found in this research to the promotion of mental illness awareness, one could hypothetically help lower social stigma levels towards mental illness in the media.

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Appendix A

Figure 1: Order of video and the Attitudes towards Mental Illness mean score. AMIS Realistic (Biased Video 1st M = 54.97, SE = 0.995; Biased Video 2nd M = 54.92, SE = 1.06) and AMIS Biased (Biased Video 1st M = 54.85, SE = 1.222; Biased Video 2nd M = 56.71, SE = 1.301)

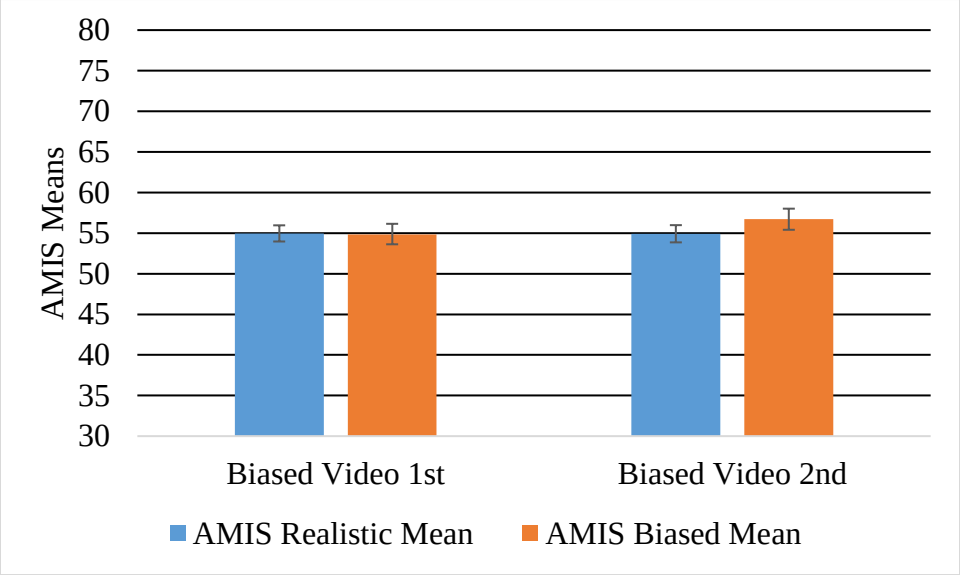


Figure 2: Attitude towards Mental Illness in the Realistic Video Condition vs. Biased Video Condition. Realistic Videos AMIS (M = 54.95, S.E. = 0.72) Biased Video AMIS (M = 55.72, S.E. = 0.89).

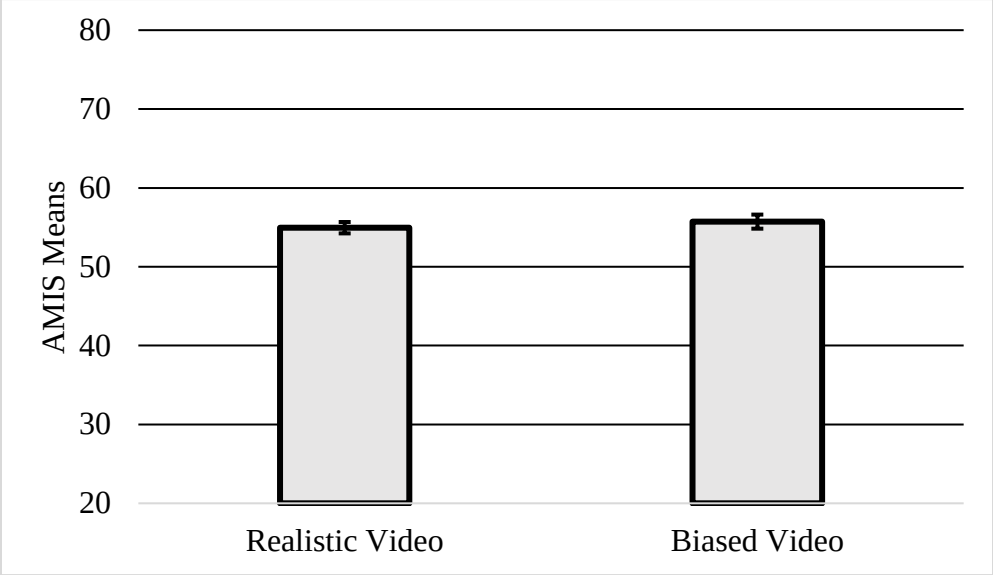


Figure 3: Identification of mental illness in the videos and the Attitudes towards Mental Illness Realistic mean score. Identified Both Videos Correctly (M = 51.5, S.E. = 1.79), Identified One Video Correctly (M = 54.99, S.E. = 0.822), Identified Neither Videos Correctly (M = 60.143, S.E. = 1.66).

