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Attitudes Toward Mental Disorders

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Attitudes Toward Mental Disorders

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Abstract

Mental disorders are often associated with social stigmas and lead to discrimination. The aim of the current study is to collect information to minimize stigma toward mental illnesses. There were 114 participants in study one (76% females), all of whom were introductory psychology students. Participants watched interviews of individuals with mental disorders, and then rated them on the Social Distance Scale, Social Attribution Scale, and Attitudes and Social Willingness Scale. Participants with firsthand experience of mental illnesses rated individuals with more acceptance than their counterparts. Results indicate amount of stigma toward individuals vary depending on diagnosis. There were 74 participants in study two (70% females). Study two expanded on study one by adding the Modern Racism Scale and an anti-stigma video. These variables were not related to stigma ratings.

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Attitudes Toward Mental Disorders

Mental disorders are often associated with social stigmas, which lead to discrimination and prejudice. Individuals with mental disorders such as schizophrenia are thought to be dangerous and responsible for their condition. Due to the stigma attached to mental disorders mental health consumers have a harder time finding a job, a place to live, friends, and support (Corrigan, 1998). Stigmas about mental illnesses are often spread through the media and cause many people to withdraw from society and to conceal their disorder (Corrigan, 1998; Wahl, 1999).

Over the years stigma has been defined in different ways. The term stigma originates from the Greek; and referred to a physical marker that exposed something unusual and morally bad about the person. Slaves, traitors, and criminals are examples of people that would be cut or burned to mark them as people to avoid (Goffman, 1963). Today, the custom of physically marking has declined, but social marking has increased and is the root of most stigmas (*Dilemma of difference a multidisciplinary view of stigma*, 1986). Devine defines stigma as a stereotype that portrays a group negatively (1989). Stereotypes are generalized beliefs that are invoked by a collectively agreed upon demographic membership (*Dilemma of difference a multidisciplinary view of stigma*, 1986). Since stereotypes are collectively agreed upon they are considered "social" (Devine, 1989). These collectively agreed upon categories are arbitrary in both the creation and the labeling of the characteristics; for example, skin color is considered socially salient, but finger length is not considered socially relevant (Yang, Link, & Phelan, 2008). Link and Phelan's definition of stigma is both descriptive and inclusive. According to their definition, there are five components to stigma: one, people make distinctions between people and label these differences; two, culturally agreed upon beliefs link labeled individuals to negative

stereotypes; three, a degree of separation is created between individuals labeled negatively and those that are not by using terms such as, “us” and “them;” four, labeled individuals experience discrimination that leads to unequal opportunities and outcomes; five, stigma is dependent on social, economic, and/or political power. Without power stigma would not result in full disapproval, rejection, exclusion, and discrimination of stereotyped individuals. For example, if stigma was solely based on labeling and stereotyping, not power, lawyers, politicians, and white people would be considered to be highly discriminated against and stigmatized groups (Link & Phelan, 2001).

There are three main paradigms researchers use to explain stigma: the motivational approach, social cognitive perspective, and the sociological perspective. The motivational paradigm believes stigma is created in order to meet basic psychological needs. For example, people have the belief that the world is just so if this belief is disrupted by a bad event happening to a good person the perceiver will fix this disruption by considering them a bad person (e.g. people with severe mental disorders must be bad people or they would not have mental disorders) (Corrigan, 1998). Most research in stigma has been from the social cognitive approach. The social cognitive approach studies how people create categories and how these categories link to the development of generalized beliefs and negative stereotypes (Link & Phelan, 2001). Categories are created in order to process and simplify the infinite amount of information people are exposed to without these categories people would have difficulty making sense of the world. According to the social cognitive paradigm, stigma is a by-product of categories that help us to simplify and make sense of our experiences (Corrigan, 1998).

Link and Phelan approach the study of stigma from a sociological perspective, which addresses the main criticisms of the social cognitive approach. A criticism of the social cognitive

approach focuses mainly on the cognitive processing of information and only peripherally addresses discrimination stigmatized individuals' experience. The sociological perspective tries to address both aspects equally and simultaneously with its definition of stigma (Yang, Link & Phelan, 2008). Link and Phelan define stigma as occurring when "elements of labeling, stereotyping, separation, status loss and discrimination co-occur in a power situation that allows them to unfold". (Link & Phelan, 2001, p. 367)

Through public communication including movies, newspapers, magazines, television shows, books, radio, and advertisements mental illnesses have been represented in a negative way that leads to increased stigma. People view individuals with severe mental illnesses differently than they do individuals with other forms of severe illnesses. The success of recovery deals in part with the reactions from health professionals, family, and society. Individuals with severe mental illnesses such as schizophrenia and their families are often told to lower their expectations, that they are highly unlikely to ever recover to premorbid levels of functioning and that they will be incapable of regular employment and living on their own. There are three main misconceptions that the media spreads about mental disorders: (1), people with mental disorders should be feared because they are potentially aggressive or homicidal; (2), people with mental disorders are childlike, view the world simply and should be treated as such; (3), people with mental disorders are rebellious and need to be civilized (Corrigan, 1998). According to a survey completed by individuals with mental disorders, seventy-seven percent sometimes, often, or very often hear or read negative or offensive remarks about mental health consumers through mass media (Wahl, 1999). Media portrayals of mental illnesses can cause consumers to hide their illnesses from others, which lead them to isolate from others and assume that they must combat their illness alone (Corrigan, 1998). According to a survey, seventy-four percent of individuals

with mental disorders avoid telling people outside of their immediate family about their diagnosis (Wahl, 1999).