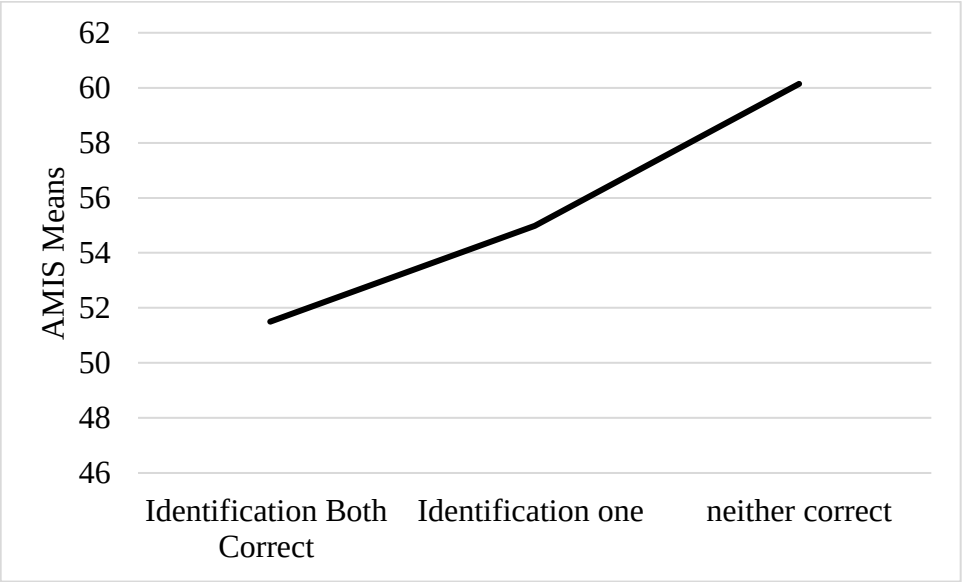


Figure 4: Video order and identification on Attitudes towards Mental Illness Realistic mean scores.

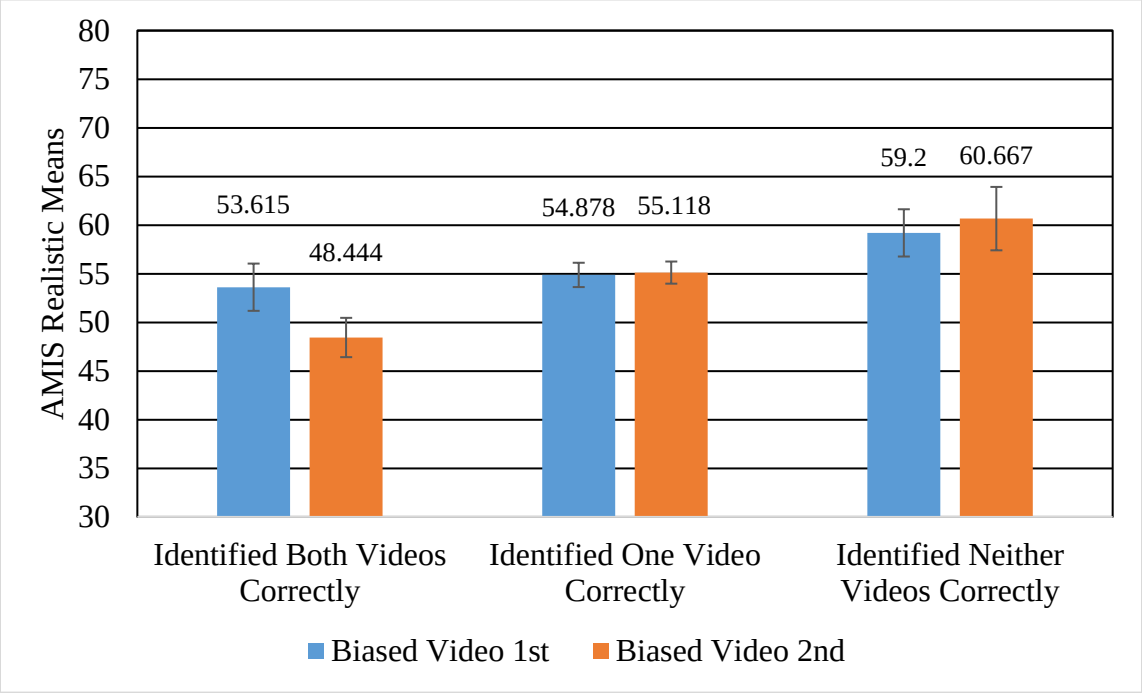
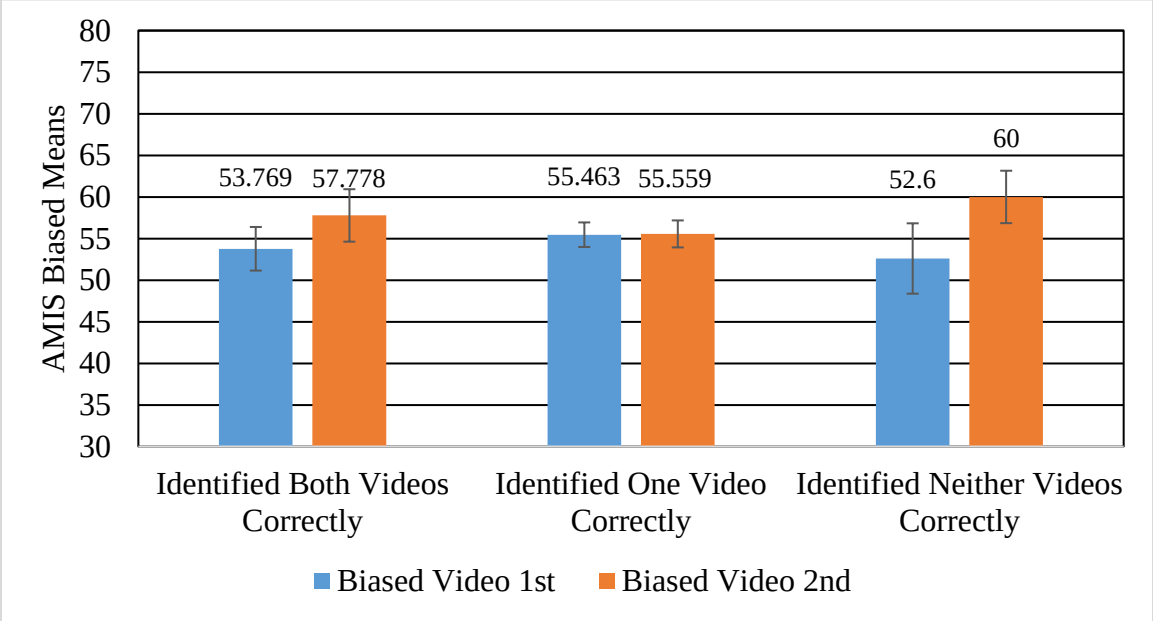


Figure 5: Video order and identification on Attitudes towards Mental Illness Biased mean scores.



Appendix B

Introduction of Researcher

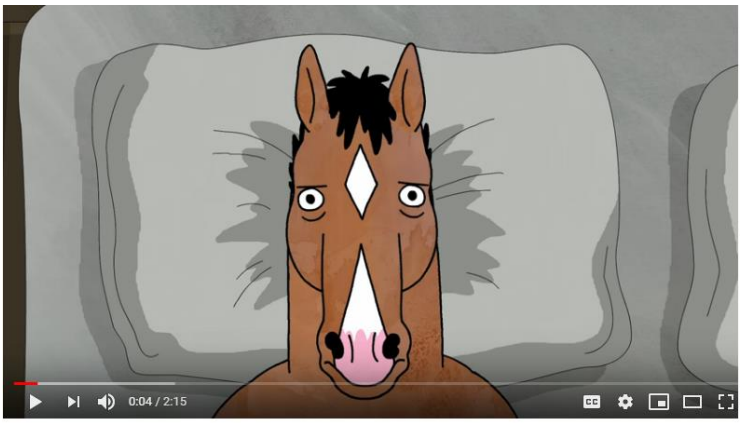
Hello and welcome to the research attention and comprehension towards the entertainment of television. My name is Abigail and I am the head researcher, coordinator and creator of this study. Before you are two items, the first is the consent form. Please read the form to completion before continuing with the study. If at any time you need to stop or have any questions please let me know. The next item is a pair of headphone we have provided. If you have your own you are more than welcome to use them.