Western attitudes toward mental disorders have three common themes, fear and exclusion, benevolence, and authoritarianism, which closely coincide with what the media portrays. Many people fear individuals with mental disorders and feel they should be segregated from those without mental disorders. A large percentage of westerners also believe that people with mental disorders are childlike and should be cared for like children. Finally, westerners believe that people with mental disorders should have their decisions made for them because they are irresponsible (Corrigan, 1998). Peoples' attitudes toward individuals with severe mental illnesses seem to be equally harmful as the illness itself. Corrigan's simple linear model of disease and discrimination on the impact of mental illnesses lead to the same outcome through different modes. Both disease models of causation and discrimination start off with an emphasis on biological vulnerability and psychiatric symptoms and eventually lead to fear, stigma, discrimination, loss of social opportunities and poor quality of life. Stigma can lead to discrimination in all aspects of life. Individuals with mental disorders have a harder time finding housing, employment, and overall are told to lower their expectations. Individuals with mental disorders are also more likely to be falsely charged with violent crimes (Corrigan, 1998).

The negative effects of stigma are not only created through discrimination from others, but also through individuals themselves internalizing and endorsing the negative stereotypes. Self-stigmatizing individuals experience reduced self-esteem, depressed mood, and poor quality of life (Corrigan, 1998; Yang, Link, & Phelan, 2008). Individuals with mental disorders that self-stigmatize believe that they are disabled for life, are incapable of having steady employment, independent living, and strong relationships (Corrigan, 1998). These beliefs contribute to lower

income, unemployment, poor social networks, homelessness, and reduced expectations in one-self (Yang, Link, & Phelan, 2008).

Two other ways stigma can affect the stigmatized is through expectancy confirmation and automatic stereotype activation-behavior. Expectancy confirmation is when someone expects the stigmatized to act a certain way and their behavior toward the stigmatized causes them to act in the expected way, reinforcing the false expectation (Major & O'Brien, 2005). Automatic stereotype activation-behavior, also known as stereotype threat, affects "behavior through ideomotor processes…because of associative linkages in memory between stereotypes and the behaviors they imply, activation of stereotypes can automatically lead to behavior that assimilates to the stereotype" (Major & O'Brien, 2005, p. 397).

Many different approaches have been taken to reduce stigma and discrimination toward individuals with mental disorders. A public health perspective has been one of the most common perspectives implemented to combat stigma. "Public health is defined as a set of efforts organized by society to protect, promote and restore the people's health through collective or social action" (Stuart, 2008, pg. 135). Public health programs are normally local programs that try to educate the public advocate legislation and fiscal reform. One of the main drawbacks of public health programs is that they are often local programs that are not documented well or published widely. Without this documentation the results of these programs often do not significantly contribute to understanding of which programs work and which programs do not. Other approaches include discussion programs and presentations by individuals diagnosed with the disorder, and sponsored by organizations such as the National Alliance for the Mentally Ill. There are no programs that have clearly been demonstrated to reduce social inequities for individuals with mental disorders. Some of the problems as to why there are not better programs

or literature attaining policy attention and receiving funding support are because of this lack of strong evidence and research documentation. Research is needed to answer the question of what works, when, for whom and why. Once these questions are answered stronger evidence can be presented to policy makers in order to get support for anti-stigma programs (Stuart, 2008).

Another approach to reduce stigma toward individuals with mental disorders is the biomedical approach. The biomedical view presents mental illnesses as genetically based brain disorders. Some psychologists believe that the genetic "revolution" will eliminate stigma toward individuals with mental disorders, while other psychologists believe that it will create more stigma and people would view mental illnesses as more permanent. Schnittker's (2008) study looks at the effects of people viewing mental illnesses as caused by genes, the results indicate that people view schizophrenic patients with more fear and patients with depressive disorders as more socially acceptable. These results suggest that the reason people are viewing schizophrenic patients with more fear seems to stem from the belief that the disorder is ingrained in them and unchangeable. Patients with depression, however, experience more social acceptance because people assume patients' are not responsible for their condition which supports that they are not just weak individuals. There are some benefits and hazards in presenting this view as a way to combat stigma depending on the disorder (Schnittker, 2008). Corrigan and Watson noticed the drawbacks to the biomedical approach and suggest using a combination of the biomedical approach and dispelling of myths with facts about mental illness. This multidimensional approach seems to be promising, but no studies have tested this approach to date (Corrigan & Watson, 2004).

Haghighat (2001) believes that anti-stigma campaigns have to be continuous and open to change. The six levels of intervention are the cognitive level, affective level, denial level,

economic origin, and the evolutionary origin. Haghighat believes that the best way to combat stigma is to continuously propagate the truth about mental illness to humanize individuals with mental illness, and to have campaigns that address all six levels of intervention (Haghighat, 2001).

Study 1. Previous studies indicate that people rate individuals differently based on their type of disorder whether it is a physical (e.g. cancer) or mental (e.g. Major Depressive Disorder.) Participants want more social distance from individuals with mental disorders than individuals with physical disorders (Breheny, 2007; Corrigan, 1998). Not only do people differentiate between physical and mental disorders, but attitudes toward people with mental disorders vary depending on the disorder. According to one study, people want the most social distance from people that have drug dependence, alcohol dependence, Schizophrenia, and Major Depressive Disorder, respectively (Martin, Pescosolido, & Tuch, 2000). The current study will compare participants' attitudes toward individuals with Major Depressive Disorder, Schizophrenia, undifferentiated type, Bipolar Disorder, type II, Schizophrenia, disorganized type, Post-Traumatic Stress Disorder, and Schizophrenia, paranoid type. It is hypothesized that people will have more negative attitudes toward individuals with more severe forms of behavioral symptoms such as schizophrenia, and that the form and intensity of stigma will vary between disorders.

Studies have also looked at differences in ratings based on the perceiver's demographics (Alexander & Link, 2003; Corrigan & Watson, 2007). According to Corrigan and Watson's study, females have less negative attitudes toward individuals with mental disorders (2007). Alexander and Link's study supported the hypothesis that those individuals that are more politically liberal and have firsthand experience with mental disorders have less negative

attitudes toward individuals with mental disorders (2003). Similar effects for gender and political affiliations are expected in this study.

The results of studies that have looked at the level of knowledge participants have about mental disorders and their level of prejudice toward individuals with mental disorders have varied (Corrigan, 1998; Corrigan, Watson, Warpinski, & Gracia, 2004; Wang & Lai, 2008). In this study it was hypothesized that individuals with more knowledge about and experience with mental disorders will have less negative attitudes toward individuals with mental disorders than their counterparts.

Study 2. Study two expands on study one by evaluating the effects of an anti-stigma video on stigma ratings in follow up session and by comparing attitudes toward mental disorders to prejudice toward race. Participants will either be randomly assigned to either a group that watches a video designed to reduce stigma toward mental illness or to a group that watches an informative video about diagnostic criteria for various mental disorders. It was hypothesized that participants in the anti-stigma video group will express less negative attitudes toward people with mental disorders after watching the anti-stigma video than those that watched the informative video.

The majority of stigma research has only concentrated on one form or type of stigma at a time (Link & Phelan, 2001). Stigma toward individuals with mental disorders may also be viewed as part of a more complex pattern of intolerance, and approached the same way other prejudices are understood (Corrigan, 2005). Therefore study two will measure prejudice levels toward race and in addition to stigma toward mental disorders. By measuring prejudice levels correlations can be used to see if participants high in racial prejudice also have more negative attitudes toward mental disorders than their counterparts. If the two are correlated that will

extend the understanding of varying levels of negative attitudes toward mental disorders. It is hypothesized that racial prejudice and stigma toward mental disorders will be significantly correlated.

Study 1

Method

Participants

One hundred and fourteen introductory psychology students from the College of William and Mary participated in study one. There were 87 (76%) females and 27 (24%) males. Participants received a research credit hour to fulfill research participation hours as a requirement for the course.

Items and Questionnaires

Study one, items and questionnaires included were six interview segments of individuals' diagnosed with a mental disorder and three questionnaires that measure attitudes toward mental disorders.

Professor Shean purchased the DSM-IV training videos the video interviews used in this study were taken from this video. In each case interviewees gave consent for the videotapes to be used for teaching and research purposes. Participants watched six video interviews that are each approximately five minutes in length. Each interview segment includes individuals diagnosed with different mental disorders, including Major Depressive Disorder, Schizophrenia, undifferentiated type, Bipolar Disorder, type II, Schizophrenia, disorganized type, Post-Traumatic Stress Disorder, and Schizophrenia, paranoid type. Each interviewee described symptoms and conditions consistent with the Diagnostic Statistical Manual of Mental Disorders-IV (Association, 2000).

The first questionnaire measures social distance by using the Social Distance Scale, published in Martin, Pescosolido and Tuch (2000). The Social Distance Scale is composed of 6 Likert-item questions that measure for social/interactional distance from people with mental disorders. Responses for the Social Distance Scale are given on a scale of 1 to 4, 1 being *strongly agree* and 4 being *strongly disagree*. Sample items include: "I would be willing to move next door to the person I just saw on the video" and "I would not like the person I just saw in the video to marry into my immediate family." (Martin et al., 2000) Refer to Appendix A for the complete questionnaire.

The second questionnaire is a based on Corrigan's model. This scale is composed of 5 Likert-item questions that measures perceived levels of controllability, responsibility and level of dangerousness associated with each disorder. Responses for the scale are given on a scale of 1 to 4, 1 being *strongly agree* and 4 being *strongly disagree*. Sample items include: "The person I just saw in the video is not able to control his/her behavior" and "The person I just saw in the video could be dangerous." (Corrigan, 2000) Refer to Appendix B for the complete questionnaire.

The third questionnaire, Attitudes and Social Willingness Scale, is based on Day's Mental Illness Stigma Scale (2007). This scale is composed of 21 Likert-item questions that measure attributions of interpersonal anxiety, relationship disruption, poor hygiene, visibility and likelihood of recovery associated with each disorder. Responses for the scale are given on a scale of 1 to 4, 1 being *strongly agree* and 4 being *strongly disagree*. Sample items include: "People with [this disorder] do not groom themselves properly" and "I don't think that I can really relax and be myself when I'm around someone with [this disorder]." (Day, Edgren & Eshleman, 2007) Refer to Appendix C for the complete questionnaire.

All questionnaires were public domain and not copyrighted.

The last item was a demographic questionnaire, which consists of four questions. The questions ask for sex, level of knowledge about mental disorders, firsthand experience with mental disorders, and government programs for individuals with mental disorders. Refer to Appendix D for the whole questionnaire.

Procedure

After signing the Consent Form, participants were read instructions for the study. They then watched a five-minute video interview of an individual with a mental disorder. After viewing, the video segment participants completed the questionnaires. After participants completed the questionnaires, they watched another five-minute video interview with a person diagnosed with a different mental disorder and then filled out the same questionnaire. This process was repeated for a total of six times. The interview segments were played in the following order: Major Depressive Disorder, Schizophrenia, undifferentiated type, Bipolar Disorder, type II, Schizophrenia, disorganized type, Post-Traumatic Stress Disorder, and Schizophrenia, paranoid type. Participants were broken up into two groups. One group watched the video in the above-mentioned order and the other group watched the videos in the reverse order to measure for order effect. After participants viewed each video interview and filled out the questionnaires. Participants completed a brief demographic questionnaire. Participants were then debriefed and thanked for their participation.

Results

Analysis Strategy

All statistical analyses were performed using SPSS Version 16.0. Each disorder was compared on each questionnaire a paired-samples t-test. Two-tailed tests were used to test for significance in order to minimize the effects of multiple t-tests on the data set. Factor Analysis

was used to see if factors emerged within scales. Oblimin and Varimax rotations were analyzed; both produced similar results, the Oblimin rotations are reported. Three separate independent t-tests were run to compare the total scores of males and females, participants with and without firsthand experience and to check for an order effect. Two separate one-way analysis of variance (ANOVA) tests were used to compare participants' rating scores with participants' reported level of knowledge of mental disorders and participants' opinion of how many mental health programs should be run by the government. Questions one, two and five of the Social Distance Scale, question two of the Social Attribution Scale, and question six of the Attitudes and Social Willingness Scale were reversed to control for response set.

Main Results

The paired t-tests analyses yielded statistically significant findings for comparisons of ratings of most disorders on each of the scales, e.g. Major Depressive Disorder ratings on the Social Distance Scale were significantly lower than Social Distance Scale ratings for all other disorders. This finding of differences in paired comparisons between ratings was true for most disorders and supports the hypothesis that participants would rate individuals differently based on their disorder. Refer to Table 1 for a complete listing of all the means and standard deviations. Refer to Table 2 for a complete list of disorders and questionnaires that were statistically significant and their t-values.

Results of an Oblimin rotation factor analysis, using an Eigenvalue equal to or greater than one, yielded two factors for all the disorders and questionnaires except for the Social Distance Scale for the following disorders: Schizophrenia, disorganized type, Post-Traumatic Stress Disorder, and Schizophrenia, paranoid type. Major Depressive Disorder, Bipolar Disorder, type II, and Schizophrenia, undifferentiated type all loaded on two factors. Each disorder had one

loading that included questions two, four, and six of the Social Distance Scale; these questions ask about being friends with, working closely to and having the mental health consumer marry into their immediate family. The Social Distance Scale is the only data reported since all other scales had similar loadings. Refer to Table 3 for a complete listing of all the factors and loadings for the Social Distance Scale.

Three independent t-tests were used to compare group differences based on gender, experience and order effect. The first was non-significant for comparisons of attitudes toward individuals with mental disorders and gender, t (112) = 0.122, $p > .05$. The second test was significant for comparisons between individuals with and without firsthand experience and attitudes toward individuals with mental disorders, t (112) = 2.101, $p < .05$. Participants with firsthand experience rated individuals with mental disorders with less negative attitudes than participants without firsthand experience, (M= 479.359, SD= 50.691) and (M= 458.492, SD= 54.748), respectively. Finally there was no effect based on the order of case presentations, t (112) = -1.202, $p > .05$. The first two results support the hypothesis that there would be no difference between ratings and gender, but there would be a significant difference between ratings and firsthand experience with mental disorders. The final result does not support my hypothesis that there would be an order effect.

One-way ANOVA was non-significant for participants' amount of knowledge of mental disorders and their ratings of individuals with mental disorders, F (3, 110) = 1.271, $p > .05$. A second ANOVA test was non-significant for comparisons of participants that thought there should be more, less, or the same number of programs offered by the government for people with mental disorders and their ratings on the three scales, F (2, 111) = 1.522, $p > .05$. These results did not support the hypothesis that participants with more knowledge about mental disorders

would rate individuals less negatively than their counterparts, or the hypothesis that participants that wanted more government programs would rate individuals less negatively than their counterparts.

Study 2

Methods

Participants

Seventy-four introductory psychology students from the College of William and Mary participated and completed study two. There were 52 (70%) females and 22 (30%) males. Participants received two credit hours to fulfill research participation as a requirement for the course. Five participants did not complete the second part of the study and were removed from the results.

Items and Questionnaires

In study two, items and questionnaires included were four videotape interview segments of individuals diagnosed with a mental disorder, a questionnaire that measures racial prejudice, three questionnaires that measure attitudes toward mental disorders, one open-ended question, a segment of an anti-stigma video and segments of a diagnostic informational video. The final item was a brief demographic questionnaire; refer to Appendix D for the questionnaire.

The four interview segments used in the study two were the same segments used in study one minus the individual with Schizophrenia, undifferentiated type and the individual with Post-Traumatic Stress Disorder. These two disorders were not used in study two because of the mixed symptoms presented in the interviews. The video segments included were Major Depressive Disorder, Schizophrenia, disorganized type, Bipolar Disorder, type II, and Schizophrenia, paranoid type.

An additional questionnaire a slightly modified version of McConahay's Modern Racism Scale (1986) was included in study two. This scale is composed of 10 Likert-item questions that measure participants prejudice level toward race. Responses for the scale are given on a scale of 1 to 4, 1 being *strongly agree* and 4 being *strongly disagree*. Sample items include: "Over the past few years, blacks have gotten more economically than they deserve" and "I would probably feel somewhat self-conscious dating someone outside of my race in public." (McConahay, 1986) Refer to Appendix E for the complete questionnaire.

The questionnaires used in study two to measure attitudes toward mental disorders are the same questionnaires used in study one, Social Distance Scale, Social Attribution Scale, and the Attitudes and Social Willingness Scale. The Attitudes and Social Willingness Scale was shorted for study two to 10 Likert-item questions from 21, refer to Appendix F for the complete questionnaire.

The open-ended question asked participant's to "*Please briefly describe one reason for why you rated this individual in terms of their ability to control their behavior*."

All questionnaires were public domain and not copyrighted.

Professor Shean purchased the anti-stigma video Stigma in Our Work, in Our Lives. In this video patients and mental health professionals speak about mental disorders in an effort to lower negative attitudes toward mental disorders. This video has been reduced to a ten minute segment.

The informational video was composed from the DSM-IV training videos that have been purchased by Professor Shean. The content of the interviews involves discussions of symptoms associated with each of the diagnostic categories used in the study. This video was reduced to a ten minute segment.

Procedure

After signing the consent form, participants were read instructions for the study. Next, they completed the Modern Racism Scale. Participants then watched a five minute segment of a video interview of a person diagnosed with a mental disorder. After viewing the video interview participants completed the three questionnaires that measure attitudes toward mental disorders. After participants completed the questionnaires, they watched another five-minute video interview with a person diagnosed with a different mental disorder and then filled out the same questionnaire. This process was repeated for a total of four times. The order the interview segments were presented are as follows: major depressive disorder, schizophrenia disorganized type, bipolar disorder type II, and schizophrenia paranoid type. Participants then filled out a brief demographic questionnaire. After participants viewed each video interview and filled out all the questionnaires, they watched a ten minute intervention or control video. Participants were divided into two groups. One group watched the diagnostic discussion video and the other group watched an anti-stigma video. This concluded the first part of the study.

Two weeks later participants returned to complete the study. After the instructions were read participants filled out the Modern Racism Scale. Participants then watched the four interview segments and completed the three questionnaires that measure attitudes toward mental disorders. Once participants completed all the questionnaires, they were debriefed and thanked for their participation.

Results

Analysis Strategy

Each disorder and questionnaire was compared using paired-samples t-tests. Two separate independent t-tests were run to compare the total scores of males and females and to

check for a significant difference between groups. A one-way ANOVA test was used to compare total scores and the number of government programs participants believe there should be for mental health patients. Pearson's correlations were used to compare ratings on the Modern Racism Scale to ratings toward individuals with mental disorders. A repeated-measures ANOVA was run to compare time one and time two total scores and groups on stigma questionnaires. Questions three and eight of the Modern Racism Scale, questions one, two, and five of the Social Distance Scale and question two of the Social Attribution Scale were reverse scored.

Main Results

Analysis of the paired t-tests yielded statistically significant findings between ratings of each of the four disorders and each of the scales. Two-tailed tests were used to test for significance in order to minimize the effects of multiple t-tests on the data set. Results support my hypothesis that participants would rate individuals differently based on their disorder and that the ratings would be similar to those in study one. Refer to Table 4 for a complete listing of all the means and standard deviations. Analysis of the independent t-test yielded no statistically significant findings between attitudes toward mental disorders and gender during part one or part two of the study, t (72) = 1.386, $p > .05$, t (72) = 1.341, $p > .05$, respectively. There were no statistically significant findings between participants ratings based on condition (anti-stigma or control) during part one of the study, t (72) = -.796, $p > .05$. The later result supports that there is not a significant difference between participants in each condition.

Analysis of the one-way ANOVA yielded no statistically significant results between participants that thought there should be more, less, or the same number of programs offered by the government for people with mental disorders and their ratings on the scales both for part one and part two of the study, F (2, 71) = 1.543, $p > .05$, F (2, 71) = 1.657, $p > .05$, respectively.

Analysis of Pearson's correlation were not significant for attitudes toward mental disorders and prejudice levels toward race for both part one (r= .094) or part two of the study (r= .133). These results do not support the hypothesis that participants' levels of prejudice for both race and mental disorders would correlate.

Repeated measures ANOVA non-significant for conditions F (1, 72) = .011, $p > .05$ and ratings from time one to time two F (1, 72) = 1.651, $p > .05$. This result does not support the hypothesis that participants in the anti-stigma condition would rate individuals less negatively during part two of the study than in part one compared to those in the informational condition.

Discussion

In the current study attitudes toward mental disorders were measured in order to find variables that contribute to variation in levels of stigma toward mental health consumers.

The largest predictor of attitudes toward mental disorders that emerged was the diagnosis of the mental health consumer. Participants had overall more negative attitudes toward patients with Schizophrenia than any other disorder. This may be due to participants believing that individuals with Schizophrenia are more violent and unpredictable than individuals with other disorder; this reasoning would align with the outcomes of Schnittker's study (2008). Another explanation for these ratings could be because of the evident delusional and somewhat bizarre ideation expressed by the patients in these interviews.

The factor analysis of the Social Distance Scale supports that participant's preferred different types of social distance based on the mental health consumer's diagnosis. Only one factor loaded for Post-Traumatic Stress Disorder, Schizophrenia, disorganized type, and Schizophrenia, paranoid type indicating that participants wanted social distance from these patients in all contexts. The loadings for the other disorders, Major Depressive Disorder, Bipolar

Disorder, type II, and Schizophrenia, undifferentiated type, indicated that participants did not seem to mind having relationships with these patients as long as they were not intimate relationships.

One of the goals of study two was to see if participants that watched an anti-stigma video would rate mental health consumers with less negative attitudes than those that watched the informative video. From time one to time two participants did not change their ratings toward mental health consumers regardless of condition. The clip participants watched was only ten minutes long; if participants watched a longer video they may have rated mental health consumers with less negative attitudes. This indicates that having participants merely passively view an anti-stigma video does not have an impact on stigma. Previous studies indicate that forms of educational interventions like the video only contribute to short term changes in attitude and that a more effective way to make longer lasting attitude changes is to actively engage with mental health consumers (Corrigan, 2005).

The only demographic variable in this study that served as a predictor of attitudes toward mental health consumers was whether or not participants had firsthand experience with mental health consumers. Participants that have firsthand experience with mental health consumers had significantly more positive attitudes toward individuals with mental disorders than those without firsthand experience. This result is congruent with other research (Alexander & Link, 2003).

In this study there was not a significant correlation between level of racial prejudice and level of prejudice toward mental health consumers. Overall, participants' scores on the Modern Racism Scale were aligned with low prejudice. One explanation for not finding a strong correlation could be that it is no longer socially acceptable to be overtly racist, but it is still social acceptable to have negative attitudes toward individuals with mental disorders. Racism is

continually changing. Overt racism used to be socially acceptable but, now forms of covert racism are prevalent. These changes in social acceptance of racism suggest that procedures to measure racism should be modified (McConahay, 1986). In this study racism was measured in an overt fashion, which could explain why a relationship was not found. Another explanation could be that racist attitudes and mental illness stigma are unrelated.

Previous studies have had mixed results on whether or not level of knowledge of mental disorders lowers negative attitudes toward mental health consumers (Corrigan, 1998; Corrigan, Watson, Warpinski, & Gracia, 2004; Wang & Lai, 2008). In this study a relationship between level of knowledge of mental disorders and attitudes toward mental disorders did not emerge. This result may have occurred because all participants were introductory psychology students so variance of knowledge was limited.

Political party affiliation did not serve as a variable that predicts attitudes toward individuals with mental disorders. This result does not agree with previous research (Alexander & Link, 2003). One reason for this disagreement could be the indirect way political party affiliation was measured in this study. Instead of asking directly what political party participants affiliate with they were asked the number of government programs there should be for mental health consumers.

Limitations

A limitation to this study was that there were confounding factors within the case presentations of mental health consumers that could also produce prejudice and cause participants to want to have social distance from them. For example, the patient with Major Depressive Disorder is also obese, which seemed to be on a lot of participants' minds. In the open-ended questions several participants wrote comments similar to these: "she looked stable

and in control although she was obese," and "at least get out of bed a few hours a day." Another confounding factor was that the patient with Post-Traumatic Stress Disorder was arrested for child abuse, which led to this disorder. Ratings on the first two scales are significantly more negative than the rating on the third scale. One explanation for this is that the first two scales ask about the person they just saw on the video and the last scale asks for individuals in general that have Post-Traumatic Stress Disorder, indicating that participants may overall have lower prejudice toward individuals with Post-Traumatic Stress Disorder than what this study indicates. This limitation could have skewed the data and true measurement of attitudes toward mental health consumers.

The way racial prejudice was measured in this study served as a limitation. Racism was measured overtly instead of covertly. Another large limitation about the way racism was measured is that it only measured racism toward blacks and no other race. This limitation seriously impacted the chances of getting a correlation between the types of prejudice.

Another limitation in this study was the anti-stigma video intervention. The video clip was too short and allowed participants to remain passive. Instead of a using a short anti-stigma video clip a more active intervention should have occurred. Interventions like having an active discussion about stigma toward mental health consumers or having a mental health consumer come in and talk about having a disorder and the stigma associated with having a disorder would make participants be more actively involved and more likely to have a change of attitude.

An additional limitation to this study was the limited sample. All participants in this study were introductory psychology students from the College of William and Mary, which is not representative of the general population.

Conclusions

When participants were asked "*Please briefly describe one reason for why you rated this individual in terms of their ability to control their behavior*" participants repeatedly linked ability to control behavior, dangerousness, and accountability as synonymous when answering. Many participants wrote comments similar to these: "she truly believed she was hearing voices, therefore she cannot be held accountable for her behavior" and "she isn't violent or anything, she just seems to lose her desire to do things." Schnittker's study reported that people believe patients with depression have more control over their behavior than patients with Schizophrenia (2008). By combining Schnittker's study and these results it can be deduced that these connections people make between ability to control behavior and dangerousness could account for why Schizophrenic patients tend to be more feared than other patients.

Research needs to be done in order to understand and reduce stigma toward mental health consumers. Future research could consolidate all theories and studies on all areas of stigma not just stigma toward mental health consumers. Some researchers have started to combine theories and studies in all areas of stigma, but there is still a lot of information that could be beneficial that does not get published. A file-drawer database should be created in order to have a central location of studies that did not get published because significant effects were not found. By combining published and unpublished studies researches will be able to more clearly see what interventions work and what interventions do not work to reduce stigma. Along with combining literature about stigma studies should look at more than one stigma at a time and see if a relationship emerges. Another avenue future research should take is concentrating on a method to reduce stigma on a large scale. Previous research indicates that contact with stigmatized individuals is the most effect way of reducing stigma, but this approach cannot easily be used

widespread (Corrigan, 2005). This study supports that stigma toward individuals varies on several factors, such as diagnosis; future research should concentrate not only on analyzing stigma broadly but also analyzing stigma on a micro level.

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Appendix A

Social Distance Scale (Martin, Pescosolido & Tuch, 2000)

1. I would like to move next door to the person I just saw on the video.

2. I would like to make friends with the person I just saw on the video.

3. I would not like to spend an evening socializing with the person I just saw on the video.

4. I would not like start working closely with the person I just saw on the video on the job.

5. I would like to have a group home for people like the person I just saw on the video opened in my neighborhood.

6. I would not like the person I just saw in the video to marry into my family.

Appendix B

Social Attribution Scale (Corrigan, 2000)

1. The person I just saw in the video is not able to control his/her behavior.

2. The person I just saw in the video is responsible for his/her actions.

3. The person I just saw in the video could be dangerous.

4. The person I just saw in the video could be unpredictable.

5. I would feel anxious or very uneasy in the presence of the person I just saw on the video.

Appendix C

Attitudes and Social Willingness Scale (Day, Edgren & Eshleman, 2007)

1. I don't think that it is possible to have a normal relationship with someone with (this condition).
2. I would find it difficult to trust someone with (this condition).
3. People with (this condition) tend to neglect their appearance.
4. I feel anxious and uncomfortable when I'm around someone with (this condition).
5. It is easy for me to recognize the symptoms of (this condition).
6. I probably wouldn't know that someone has (this condition) unless I was told.
7. A close relationship with someone with (this condition) would be like living on an emotional roller coaster.
8. I think that a personal relationship with someone with (this condition) would be too demanding.
9. Once someone develops (this condition), he or she will never be able to fully recover from it.
10. (This condition) prevents people from having normal relationships with others.
11. I tend to feel anxious and nervous when I am around someone with (this condition).
12. When talking with someone with (this condition), I worry that I might say something that will upset him or her.
13. I can tell that someone has (this condition) by the way he or she acts.
14. People with (this condition) do not groom themselves properly.
15. People with (this condition) will remain ill for the rest of their lives.
16. I don't think that I can really relax and be myself when I'm around someone with (this condition).
17. When I am around someone with (this condition) I worry that he or she might harm me physically.
18. I would feel unsure about what to say or do if I were around someone with (this condition).
19. I feel nervous and uneasy when I'm near someone with (this condition).
20. I can tell that someone has (this condition) by the way he or she talks.
21. People with (this condition) need to take better care of their grooming (bathe, clean teeth, use deodorant).

Appendix D

Demographic Questionnaire

Directions: Please answer the following questions by circling your response.

*1. Sex?

Male Female

2. How knowledgeable to you consider yourself in regards to mental disorders?

Very Unknowledgeable Unknowledgeable Knowledgeable Very Knowledgeable

3. Do you have any firsthand experience with mental disorders?

Yes No

*4. Do you think that the government should have more or fewer social programs for people with mental disorders?

Fewer Same More

* Questions one and four were used in study 2.

Appendix E

Modern Racism Scale (McConahay, 1986)

1. Over the past few years, blacks have gotten more economically than they deserve.

2. Over the past few years, the government and news media have shown more respect for blacks than they deserve.

3. It is easy to understand the anger of black people in America.

4. Blacks are getting too demanding in their push for equal rights.

5. Now that Barack Obama is President, affirmative action is no longer needed.

6. Most blacks on welfare could get along without it if they really tried.

7. These days it seems as though government officials pay more attention to requests from black citizens than from white citizens.

8. I consider the present social system to be fundamentally unjust to the black person.

9. A hotel owner ought to have the right to decide for himself whether he is going to rent rooms based on race.

10. I would probably feel somewhat self-conscious dating someone outside of my race in public.

Appendix F

Attitudes and Social Willingness Scale (Day, Edgren & Eshleman, 2007)

1. I don't think that it is possible to have a normal relationship with someone with Schizophrenia.

2. I would find it difficult to trust someone with Schizophrenia.

3. People with Schizophrenia tend to neglect their appearance.

4. It is easy for me to recognize the symptoms of Schizophrenia.

5. A close relationship with someone with Schizophrenia would be like living on an emotional roller coaster.

6. Once someone develops Schizophrenia, he or she will never be able to fully recover from it.

7. I can tell that someone has Schizophrenia by the way he or she acts.

8. People with Schizophrenia do not groom themselves properly.

9. I don't think that I can really relax and be myself when I'm around someone with Schizophrenia.

10. When I am around someone with Schizophrenia I worry that he or she might harm me physically.

Table 1

Means and Standard Deviations for All Measures in Study 1

	SDS		SAS		ASWS		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
MDD	16.83	2.67	14.23	2.26	56.41	6.95	87.47	9.88
BPD	15.68	3.14	12.04	2.03	54.80	7.44	82.52	10.93
PTSD	13.93	3.45	11.81	2.43	55.77	7.79	81.51	12.15
SCZ1	13.20	3.37	10.19	2.18	48.92	7.33	72.32	10.82
SCZ2	13.39	3.60	10.41	2.32	49.00	8.40	72.81	12.45
SCZ3	12.63	3.24	10.61	2.37	48.32	8.05	71.57	11.59

Note. SDS = Social Distance Scale; SAS = Social Attribution Scale; ASWS = Attitudes and Social Willingness Scale; MDD = Major Depressive Disorder; BPD = Bipolar Disorder, type II; PTSD = Post-Traumatic Stress Disorder; SCZ1 = Schizophrenia, undifferentiated type; SCZ2 = Schizophrenia, disorganized type; SCZ3 = Schizophrenia, paranoid type

Highest and lowest prejudice scores possible: SDS (6, 24); SAS (5, 20); ASWS (21, 84); Total (32, 128)

Table 2

Significant t-values for All Scales and Disorders for Study 1

	SDS	SAS	ASWS	Total	SDS	SAS	ASWS	Total
	Major Depressive Disorder (MDD)				Bipolar Disorder (BPD)			
MDD					4.17*	10.37*	*ns*	5.22*
BPD	4.17*	10.37*	*ns*	5.22*				
PTSD	9.96*	10.19*	*ns*	6.66*	5.78*	*ns*	*ns*	*ns*
SCZ1	10.93*	16.01*	11.09*	15.45*	-9.08*	-8.39*	-8.47*	-10.34*
SCZ2	9.62*	13.42*	9.88*	13.65*	7.16*	7.26*	7.74*	8.69*
SCZ3	13.98*	12.00*	10.08*	15.03*	11.01*	5.63*	8.53*	10.25*
	Post Traumatic Stress Disorder (PTSD)				Schizophrenia, undifferentiated type (SCZ1)			
MDD	9.96*	10.19*	*ns*	6.66*	10.93*	16.01*	11.09*	15.45*
BPD	5.78*	*ns*	*ns*	*ns*	-9.08*	-8.39*	-8.47*	-10.34*
PTSD					*ns*	-5.83*	-10.90*	-7.28*
SCZ1	*ns*	-5.83*	-10.90*	-7.28*				
SCZ2	*ns*	-5.14*	-10.06*	-7.36*	*ns*	*ns*	*ns*	*ns*
SCZ3	4.29*	4.50*	12.00*	9.99*	*ns*	*ns*	*ns*	*ns*
	Schizophrenia, disorganized type (SCZ2)				Schizophrenia paranoid type (SCZ3)			
MDD	9.62*	13.42*	9.88*	13.65*	13.98*	12.00*	10.08*	15.03*
BPD	7.16*	7.26*	7.74*	8.69*	11.01*	5.63*	8.53*	10.25*
PTSD	ns	-5.14*	-10.06*	-7.36*	4.29*	4.50*	12.00*	9.99*
SCZ1	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*
SCZ2					*ns*	*ns*	*ns*	*ns*
SCZ3	*ns*	*ns*	*ns*	*ns*				

Note. SDS = Social Distance Scale; SAS = Social Attribution Scale; ASWS = Attitudes and Social Willingness Scale

*$p < .001$

Table 3

Oblimin Rotation Factor Analysis for the Social Distance Scale in Study 1

		% Variance	Item Loading					
Item #			1	2	3	4	5	6
MDD								
	Factor 1	39.28	-	0.62	-	0.86	-	0.83
	Factor 2	17.90	0.63	0.65	0.72	-	0.63	-
BPD								
	Factor 1	50.08	0.83	0.75	0.75	-	0.73	-
	Factor 2	16.82	-	0.63	-	0.90	-	0.72
SCZ1								
	Factor 1	51.56	0.62	0.78	0.73	0.85	-	0.73
	Factor 2	18.57	0.81	0.59	-	-	0.89	-

Note. MDD = Major Depressive Disorder; BPD = Bipolar Disorder, Type II,

SCZ1 = Schizophrenia, undifferentiated type

Post-Traumatic Stress Disorder, Schizophrenia, disorganized type, and Schizophrenia, paranoid type are not reported because they only loaded on one factor.

Eigenvalue $\geq$ 1.00

Table 4

Means and Standard Deviations for All Scales Measuring Attitudes toward Mental Disorders for Study 2

		SDS		SAS		ASWS		Total	
		M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Part 1									
	MDD	17.05	2.68	13.59	1.86	27.28	3.49	57.93	5.84
	BPD	15.49	2.83	11.97	2.31	26.45	3.70	53.91	7.26
	SCZ2	13.53	3.44	11.09	2.07	24.39	3.80	49.00	7.42
	SCZ3	11.77	3.64	10.08	2.48	23.23	4.32	45.08	8.67
Part 2									
	MDD	16.62	2.90	14.31	2.10	27.30	3.88	58.23	6.71
	BPD	15.30	2.90	12.39	2.40	26.53	3.80	54.22	7.66
	SCZ2	13.78	3.53	11.15	2.16	24.23	4.27	49.16	8.44
	SCZ3	12.36	3.51	10.51	2.17	23.80	4.79	46.68	8.53

Note. SDS = Social Distance Scale; SAS = Social Attribution Scale; ASWS = Attitudes and Social Willingness Scale; MDD = Major Depressive Disorder; BPD = Bipolar Disorder, type II; SCZ2 = Schizophrenia, disorganized type; SCZ3 = Schizophrenia, paranoid type

Highest and lowest prejudice scores possible: SDS (6, 24); SAS (5, 20); ASWS (10, 40); Total (21, 84)