Now, what you will be doing is very simple. All that is required of you is to watch two videos and answer survey questions after each. It is very important for you to pay close attention to the clips as this matters. Please answer all the questions honestly and as accurately as you can. If there are any issues accessing the videos please let me know.

This study will take no more than 30 minutes. Once you are done, remain seated until everyone else is done with the study. After everyone is done you will be debriefed as a group and you can leave. Are there any questions? (Answer questions)

Major Depressive Disorder

BoJack Horseman: run time 2 minutes and 15 seconds. This is the romanticized version of Depression



Bojack, you're a piece of shit (Bojack Horseman - Season 4)

One Day at a Time: run time 3 minutes and 4 seconds. This is the accurate version of Depression

ONE DAY AT A TIME - Penelope Struggles With Depression (CLIP)

Bipolar Disorder - Type I

Shameless: run time is 4 minutes and 23 seconds. This is the romanticized version of Bipolar disorder - type I.

Ian & Mickey 506.5 | Gallavich

Homeland: run time is 45 seconds. This is the accurate version of Bipolar disorder - type I.

Homeland | 'Facts Are Facts' Official Clip | Season 1 Episode 11

AMIS 1

Survey:

1. One of the main causes of mental illness is a lack of self-discipline and will-power
2. There is something about people with mental illness that makes it easy to tell them from normal people
3. Mental illness is an illness like any other
4. Mental hospitals are outdated means of treating people with mental illness
5. We need to adopt a far more tolerant attitude toward people with mental illness in our society
6. We have a responsibility to provide the best possible care for people with mental illness
7. People with mental illness are a burden on society
8. Increased spending on mental health services is a waste of money
9. I would not want to live next door to someone who has been mentally ill
10. Anyone with a history of mental problems should be excluded from taking public office
11. People with mental illnesses are far less of a danger than most people suppose
12. The best therapy for many people with mental illness is to be part of a normal community
13. As far as possible, mental health services should be provided through community-based facilities.
14. Locating mental health facilitates in a residential area downgrades the neighbourhood
15. People with mental health problems should have the same rights to a job as anyone else

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 2: multiple choice – select the ones you agree with

1. Which of these do you feel usually describes a person who is mentally ill?
    1. Someone who has serious bouts of depression
    2. Someone who is incapable of making simple decisions about his or her own life
    3. Someone prone to violence
    4. Someone who is suffering from schizophrenia

Questions 3-4: The following Questions ask about your experiences and views in relation to people who hae mental health problems. By this I mean people who have been seen by healthcare staff for a mental health problem.

Q3: Are you currently living with, or have you ever lived with, someone with a mental health problem?

a. Yes
b. No

Q4: Do you currently, or have you ever had, a close friend with a mental health problem?

c. Yes
d. No

Question 5-6 (Future Analysis): The following statements ask about any future relationships you may experience with people with mental health problems. Please tell me how much you agree or disagree with each one.

Q5: In the future, I would be willing to live with someone with a mental health problem.

Q6: In the future, I would be willing to continue a relationship with a friend who developed a mental health problem.

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 7: Please tell me how much you agree or disagree with each one.

Q7A: Most people with mental health problems want to have paid employment

Q7B: Psychotherapy (e.g., talking therapy or counselling) can be an effective treatment for people with mental health problems

Q7C: People with severe mental health problems can fully recover

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 8: Please say to what extent you agree or disagree that each of the following conditions is a type of mental illness…

Q8A: Depression

Q8B: Schizophrenia

Q8C: Drug addiction

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 9: Who is the person closest to you who has or has had some kind of mental illness?

1. Immediate family (spouse\child\sister\brother\parent etc.)
2. Partner (not living with you)
3. Friend
4. Acquaintance
5. Self

Question 10: If you felt you had a mental health problem; how likely would you be to go to your general practitioner for help?

1. Very likely
2. Quite likely
3. Neither likely nor unlikely
4. Quite unlikely
5. Very unlikely

Question 11: In general, how comfortable would you feel talking to a current or prospective employer about your mental health, for example telling them you have a mental health diagnosis and how it affects you?

1. Very uncomfortable
2. Moderately uncomfortable
3. Slightly uncomfortable
4. Neither comfortable nor uncomfortable
5. Fairly comfortable
6. Moderately comfortable
7. Very comfortable

Question 12: Do you think mental health-related stigma and discrimination has changed in the past year?

1. Yes – increased
2. Yes – decreased
3. No

AMIS 2

Survey

1. There is something about people with mental illness that makes it easy to tell them from normal people
2. As soon as a person shows signs of mental disturbance, he should be hospitalized.
3. Mental illness is an illness like any other
4. Less emphasis should be placed on protecting the public from people with mental illness
5. Virtually anyone can become mentally ill
6. People with mental illness have far too long been the subject of ridicule.
7. People with mental illness don't deserve our sympathy
8. Increased spending on mental health services is a waste of money
9. There are sufficient existing services for people with mental illnesses
10. People with mental illness should not be given any responsibility
11. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered
12. No-one has the tight to exclude people with mental illness from their neighbourhood
13. Most women who were once patients in a mental hospital can be trusted as babysitters
14. Residents have nothing to fear from people coming into their neighbourhood to obtain mental health services
15. It is frightening to think of people with mental problems living in residential neighbourhoods

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 2: multiple choice – select the ones you agree with

Q2: Which of these do you feel usually describes a person who is mentally ill?

1. Someone who has a split personality
2. Someone who is born with some abnormality affecting the way the brain works
3. Someone who cannot be held responsible for his or her own actions
4. Someone who has to be kept in a psychiatric or mental hospital

Questions 3-4: The following Questions ask about your experiences and views in relation to people who hae mental health problems. By this I mean people who have been seen by healthcare staff for a mental health problem.

Q3: Are you currently, or have you ever worked, with someone with a mental health problem?

e. Yes
f. No

Q4: Do you currently, or have you ever, had a neighbour with a mental health problem?

g. Yes
h. No

Questions 5-6 (Future Analysis): The following statements ask about any future relationships you may experience with people with mental health problems. Please tell me how much you agree or disagree with each one.

Q5: In the future, I would be willing to work with someone with a mental health problem.

Q6: In the future, I would be willing to live nearby someone with a mental health problem.

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 7: Please tell me how much you agree or disagree with each one.

Q7A: If a friend had a mental health problem, I know what advice to give them to get professional help

Q7B: Medication can be an effective treatment for people with mental health problems

Q7C: Most people with mental health problems go to a healthcare professional to get help

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 8: Please say to what extent you agree or disagree that each of the following conditions is a type of mental illness…

Q8A: Stress

Q8B: Bipolar disorder (manic-depression)

Q8C: Grief

1 = Agree Strongly
2 = Agree Slightly
3 = neither Agree nor Disagree
4 = Disagree Slightly
5 = Disagree Strongly

Question 9: Who is the person closest to you who has or has had some kind of mental illness?

1. Partner (living with you)
2. Other family (uncle\aunt\cousin\grandparent etc)
3. Work colleague
4. Other (please specify)
5. No-one known

Question 10: What proportion of people in the US do you think might have a mental health problem at some point in their lives?

1. 1 in 1000
2. 1 in 100
3. 1 in 50
4. 1 in 10
5. 1 in 5
6. 1 in 3

Question 11: In general, how comfortable would you feel talking to a friend or family member about your mental health, for example telling them you have a mental health diagnosis and how it affects you?

1. Very uncomfortable
2. Moderately uncomfortable
3. Slightly uncomfortable
4. Neither comfortable nor uncomfortable
5. Fairly comfortable
6. Moderately comfortable
7. Very comfortable

Question 12: Do you think that people with mental illness experience stigma and discrimination nowadays, because of their mental health problems?

1. Yes – a lot of stigma and discrimination
2. Yes – a little stigma and discrimination
3. No

Video Questions

Directions: Please check the appropriate answer to each question.

1. You have seen this show before.
    a. Yes
    b. No

2. You would watch this show.
    a. Yes
    b. No

3. Does this show represent any mental illnesses? If so which one?
    a. Depression
    b. Bipolar (type I or type II)
    c. No, it does not show a mental illness

4. Do you believe this depiction of mental illness is realistic or biased?
    a. Biased
    b. Realistic

Demographics Survey: used for both studies.

Age: Write in

Gender: Write in

Race:

- African American/African/Caribbean/Black
- White, Non-Hispanic
- Asian/Pacific Islander
- Native American
- Other
- Prefer Not to Say

Year in College:

- Freshman
- Sophomore
- Junior
- Senior

Major: Write in

How many psychology classes have you taken and which ones?

- Abnormal Psychology
- Social Psychology
- Experimental Psychology
- Introduction to Psychology
- Theories of Counseling (I or II)
- Adolescent Psychology
- OTHER

Flow Chart for Experimental Design and Randomization: