

REDUCING THE STIGMA OF MENTAL ILLNESS: VIDEO
INTERVENTION FOR WIDESPREAD USE

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By
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CERTIFICATION OF APPROVAL

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DEDICATION

This thesis is dedicated to my family and friends who have provided me with motivation, encouragement, and endless amounts of support throughout my academic career. I would also like to dedicate this thesis to my thesis chair, Dr. Jessica Lambert, who continuously worked with and supported me throughout this process.

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ABSTRACT

The stigma of mental illness is pervasive and constitutes a formidable barrier to treatment and quality of life for individuals living with mental illness and their families. This study examined the effects of a brief educational video presenting factual information regarding mental illness on participants' attitudes toward mental illness and help-seeking behavior. Contrary to what was hypothesized, the educational video had no significant effect on participants' reported attitudes. These results conflict with past research which has shown that relatively brief educational programs can result in significantly improved attitudes towards mental illness and help-seeking behavior. Potential explanations regarding the contrary results of this study are examined, and limitations, as well as suggestions for future research are discussed.

LITERATURE REVIEW

Research has shown that individuals with mental illness are generally considered by the public to be dangerous and irresponsible; these individuals face more disapproval than individuals with conditions such as Alzheimer's disease, blindness, or physical disability (Mayville & Penn, 1998). The stigma associated with mental illness can have a large impact by affecting an individual's self-perception, social life, work, housing, and healthcare. For example, research has found that individuals with mental illness are at an increased risk to experience homelessness, as well as employment and housing discrimination compared to individuals without mental illness (Parcesepe & Cabassa, 2013). The stigma of mental illness can also serve as a barrier to help-seeking and treatment compliance, as individuals with mental illness may not seek out treatment or drop out prematurely in order to avoid the stigmatizing label of being mentally ill (Corrigan, 2014). This reality continues despite the significant scientific advancements that have been made with evidence-based treatments (Gary, 2005).

Therefore, the difficulties associated with mental illness result not only from symptoms, but also from disadvantages experienced in society. The extent to which individuals with mental illness encounter stigma in their daily lives is a matter of significant importance for their recovery and quality of life (Wahl, 1999). Subsequently, in 1999 the U.S. Department of Health and Human Services reported the stigma of mental illness to be, "the most formidable obstacle to future progress in

the area of mental illness and health” (p. 29). Some research suggests that public attitudes toward individuals with mental illness have become more stigmatizing over the last decades.

Survey research suggests that a representative 1996 population sample in the U.S. was 2.5 times more likely to endorse stigma than a comparable 1950 group (Rüsch et al., 2005). A meta-analysis conducted by Schwahn et al. (2012) found that public attitudes towards individuals with mental illness between 1990 and 2006 remained negative and even worsened regarding some mental illness, including schizophrenia. More recently, however, longitudinal research conducted by Henderson et al. (2016) found that over the course of an anti-stigma campaign started in England in 2008, public attitudes toward individuals with mental illness showed improvement in 2010 and again in 2013-2015, with participants reporting lower levels of stigma than prior years. These results demonstrate a positive change in public attitudes toward individuals with mental illness as a result of an anti-stigma intervention and supports the idea that interventions to combat the stigma of mental illness can be effective and disseminated on a large-scale.

Defining Stigma

When stigma is explicitly defined, many authors quote Erving Goffman (1963) in his classic text, *Stigma: Notes on Management of Spoiled Identity*, in which he defined stigma as an “attribute that is deeply discrediting” and that reduces the individual “from a whole and usual person to a tainted, discounted one” (Goffman, 1963, p. 3). Since Goffman, definitions have varied considerably. For example,

Crocker and colleagues suggested that “stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context” (Crocker et al., 1998, p. 505).

Additionally, Jones and colleagues (1984), introduced an influential definition using Goffman’s (1963) observation that stigma can be understood as a relationship between an “attribute and a stereotype” (p. 4). Their definition describes stigma as a “mark” (i.e., attribute) which links an individual to undesirable characteristics (i.e., stereotypes) (Link & Shapiro, 2001).

The definition of stigma likely varies because the concept has been applied to an array of circumstances, each of which is unique (Link & Phelan, 2001). In this study, stigma will be defined as the co-occurrence of three interrelated components: stereotypes, prejudice, and discrimination. In the first component, individuals are labeled and linked to undesirable characteristics (i.e., negative stereotypes). In the second, individuals experience prejudice as a result of being stereotyped. In the third, prejudice leads stereotyped individuals to experience discrimination (Link & Phelan, 2001). The components of stigma are elaborated below.

Stigma Component 1: Labeling and Stereotyping

Component one of stigma involves the act of labeling and stereotyping a stigmatized individual. The label links the individual to a set of undesirable characteristics that form the stereotype. Therefore, labeling leads to stereotyping, or general beliefs about the characteristics, attributes, and behaviors of individuals who are categorized as a member of a particular social group, or what we think members

of a particular group are like (e.g., “Individuals who are mentally ill are dangerous.”). Members of the general public often learn these labels and stereotypes by the time they reach adulthood, because individuals develop conceptions of mental illness early in life as a part of socialization into our culture (Corrigan & Shapiro, 2010).

Social labels connote a separation of “us” from “them.” In other words, labeled individuals are put into categories that differ from the majority (Corrigan et al., 2015). The linking of labels to undesirable attributes becomes the rationale for believing that negatively labeled individuals are fundamentally different from those who do not share that label (Link & Phelan, 2001). Evidence of separation can be observed in the very language used to describe stigmatized individuals. For example, it is common to call an individual “schizophrenic” rather than describing him or her as having schizophrenia. Yet, this is different for other diseases; an individual has cancer, heart disease, or the flu. The individual afflicted by a physical illness remains one of “us” and has an attribute, while the “schizophrenic” becomes one of “them” and is the label he or she is given (Link & Phelan, 2001).

Viewing individuals with mental illness as different has been linked to prejudice and discrimination, as well as public beliefs regarding an individual with mental illness’ ability to recover and entitlement to personal power over their lives (Corrigan et al., 2015). For example, in a study conducted by Corrigan et al. (2015), participants who viewed individuals with mental illness as different were compared to participants who did not view individuals with mental illness as different. Corrigan et al. (2015) found that participants who viewed individuals with mental illness as

different, were also more likely to agree with stereotypes and less likely to believe individuals with mental illness could recover or should have power over their lives. These attitudes can lead to restricted vocational, housing, and healthcare opportunities for individuals with mental illness, and may stop an individual from seeking mental health treatment in an attempt to avoid being labeled as mentally ill (Corrigan et al., 2015).

Stigma Component 2: Prejudice

Prejudice is a generalized attitude toward members of a social group, or how someone feels about a group (e.g., feeling nervous, scared, or angry around an individual with mental illness). Prejudice denotes thoughts and feelings that members of one group have about individuals in another group which are typically based on stereotypes and unsubstantiated information (Gary, 2005). That is, prejudiced individuals endorse negative stereotypes (e.g., “People with mental illness are violent.”) and have negative emotional reactions as a consequence (e.g., “They all scare me.”). Thus, prejudice is a cognitive and affective response, which serves as an antecedent to discrimination, which has behavioral dimensions (Gary, 2005).

Stigma Component 3: Discrimination

Stereotypes and prejudice alone are not sufficient for stigma. Discrimination, frequently considered the worst consequence of stigma, is a necessary component. Discrimination is a behavioral consequence of stereotypes and prejudice. When individuals withhold opportunities from, or behave aggressively towards members of a stigmatized group, they are engaging in discrimination (Rüsch et al., 2005). It can

be experienced on the individual, as well as structural level. Discrimination on the individual level involves actions such as an employer rejecting a job application, a landlord refusing to rent an apartment, displays of public anger, or physical and verbal abuse. Structural discrimination includes private and public institutions that intentionally or unintentionally restrict opportunities for individuals with mental illness through policies and practices that undermine opportunities (Rüsch et al., 2005).

Examples of structural discrimination include discriminatory legislation or allocation of comparatively fewer financial resources into the mental health system than into the medical system, lack of parity in healthcare coverage (i.e., insurance benefits for mental health problems being less than those provided for general health), and failure to fund mental health research at levels similar to other health conditions (Callard et al., 2012; Rüsch et al., 2005). According to Cummings, Lucas, and Druss (2013), health insurance coverage for mental illness has historically been less than coverage for medical care.

Despite the creation of antidiscrimination protections, such as The Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008, protections for individuals are not uniform across all subgroups with mental illness (Cummings et al., 2013). For example, the MHPAEA contains statutory language that is open to interpretation regarding which groups qualify for protection, allowing insurers to determine which mental health diagnoses are covered by the health insurance plan

(Cummings et al. 2013). Another example of structural discrimination can be found in state legislation that limits the civil rights of individuals with mental illness.

Research that examined state legislation in the 1980s and 1990s found that as many as 20 states restricted voting, jury duty, elective office, parenting, and marriage rights due to mental illness (Corrigan et al., 2014). In 2018, laws in 39 states were found to allow judges to strip voting rights from individuals with mental illness who were deemed “incompetent,” some of those states using language such as “idiots,” or “insane persons” in their statutes (Vasilogambros, 2018). Furthermore, because of historical processes influenced by stigma, treatment facilities for the mentally ill tend to be either isolated in settings away from other people, or confined to some of the most disadvantaged neighborhoods in urban settings in communities that do not have the power to exclude this stigmatized group (Link & Phelan, 2001). Stigma has affected the structure around the individual, resulting in that individual being exposed to a host of untoward circumstances (Link & Phelan, 2001). The consequences of stigma can be severe and undoubtedly contribute to differences in the life opportunities of individuals in stigmatized groups, such as the mentally ill.

Types of Stigma

The stigma associated with mental illness can be broken down and observed from various levels which include, public, self, and family stigma. Each categorization is slightly different, yet these manifestations are fundamentally interconnected, in that public stigma leads to both, self and family stigma. Therefore, the various levels of stigma involve interrelated processes and consequences, which

not only affect the individual with mental illness, but may also impact a variety of people who associate with that individual. Thus far, when discussing stigma, what is actually being referred to is public stigma.

Public Stigma

The components of stereotypes, prejudice, and discrimination form what is known as public stigma. Public stigma occurs when individuals from the general population endorse stereotypes and discriminate against individuals labeled mentally ill (Corrigan et al., 2014). Stigmatized groups are disadvantaged when it comes to a general profile of life opportunities, such as income, education, psychological wellbeing, housing status, medical treatment, and health. Public stigma can result in the loss of jobs, unfair housing, physical violence, verbal abuse, and countless other negative consequences (Corrigan, 1998). Two goals in particular are central to the concerns of most people, including those with mental illness: obtaining competitive employment, and living independently in a safe and comfortable home. Stigmatizing attitudes have a deleterious impact on obtaining good jobs and leasing safe housing (Corrigan et al., 2005). For example, in a large survey study one in three (32%) participants reported that they had been turned down for a job for which they were qualified after their mental health consumer status was revealed (Wahl, 1999).

Public stigma also impacts individuals with mental illness who interact with the criminal justice system. The criminalization of individuals with mental illness occurs, when these individuals are dealt with by the police, courts, and jails, rather than the mental health system. Unfortunately, inadequate funding for mental health

services and “get tough” on crime policies have contributed to the increasing number of individuals with mental illness in jail (Corrigan et al., 2005). The growing intolerance of offenders in general has led to harsher laws and hampered effective treatment planning for mentally ill offenders (Corrigan et al., 2015).

Research has shown that individuals exhibiting symptoms and signs of mental illness are more likely than others to be arrested by police (Teplin, 1984; Dewa et al., 2018). The selective process continues if the person is taken to jail. Individuals with mental illness typically spend more time incarcerated than individuals without mental illness. Treating individuals with mental illness like criminals has implications not only for their life, liberty, and wellbeing, but also for the larger community including the loss of potential contributions by viable citizens (Corrigan et al., 2005). In addition to trouble with the criminal justice system, individuals with mental illness also encounter the effects of stigma in the realm of healthcare.

Research indicates that individuals with mental illness are less likely to benefit from the American healthcare system. Corrigan and colleagues (2005) reported that individuals with mental illness receive fewer medical services than those not labeled mentally ill. For example, a research study examined the likelihood of a range of medical procedures after myocardial infarction in a sample of 113, 653. Compared to the rest of the sample, those individuals with a comorbid mental illness were significantly less likely to undergo percutaneous transluminal coronary angioplasty (PTCA), a less expensive and less traumatic alternative to bypass surgery (Corrigan et al., 2005). Not only does the public stigma of mental illness impact an

individual's provision of healthcare, but it can also have a significant impact on help-seeking for mental health issues.

Although treatments have been developed and tested to successfully reduce the symptoms and disabilities of many mental illnesses, the individuals distressed by these illnesses often do not seek out services. Globally, more than 70% of people with mental illness receive no treatment from healthcare staff (Henderson et al., 2013). Even when individuals do seek mental health treatment, many prematurely terminate (Henderson et al., 2013). Negative perceptions of mental health and treatment which reflect prejudices can emerge and derail interventions (Corrigan et al., 2014). The stigma of mental illness represents a major barrier to individuals who require mental health services but are reluctant or refuse to seek such help because of the potential for discrimination and rejection by others. Public stigma can result in attempts to escape the unfair loss of opportunities that comes with stigmatizing labels by not going to clinics or interacting with mental health providers (Corrigan et al., 2014). Often times, public stigma leads an individual with mental illness to apply the associated stereotypes to themselves, thus developing self-stigma.

Self-Stigma

Self-stigma occurs when a person with mental illness internalizes the corresponding public stigma. A regressive model of self-stigma has four stages: (1) individuals with mental illness are aware of the public stigma; (2) this may lead to agreement with the stigma; (3) self-application; which has a negative impact on self-esteem, (4) resulting in shame (Corrigan et al., 2014). Self-stigma has been found to

lead to a diminished self-efficacy, self-esteem, and quality of life (Livingston & Boyd, 2010). For example, Wahl (1999) found that more than half of respondents reported lowered self-esteem and loss of confidence in themselves as a result of experiencing stigma associated with their mental illness.

Self-stigma not only results in the loss of self-esteem and diminished self-efficacy, but also an increased reticence in social interactions and help-seeking. Individuals with mental illness often question their ability to cope effectively with the daily challenges they face, which leads to a reluctance to actively participate in social activities and leads to a decrease in life opportunities (Holmes & River, 1998). For example, respondents in the Wahl (1999) survey reported that their experiences of stigma made them more likely to avoid social contact, and less likely to apply for a job or educational opportunities (Wahl, 1999).

Corrigan et al. (2014) explained how self-stigma serves as a barrier to help-seeking, as individuals with mental illness often do not seek out care or drop out prematurely in order to avoid stigmatizing labels and shame. Similarly, research conducted by Livingston and Boyd (2010) found that self-stigma was positively correlated to psychiatric symptom severity and negatively correlated with treatment adherence. Therefore, individuals experiencing self-stigma are often less likely to seek out care in an attempt to avoid being labeled as mentally ill, and more likely to experience psychiatric symptoms compared to individuals with mental illness who do not experience self-stigma (Corrigan et al., 2014; Livingston & Boyd, 2010). The negative impact of stigma is not limited to the individual diagnosed with mental

illness, family members of these individuals are also likely to be subjected to stigma and its ill effects.

Family Stigma

Family stigma, also known as courtesy stigma, occurs when prejudice and discrimination are extended to others because they are somehow linked to an individual who is stigmatized, in this case, an individual with mental illness. Two reasons have been hypothesized to explain why the public may extend the stigma of mental illness to friends and families: (1) people who appear together in public seem alike; and (2) if someone decides to associate with a marginal individual, he or she cannot be worth much. Many family members of individuals with mental illness experience significant discrimination which is attributable to a set of common stereotypes: blame and contamination (Corrigan & Miller, 2004).

Blame is a stereotype which the public expresses about families with relatives with a mental illness. Research has demonstrated that the public frequently views family members, especially parents, as responsible for the relative's mental illness (Corrigan & Miller, 2004). Families report that friends, neighbors, and coworkers frequently blame them for their relative's mental illness, or express disapproval because the relative has not recovered (Corrigan et al., 2014). Some family members may internalize this stereotype resulting in self-stigma. They may blame themselves for their relative's illness—believing, for example, that they are genetically flawed or were bad parents—which can lead to shame (Corrigan et al., 2014).

Contamination is another stereotype associated with family stigma.

Contamination involves the public's belief that family members are somehow infected or contaminated by mental illness. This may involve a child being contaminated by his or her parent's mental illness. The public may believe that due to the child's close association with a mentally ill parent, this results in an infectious process; perhaps a bacterium jumping from patient to child causing him or her to develop the same symptoms. The negative consequences of the various manifestations of stigma towards mental illness are vast and can affect just about every aspect of an individual's life, as well as the lives of those around them.

Public stigma, which develops from stereotypes and prejudice, can lead to discrimination, or aggressive behavior and restricted opportunities. Public stigma may also result in self-stigma, or the acceptance and self-application of negative stereotypes, resulting in shame, diminished self-esteem and self-efficacy, a reluctance to engage in social interactions, treatment avoidance, and a decrease in life opportunities. Family stigma may also develop from public stigma and result in discrimination and self-stigma. Due to the widespread influence of public stigma, and because research has shown it to predict the occurrence of both, self- and family-stigma, public stigma is the main focus of this study. It is at the public level that interventions will have the most impact in reducing the stigma associated with mental illness. Due to the severity and breadth of the harmful consequences associated with the public stigma, numerous attempts have been made to reduce or eliminate it. The

three main approaches aimed at changing public stigma towards mental illness, and subsequently self and family stigma, include protest, contact, and education.

Interventions to Reduce Stigma

Protest

Strategies which utilize protest as a means to reduce stigma highlight the injustices of the various forms of stigma and chastise offenders for their stereotypes and discrimination. Corrigan and Shapiro (2010) have defined protest as strategies that involve the public being asked to suppress their prejudice. There is some evidence that suggests that protest can positively influence harmful behaviors (Corrigan & Shapiro, 2010). For example, through protest the National Association on Mental Illness (NAMI) StigmaBusters helped to get ABC to cancel the program “Wonderland,” because the show portrayed individuals with mental illness as dangerous and unpredictable. Although this is an impressive victory, the evidence on protest effects is largely anecdotal. Furthermore, there is evidence that protest might actually have an unintended consequence.

There are two major problems with suppression of prejudice. First, suppression of prejudice is an effortful, resource-demanding process which reduces attentional resources. As a result, people are less likely to learn new information which could disconfirm the stigmatizing stereotype (Rüsch et al., 2005). Secondly, some evidence suggests that protest campaigns that ask the public to suppress their prejudice can result in a “rebound” effect in which prejudices about a group actually get worse (Corrigan & Shapiro, 2010). In one set of studies, MacRae and colleagues

(1994) found that participants directed to suppress their stereotypes about skinheads showed increased stereotype activation, increased stereotype use, and increased distancing from skinheads. Therefore, while protest may be useful in changing behavior, it may have little or a negative impact on public attitudes regarding individuals with mental illness (Corrigan et al., 2005).

Contact

The second strategy for reducing stigma is interpersonal contact with members of the stigmatized group. According to Corrigan and Shapiro, “Members of the general population who meet and interact with people with mental illnesses are likely to show decreased prejudice” (2010, p. 910). Contact has long been considered an effective means of reducing stereotypes. For example, in a recent meta-analysis including data from 38,000 research participants from 79 studies of public stigma change, contact-based methods (i.e., video or in vivo presentations) were found to result in significant positive changes in attitudes towards individuals with mental illness (Michaels et al., 2014). Additionally, Corrigan et al. (2005) found that contact led to improved attitudes towards individuals with mental illness, as well as participant willingness to donate money to a mental health advocacy group.

However, the strength of the effect of change depends on the level of disconfirmation by the stigmatized individual. Contact with stigmatized individuals who do not resemble stereotypes about individuals with mental illness are unlikely to have a significant effect on those stereotypes. For example, as Rüsçh and colleagues (2005) explained, contact with a woman with mental illness who is also highly

attractive and successful may not only fail to reduce stigma, but may even lead to a boomerang effect. That is, the information about this woman may not be used to disconfirm the stereotype about individuals with mental illness, rather the woman will likely be subtyped as unusual. Furthermore, she may even be reclassified as belonging to “us” instead of “them” (Rüsch et al., 2005). In addition to the potential for contact to lead to subtyping and therefore the continuance of stigma, contact-based methods are cumbersome and difficult to achieve on a large-scale. Therefore, although research has found contact to be effective in some circumstances, there are drawbacks to its use.

Education

Educational approaches to stigma challenge inaccurate stereotypes regarding mental illness, replacing them with factual information (Corrigan & Shapiro, 2010). Educational interventions frequently include the message that mental illnesses are treatable disorders, often followed by information regarding service availability in the geographic area (Corrigan et al., 2014). Factual knowledge that challenges the prejudices and stereotypes of mental disorders can be provided in various ways making it feasible for large-scale use. For example, the stereotype that individuals with mental illness are somehow to blame for their illness can be challenged with factual information regarding the neurobiological basis of mental illness. In so doing, an educational approach may be able to decrease the number of people who hold this stereotype and therefore decrease the stigma of mental illness. Educational strategies include public service announcements, books, flyers, movies, videos, web pages,

podcasts, virtual reality, and other audio-visual aids. The multiple benefits of an educational intervention include their low cost, easy production, and broad reach. Given the current capabilities of today's technology, a video presentation, for example, can be produced which highlights key myths and facts regarding mental illness, and encourages help-seeking (Corrigan & Shapiro, 2010).

This video could then be easily circulated over the internet and therefore reach numerous individuals. In addition, an educational strategy, such as a video presentation, is an appealing choice because it can be tailored to target groups such as employers, landlords, legislators, educators, and healthcare providers. All of which hold positions that partly reflect power or social control of individuals with mental illness (Corrigan & Shapiro, 2010). Past research evaluating the effectiveness of educational strategies for reducing the stigma of mental illness has shown that relatively brief education programs can result in significantly improved attitudes (Corrigan, 2004). The United Kingdom's Time to Change initiative is an example of an educational program designed to combat stereotypes and discrimination (Henderson & Thornicroft, 2009).

The Time to Change initiative seeks to promote care and challenge discrimination so that individuals with mental illness have equal opportunities. The national campaign utilizes mass-media advertising and public relations exercises to educate, change attitudes, and reduce discrimination (Henderson & Thornicroft, 2009). The Time to Change campaign's key messages are: (1) mental illnesses are common and individuals with mental illness can live meaningful lives; (2) the stigma

of mental illness and the associated discrimination can affect individuals' lives in a way that many describe as worse than the illness itself; and (3) we can all do something to help individuals with mental illness (Henderson & Thornicroft, 2009). Research found that awareness of Time to Change ranged from 38% to 64% and was associated with increased knowledge of mental illness and less stigmatizing attitudes (Corrigan et al., 2014). Similarly, in a study evaluating the level of discrimination experienced by individuals using mental health services over the course of the Time to Change campaign, Corker et al. (2013) found that individuals reported a decrease in discrimination from 91% of individuals experiencing discrimination in 2008 compared to 88% of individuals experiencing discrimination in 2011. Although these are positive results, some research findings have suggested that the effects of educational interventions can be short-lived (Corker et al., 2013).

Despite this, a large amount of research has shown improvements in attitudes and reduced stigma resulting in reduced discrimination toward the mentally ill as a result of educational interventions (Corrigan & Shapiro, 2010). Although quite a bit of research demonstrating the effectiveness of the various intervention strategies in reducing stigma has been conducted, the research is limited in regards to identifying an intervention that can be easily and successfully utilized on a large-scale (e.g., schools, universities, businesses, and corporations, etc.). To support individuals with mental illness and reduce the associated stigma, successful, wide-ranging anti-stigma interventions which can be easily disseminated are needed. Each strategy discussed has potential drawbacks related to its implementation and/or effectiveness. However,

because educational strategies have been shown to be effective in reducing stigma and are extremely cost-effective as well as easy to produce and disseminate on a large-scale, they appear to be an ideal method for combating the stigma of mental illness.

Stigma Research and Social Desirability Bias

In addition to considering the intervention used, socially desirable responding must also be taken into account when considering the impact of interventions designed to reduce the stigma of mental illness. Henderson and colleagues (2012) have defined social desirability as, “a conscious desire to present oneself in a positive light” (p. 153). More specifically, social desirability refers to respondents’ inclination to admit to socially desirable traits and behaviors, while denying socially undesirable traits or behaviors in terms of prevailing cultural norms (Krumpal, (2013).

A need for social approval and self-presentation concerns are two motivating factors that have been described as influencing the tendency for socially desirable responding (Krumpal, 2013). For example, an individual might underreport endorsement of stigma in order to avoid being seen as bigoted or lacking open-mindedness (Corrigan et al., 2015). Past research has highlighted the importance of considering methods of data collection, as these may influence the degree of responses influenced by social desirability (Henderson et al., 2012; Krumpal, 2013).

Self-report measures, such as questionnaires, are frequently utilized when studying stigma; however, face-to-face, computer-based, and telephone interviewing methods have also been utilized for collecting data (Henderson et al., 2012). In a

study conducted by Henderson et al., (2012) regarding mental health stigma research and social desirability bias, it was concluded that by minimizing contact with the interviewer, participant's felt increased levels of privacy and decreased feelings of shame and embarrassment during interviews. The researchers determined that mental health stigma research is best assessed utilizing online self-report measures, rather than in-person interviews (Henderson et al., 2012).

Statement of Purpose and Hypotheses

The purpose of this study was to determine the extent to which a brief educational video that included present factual information regarding mental illness (i.e., causes, treatment, resources), would successfully reduce participants' reported stigmatizing attitudes towards mental illness and help-seeking behavior. Using the Community Attitudes toward Mental Illness (CAMI) and Self-Stigma of Seeking Help (SSOSH) questionnaires, the current study was designed to measure the experimental group's reported attitudes regarding mental health stigma and self-stigma associated with help-seeking after the presentation of an educational video, and compare these scores to the control groups, which viewed a mental health statistics video (control group 1) and a nature video (control group 2), prior to completing the measures. A second control group was utilized to control for the potential effects of presenting mental health information on participant responding. By including a control group which viewed mental health statistics, as well as control group which viewed nature scenes, the potential influence of presenting information regarding mental illness on participants' scores could be explored.

The first hypothesis of this study was that participants shown the educational video would report less stigmatizing attitudes towards individuals with mental illness when compared to the control groups, as measured by a lower score on the Community Attitudes toward Mental Illness (CAMI) questionnaire. The second hypothesis was that participants shown the educational video would report less self-stigma associated with help-seeking. Thus, it was expected that individuals in the experimental group would have lower scores on the Self-Stigma of Seeking Help (SSOSH) questionnaire when compared to the control groups. Due to the potential effects of social desirability on the accuracy of participant responding, the Marlowe-Crowne-Social Desirability Scale (MC-SDS) was also used to measure the participants' level of responses influenced by social desirability. Participant scores on the MC-SDS were considered as a covariate in this study.

METHOD

Participants

The participants of this study were 18 years of age or older and residents of the U.S. Participants were recruited using Amazon Mechanical Turk (mTurk) and were compensated fifty cents for the completion of the study. Data were collected from 331 participants. Twelve participants were removed from the final sample due their answers to the quality-control question (i.e., “I am answering this questionnaire truthfully”). Participants that reported they were not answering the questionnaires truthfully were removed from the data. Additionally, 48 participant scores were removed from the data due to incomplete questionnaires. Therefore, the total number of participants included in the final study was 271. Of the 271 participants in the current study, a slight majority was male $n = 138$ (50.9%), 30-39 years of age $n = 121$ (44.6%), Caucasian $n = 207$ (76.4%), college degree education $n = 109$ (40.2%), earning 26-50k annually $n = 74$ (27.3%), and have known someone who has experienced mental illness $n = 233$ (86.0%). Additional information regarding participant demographics can be found on Table 1.

Table 1

Demographic Characteristics of Participants (N = 331)

Characteristic	<i>n</i>	%
Gender		
Male	138	50.9
Female	130	48.0
Other	1	0.4
Decline to Answer	2	0.7
Age Group (in years)		
19	2	0.7
20-29	88	32.5
30-39	121	44.6
40-49	28	10.3
50-59	23	8.5
60-69	9	3.3
Ethnicity		
Hispanic	17	6.3
White	207	76.4
African American	14	5.2
Asian or Pacific Islander	30	11.1
Other	5	1.1
Education		
High School	48	17.7
Community College	54	19.9
College Degree	109	40.2
Postgraduate Degree	55	20.3
Ph.D.	5	1.9

Characteristic	<i>n</i>	%
Yearly Income		
0-25k	52	19.2
26-50k	74	27.3
51-75k	69	25.5
76-100k	34	12.5
101-125k	15	5.5
126-150k	13	4.8
151-175k	1	0.4
176-200k	2	0.7
201k or more	8	3.0
Not reported	3	1.1
Have you or anyone you have known experienced mental illness (i.e., depression, anxiety, bi-polar, substance abuse, etc.)?		
Yes	233	86.0
No	28	10.3
Not sure	9	3.3
Decline to Answer	1	0.4

Data Collection

Using Qualtrics, a survey was constructed, and data collected. Qualtrics is an online program which allows for the organization and formatting of questionnaires and the collection of data. Data were analyzed using the data analysis program, Statistical Package for Social Sciences (SPSS).

Materials

Informed Consent Form

Participants were presented with written informed consent forms which provided information about the study, participant rights, including the right to

discontinue participation at any time, and researcher contact information (see Appendix A).

Demographic Questionnaire

A demographic questionnaire to assess age, sex, ethnic/racial group, level of education, socioeconomic background, and level of experience with mental illness was provided to participants (see Appendix B).

Marlowe Crowne-Social Desirability Scale (MC-SDS)

The MC-SDS is a 33-item, true/false survey designed to measure participants' level of responses influenced by social desirability (see Appendix C). Questions 3, 5, 6, 9, 10, 11, 12, 14, 15, 19, 22, 23, 28, 30, and 32 are reverse coded. Scores range from 0-33, with a high score of 33 indicating the highest degree of responses influenced by social desirability. The MC-SDS has been found to have high test-retest reliability ($r = .89$) and internal consistency ($\alpha = .88$) (Crowne & Marlowe, 1960). Accordingly, this scale is the most commonly used tool to assess for responding influenced by social desirability bias (Beretvas et al., 2002). Analyses indicated adequate internal consistency of the MC-SDS in the current study (Cronbach's $\alpha = .83$). A quality-control question was included in the MC-SDS to test for participants' attention and accuracy (i.e., "I am answering this questionnaire truthfully").

Community Attitudes toward Mental Illness (CAMI)

CAMI is a 40-item questionnaire measuring participant attitudes toward mental illness using a 5-point Likert scale (1 = strongly disagree, 3 = not sure, 5 = strongly agree) (see Appendix D). CAMI is a survey tool frequently used in the

assessment of attitudes towards mental illness and has been found to have high internal consistency (alpha = .68 - .88) (Morris et al., 2011). Questions 5, 6, 7, 8, 13, 14, 15, 16, 21, 22, 23, 24, 29, 30, 31, 32, 35, 37, 38, 39, and 40 are reverse coded. The scale measures 4 constructs: authoritarianism, benevolence, social restrictiveness, and community mental health ideology. For the purposes of this study, the four subscales were averaged to provide overall attitudes towards individuals with mental illness. A higher overall score signifies a higher level of stigmatizing attitudes. A quality control question was included in the CAMI to test for participants' attention and accuracy (i.e., "I am answering this questionnaire truthfully").

Self-Stigma of Seeking Help (SSOSH)

SSOSH is a 10-item questionnaire which assesses an individual's self-stigma associated with seeking mental health treatment using a 5-point Likert scale (1 = strongly disagree, 3 = agree & disagree equally, 5 = strongly agree) (see Appendix E) (Vogel et al., 2009). Questions 2, 4, 5, 7, and 9 are reverse coded. A higher overall score indicates a higher level of self-stigma associated with seeking psychological help, which has been found by Vogel and colleagues (2006) to be negatively correlated with less positive attitudes toward seeking psychological help (beta = -.40). SSOSH has been found to have high test-retest reliability ($r = .72$) and internal consistency (alpha = .86 - .90) (Vogel et al., 2009). Analyses indicated adequate internal consistency of the SSOSH in the current study (Cronbach's alpha = .91). A quality control question was included in the SSOSH to test for participants' attention and accuracy (i.e., "I am answering this questionnaire truthfully").

Educational Video

A one minute and fifty-three second educational video presenting factual information regarding mental illness titled, “What is Mental Illness,” created by the National Alliance on Mental Illness (NAMI), was obtained from NAMI Montana’s website. NAMI Montana is the Montana-based chapter of NAMI, an organization providing support for individuals with mental illness and their families. The educational video provides a definition of mental illness, as well as basic information regarding causes and recovery. The video is animated with a musical backdrop and depicts a hand writing out educational material with a marker. The video ends by displaying NAMI Montana’s web address, where viewers may find additional information regarding mental illness, available resources, and support. This video has not been studied independently in changing stigmatizing attitudes towards mental illness or seeking psychological treatment, it was selected due to its short duration and presentation of facts regarding mental illness.

Mental Health Statistics Video

A one minute and forty-nine second video, titled, “Mental Health Statistics in America,” was obtained from YouTube, a video-sharing website. This video presents statistics regarding the prevalence of mental illness within the United States in text form with an orange background and musical backdrop. This video was selected due its short duration and presentation of mental health statistics.

Nature Video

A one minute and fifty-seven second video, titled, “Amazing Nature Scenery,” was obtained from YouTube, a video-sharing website. This video shows natural scenes of beaches, waterfalls, and forests with a musical backdrop. This video was selected due to its short duration and presentation of nature scenes—a topic not directly connected to mental illness.

Debriefing Form

A debriefing form providing information about the study, data collection, researcher contact information, and references was presented to participants at the end of the study (see Appendix F).

Procedure

The study was accessible online through Amazon Mechanical Turk (mTurk), using Qualtrics software. Volunteer participants provided their informed consent by agreeing to the terms set forth in the informed consent form. The participants who did not agree to the study were directed to the final page and thanked for their time. Participants who agreed to the consent form were directed to the demographic questionnaire before completing the Marlowe Crowne-Social Desirability Scale (MC-SDS). Next, participants were randomly assigned to 1 of the 3 groups and the corresponding video was presented—while the experimental group viewed the educational video, control group 1 viewed mental health statistics and control group 2 viewed nature scenes. Following video presentations, participants were asked to complete the Community Attitudes toward Mental Illness (CAMI) questionnaire, and

the Self-Stigma of Seeking Help (SSOSH) questionnaire. A debriefing form including the researchers' contact information was provided to participants once the measures were completed. Participants were paid fifty cents through mTurk as an incentive for completing the study.

Design

This study used a between-subjects design, with an experimental group and 2 control groups. The purpose of control group 1, which viewed the mental health statistics video, was to control for the potential effect of presenting mental health information on participant responding. Measures were scored and entered in SPSS. An Analysis of Covariance (ANCOVA) was conducted in order to compare the mean differences between groups while controlling for the effects of socially desirable responding. Participants' social desirability bias was considered as a covariate. We sought to explore the interaction between an educational video presenting factual information regarding mental illness (i.e., definition, causes, treatment, resources), and reported attitudes regarding mental illness and self-stigma associated with help-seeking. The educational, mental health statistics, and nature videos were the independent variables, while participant scores on the MC-SDS, CAMI, and SSOSH were the dependent variables. An ANCOVA was also completed to explore the mean differences between the control groups, with participants' social desirability bias considered as a covariate.

RESULTS

Summary

This study evaluated the effects of a brief educational video presenting factual information regarding mental illness on participants' reported stigmatizing attitudes towards mental illness and help-seeking behavior. Participants were given three measures, Community Attitudes toward Mental Illness (CAMI) questionnaire, Self-Stigma of Seeking Help (SSOSH) questionnaire, and Marlowe Crowne-Social Desirability Scale (MC-SDS). Table 2 presents means, standard deviations, and ranges for these measures.

Table 2

Dependent Variables of Interest ($N = 271$)

Variable	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
CAMI	3.08	.31	.00	3.90
SSOSH	2.29	.88	.00	5.00
MC-SDS	14.46	7.16	.00	32.00

Note: CAMI = Community Attitudes toward Mental Illness; SSOSH = Self-Stigma of Seeking Help; MC-SDS = Marlowe-Crowne Social Desirability Scale

Results

It was hypothesized that participants shown the educational video would report less stigmatizing attitudes toward individuals with mental illness, after adjusting for level of social desirability. That is, the experimental group would have lower Community Attitudes toward Mental Illness (CAMI) scores when compared to

control groups, after adjusting for level of social desirability. To test this hypothesis, an Analysis of Covariance (ANCOVA) was completed to compare the experimental group's CAMI scores to the control groups' CAMI scores with participants' social desirability bias considered as a covariate (Table 3).

Contrary to hypothesis 1, after adjusting for level of social desirability, the experimental group ($M = 3.10$, $SD = .15$) did not report less stigmatizing attitudes towards individuals with mental illness on the CAMI when compared to the control groups: mental health statistics video ($M = 3.12$, $SD = .16$) and nature video ($M = 3.08$, $SD = .17$). This result suggests that the group participants were assigned to did not influence their CAMI score.

Table 3

Analysis of Covariance of the Experimental Group compared to the Control Groups on the Community Attitudes Toward Mental Illness questionnaire with Participants Social Desirability Bias Considered as a Covariate (N = 268)

<i>Tests of Between-Subjects Effects After Adjusting for Level of Social Desirability</i>					
<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Corrected Model Intercept	.18	5	.04	.59	.704
Group	.00	1	.00	.06	.803
Social Desirability	.09	2	.04	.70	.497
Group * Social Desirability	.04	2	.02	.36	.697
Error	16.25	262	.06		
Total	2570.26	268			

According to the results, most participants $n = 75$ (27.68%) placed within the 1st Quartile (25th percentile) with CAMI scores ranging from 0 to 3.00 (Table 4). That is, most participants reported fairly low levels of mental health stigma.

Table 4

Quartiles/Scores for CAMI (N = 271)

	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
Scale	(0-3.00)	(3.01-3.10)	(3.11-3.20)	(3.21-3.90)
CAMI $n =$	75	74	68	54

Note: CAMI = Community Attitudes toward Mental Illness

It was also hypothesized that participants shown the educational video would report more willingness to seek mental health treatment. Thus, it was expected that individuals in the experimental group would have lower scores on the Self-Stigma of Seeking Help (SSOSH) questionnaire when compared to the control groups. This hypothesis was also tested using an Analysis of Covariance (ANCOVA) to compare the experimental group's SSOSH scores to the control groups' SSOSH scores with participants' social desirability bias considered as a covariate (Table 5).

After adjusting for level of social desirability, the experimental group ($M = 2.36$, $SD = .96$) did not report less self-stigma associated with help-seeking on the SSOSH when compared to the control groups: mental health statistics video ($M = 2.26$, $SD = .87$) and nature video ($M = 2.27$, $SD = .81$). This result suggests that, after

adjusting for level of social desirability, the group participants were assigned to did not influence their SSOSH score.

Table 5

Analysis of Covariance of the Experimental Group compared to the Control Groups on the Self-Stigma of Seeking Help questionnaire with Participants Social Desirability Bias Considered as a Covariate (N = 268)

Tests of Between-Subjects Effects After Adjusting for Level of Social Desirability

<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Corrected Model Intercept	3.47	5	0.69	0.90	.479
Group	0.34	1	0.34	0.44	.509
Social Desirability	2.5	2	1.25	1.63	.198
Group * Social Desirability	0.08	2	0.04	0.05	.948
Error	201.34	262	0.77		
Total	1607.39	268			
Corrected Total	204.81	267			

As shown in Table 6, most participants $n = 72$ (26.57%) placed within the 2nd

Quartile (25th percentile or Median) with SSOSH scores ranging from 1.61 to 2.20.

However, the data suggest an even spread of participants across quartiles.

Table 6

Quartiles/Scores for SSOSH (N = 271)

Scale	<i>Q1</i> (0- 1.60)	<i>Q2</i> (1.61- 2.20)	<i>Q3</i> (2.21- 2.70)	<i>Q4</i> (2.71- 5.00)
SSOSH <i>n</i> =	69	72	63	67

Note: SSOSH = Self-Stigma of Seeking Help

This study also explored whether there was a statistically significant difference between control group 1 (mental health statistics video) and control group 2 (nature video) scores on the CAMI and SSOSH. This was done in order to determine if presenting mental health information affected participant responding. Therefore, by including a control group that viewed mental health statistics, as well as a control group that viewed nature scenes, the potential influence of presenting information regarding mental illness on participants' scores could be investigated.

To explore whether there was a statistically significant difference between control group 1 and control group 2 scores on the CAMI, an Analysis of Covariance (ANCOVA) was completed to compare control group 1 and control group 2 scores on the CAMI with participants' social desirability bias considered as a covariate (Table 7). After adjusting for level of social desirability, there was not a statistically significant effect between the participants shown the mental health statistics video ($M = 3.05$, $SD = .36$) compared to those shown the nature video ($M = 3.08$, $SD = .37$) on

the CAMI. This result suggests that, after adjusting for level of social desirability, the control group participants were assigned to did not influence their CAMI score.

Table 7

Analysis of Covariance of the Two Control Groups on the Community Attitudes Toward Mental Illness questionnaire with Participants Social Desirability Bias Considered as a Covariate (N = 268)

Tests of Between-Subjects Effects After Adjusting for Level of Social Desirability

<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Corrected Model Intercept	.47	5	.09	1.18	.321
MH Statistics Video	.09	1	.09	1.10	.295
Social Desirability	.12	2	.06	.77	.464
MH Statistics Video * Social Desirability	.13	2	.07	.84	.434
Error	14.01	176	.08		
Total	1743.41	182			
Corrected Total	14.48	181			

To explore whether there was a statistically significant difference between control group 1 and control group 2 scores on the SSOSH, an Analysis of Covariance (ANCOVA) was completed to compare control group 1 and control group 2 scores on the SSOSH with participants' social desirability bias considered as a covariate (Table 8). After adjusting for level of social desirability, there was not a statistically significant effect between the participants shown the mental health statistics video ($M = 2.26$, $SD = .87$) compared to those shown the nature video ($M = 2.27$, $SD = .81$) on

the SSOSH. This result suggests that, after adjusting for level of social desirability, the control group participants were assigned to did not influence their SSOSH score.

Table 8

Analysis of Covariance of the Two Control Groups on the Self-Stigma of Seeking Help questionnaire with Participants Social Desirability Bias Considered as a Covariate

Tests of Between-Subjects Effects After Adjusting for Level of Social Desirability

<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Corrected Model Intercept	3.64	5	.73	1.03	.401
MH Statistics Video	.04	1	.04	.06	.808
Social Desirability	1.97	2	.99	1.40	.250
MH Statistics Video * Social Desirability	1.50	2	.75	1.06	.349
Error	124.25	176	.71		
Total	1058.74	182			
Corrected Total	127.89	181			

DISCUSSION

The purpose of this study was to determine the extent to which a brief educational video, presenting factual information regarding mental illness, would successfully reduce participants' reported stigmatizing attitudes towards mental illness and help-seeking behavior. The results of the current study suggest that a brief educational video presenting information regarding causes of mental illness, treatment, and mental health resources is not sufficient in reducing stigmatizing attitudes towards mental illness and help-seeking behavior.

Past research evaluating the effectiveness of educational strategies for reducing the stigma of mental illness and help-seeking behavior have shown that relatively brief education programs can result in significantly improved attitudes (Corrigan, 2004). Sakellari, Leino-Kilpi, and Kalokerinou-Anagnostopoulou (2011) reviewed twelve studies which utilized various educational approaches for reducing the stigma of mental illness and found an overall positive effect on attitudes toward mental illness and an increase in knowledge of mental illness. Stuart (2006) conducted a study utilizing a video-based intervention involving 330 participants between the ages of 13-18 in Canada. The results showed an increase in knowledge regarding mental illness, improved behavioral intentions, and a decrease in desire for social distancing (Stuart, 2006).

Similarly, Watson et al. (2004) evaluated the effectiveness of a video-based intervention for reducing the stigma of mental illness across 16 states utilizing 1,566

participants. The results of the study showed an increase in knowledge regarding mental illness and a decrease in negative attitude scores (Watson et al., 2004). Additionally, Sharp et al. (2006) conducted a study examining the effect of an educational approach on help-seeking behavior. The researchers found that an educational lecture providing detailed information regarding available mental health services positively affected the participants' attitudes towards help-seeking for mental health issues (Sharp et al., 2006). Contrary to past research, the current study suggests that a brief educational approach is not effective for positively changing attitudes towards mental illness and help-seeking behavior.

The non-significant findings in this study may be due to several factors. First, the current study utilized a web-based approach providing videos and questionnaires online, whereas the research studies discussed previously were conducted in-person. This difference may help to account for the inconsistent results, as participants' attention when completing the current study cannot be determined. For example, participants may have completed the study in a setting with distractions, limiting their attention to the video and questionnaires. It is also possible that participants did not watch the video or read the questionnaire items completely, leading to unreliable results.

Additionally, the quality of the video may be responsible for the contradictory results, as participants may have experienced difficulty streaming the video due to the strength of their internet connection or condition of their electronic device. Video presentations could have been erratic, choppy, or distorted resulting in difficulty

comprehending the material. Moreover, the educational video used in this study can be described as having a neurobiological focus, explaining the neurobiological causes and treatments of mental health disorders. This differs slightly from the focus of the interventions used in the studies previously discussed. For example, Stuart (2006) employed a video-based anti-stigma intervention that focused not only on signs, symptoms, and causes of mental illness, but also on myths and mental health stigma. Therefore, the video-based intervention used by Stuart (2006) discussed and explained the stigma attached to mental illness, which may have been an important feature necessary to reduce stigmatizing attitudes.

Furthermore, Watson et al. (2004), utilized an anti-stigma video-based intervention which described the biological, psychological, and social aspects of mental illness—much broader than the video used in the current study. This comprehensive educational approach could have resulted in a better overall understanding of mental illness and the consequences experienced by individuals with mental illness. Therefore, the emphasis on the biopsychosocial aspects of mental illness may have resulted in a larger decrease in stigmatizing attitudes due to its promotion of positive and nondiscriminatory attitudes towards individuals with mental illness. In addition to the differences found in the focus of anti-stigma video-based interventions, the sample used in the current study may also help to explain the non-significant results.

It is possible that the individuals who have accounts on mTurk and who chose to participate in the current study may have had low levels of stigma prior to viewing

the video. Of the 271 participants in this study, most were 30-39 years of age $n = 121$ (44.6%), with 211 participants (77.8%) 39 years of age or younger. This may help to account for the lack of a significant difference between groups, as research has shown age to be an important factor which can influence stigmatizing attitudes. For example, Wahl et al., (2012) report that despite the fact that young peoples' mental health knowledge can be inconsistent, attitudes towards mental illness are generally positive. Similarly, research conducted by the Time to Change initiative reports that young people are typically less fearful of individuals with mental illness compared to older adults (Bradbury, 2020).

This may be due to the fact the young people live in a society where mental illness and mental health stigma have been discussed in the media and in schools for much of their lives (Sheehan, 2018). Research conducted in 2018 found that 77% of individuals age 16-24 use social media, compared to 36% of individuals age 45-54 (Sheehan, 2018). Social media platforms are commonly utilized by anti-stigma organizations, such as the Time to Change initiative, to increase awareness and education, as well as challenge stigma. Younger individuals generally spend more time on social media and are therefore exposed to anti-stigma information more frequently than are older adults. Subsequently, it is possible that the large proportion of participants in this study who were 39 years of age or younger (77.8%) may have maintained lower levels of mental health stigma prior to completing the study, and may help to account for the non-significant findings. In addition to age, the level of

education of participants in the current study must also be considered, as level of education has also been found to influence stigmatizing attitudes.

Historically, the formal education system has provided an important method for challenging and changing social attitudes (Hampson et al., 2018). Past research evaluating the effect of education level on stigmatizing attitudes found a significant inverse relationship between participants' level of education and mental health stigma in a community-based cross-sectional study (Girma et al., 2013). More specifically, Girma et al. (2013), found that a higher education level was significantly associated with a lower level of stigma. Of the 271 participants in the current study, most had a college degree education, $n = 109$ (40.2%), with 169 participants (62.4%) having a college degree education or higher (Postgraduate degree $n = 20.3%$, Ph.D. $n = 1.9%$). Thus, the high level of education among participants in the current study could help to account for the non-significant findings, as individuals with higher education levels are typically found to hold less stigmatizing attitudes. Another influencing factor that may help to explain the contrary results of the current study involves participants' level of experience with mental illness.

As previously mentioned, contact with an individual with mental illness has been found to be an effective method for changing stigmatizing attitudes. Although contact-based intervention methods can be cumbersome and difficult to achieve on a large-scale, past research has demonstrated that participants in contact-based anti-stigma interventions show significant improvements in their attitudes toward individuals with mental illness (Corrigan & Shapiro, 2010). Of the 271 participants in

the current study, most had known someone who has experienced mental illness $n = 233$ (86.0%). The large percentage of participants in the current study who had previous contact with individuals with mental illness may have resulted in low levels of stigma prior to completing the study, and therefore help to account for the non-significant findings. There are also important considerations, as well as potential limitations to the current study which may help to explain the conflicting results.

Limitations

The web-based approach employed in the current study is a central feature which necessitates further consideration. Web-based methods result in an inability to determine participants' attention to the study and the reliability of the results. However, despite the potential drawbacks, web-based methods which minimize in-person interaction, have been found to be the most effective data collection method when measuring sensitive topics, such as stigma (Krumpal, 2013). As previously discussed, research conducted by Henderson et al. (2012) found that by minimizing contact with the interviewer, participants felt increased levels of privacy and decreased feelings of shame and embarrassment—leading the researchers to determine that mental health stigma research is best assessed utilizing online self-report measures, rather than in-person interviews. Therefore, although there are limitations to using a web-based self-report approach to data collection, there are also benefits. This limitation was also addressed in the current study by the addition of a quality-control question to assess for participants' attention.

The potential for sample bias is another important consideration when utilizing online data collection tools. For example, the participants who chose to complete the study are those individuals who have accounts with mTurk and may not be representative of the entire U.S. population, severely limiting the generalizability of the study results. Of the 271 participants in this study, most were 30-39 years of age $n = 121$ (44.6%), college degree education $n = 109$ (40.2%), and Caucasian $n = 207$ (76.4%). Research conducted in 2018 found that mTurk workers, while being a more diverse sample than the commonly used student samples, are still different than the larger U.S. population (Sheehan, 2018).

For example, roughly 88% of the mTurk workforce is under 50 years of age, compared to 66% of U.S. working adults. Therefore, the mTurk workforce is younger than the U.S. population as a whole (Sheehan, 2018). Additionally, mTurk workers are also somewhat better educated, with 51% of the mTurk workforce having college degrees compared to 36% of working adults in the U.S. (Sheehan, 2018). Furthermore, about three-fourths of mTurk workers in the U.S. are Caucasian, compared to about two-thirds of the U.S. population (Sheehan, 2018). These findings are consistent with the demographics of the sample used in the current study, and therefore demonstrate the sample bias present in the current study. Despite this, however, mTurk workers represent a more diverse sample than do student samples, and data collected on mTurk has been found to be just as valid as data collected via alternative methods (Sheehan, 2018). Consequently, although the mTurk workforce

may not be totally representative of the U.S. population, they are more representative than alternative samples available to researchers and yield valid results.

Another important consideration of the current study involves the use and application of self-report tools. Self-report tools can be highly effective for allowing participants to share their experiences, but they also have limitations. For example, participants may have not answered questionnaire items honestly, selecting more socially acceptable answers rather than answering truthfully. To address the issue of socially desirable responding, participants' scores on the MC-SDS were included in all analyses. Additionally, all participants received the study measures in the same order (i.e., demographics, MC-SDS, CAMI, SSOSH). Without counter-balancing the study measures, it is possible that participants' exposure to the MC-SDS measure influenced their responses on the CAMI and SSOSH. For example, participants may have concluded that the focus of the current study was a socially sensitive topic, and therefore adjusted their responses to be more socially acceptable. The current study attempted to address these limitations by incorporating participants' MC-SDS scores as a covariate in all analyses. However, it is difficult to eliminate any potential "priming" influence of the MC-SDS on the CAMI and SSOSH.

Another potential limitation of the present study involves the focus of the educational video. The educational video presents information regarding mental illness from a neurobiological perspective, which may have had an unintended consequence. Education programs which present mental illnesses as brain disorders are intended to challenge stigmatizing beliefs regarding individuals with mental

illness being responsible or to blame for their illnesses (Corrigan & Shapiro, 2010). These programs typically attempt to counter beliefs regarding choice and culpability with findings from medical science regarding the cause of mental illnesses and have been shown to result in decreased stigma related to blame and responsibility (Corrigan & Shapiro, 2010). However, research also shows that at times, educational approaches to reducing the stigma of mental illness with a neurobiological focus have resulted in beliefs that individuals are less responsive to treatment, and unable to overcome their disabilities because the illness is “hardwired.”

Rusch, Angermeyer, and Corrigan explained that a neurobiological focus which identifies a genetic cause for mental illness could lead the public to see individuals with mental illness as “almost a different species,” and therefore increase the separation between ‘us’ and ‘them’ (2005, p. 535). Past research has also found that describing mental illness in medical rather than psychosocial terms can lead to harsher behavior towards individuals with mental illness (Rusch et al., 2005). It is unclear whether the participants in the current study formulated such beliefs regarding individuals with mental illness as a result of the neurobiological focus of the educational video. Although, past research demonstrates that the educational video utilized in the current study could be a potential limitation, there is also research demonstrating the effectiveness of using a neurobiological explanation of mental illness for reducing stigmatizing attitudes.

Furthermore, the educational video utilized in the current study had not been tested as a single intervention for reducing the stigma of mental illness. The

educational video, “What is Mental Illness,” presented by NAMI Montana was developed to increase knowledge regarding mental illness and provide information regarding available mental health services. This study assumed the video could be utilized independently as an intervention to reduce the stigma of mental illness. However, the video was not successful in influencing participants’ reported attitudes towards mental illness and help-seeking behavior. This suggests that the educational video used in this study is not sufficient in affecting attitudinal change and provides an important area for future research. Future research examining the effectiveness of a brief educational video for reducing the stigma of mental illness and help-seeking behavior can continue to improve on the limitations of current study.

Future Research

This study aimed to further the research regarding the use of a brief educational video to reduce stigmatizing attitudes towards mental illness and help-seeking behavior. Although the intervention did not prove to be successful in confirming the hypotheses, conclusions were made as a result. In this case, a brief educational video presenting factual information regarding mental illness was not sufficient in influencing attitudes toward mental illness and help-seeking behavior.

Future research should continue to explore the effects of video-based interventions which are cost-effective and easily disseminated on a large-scale to combat the stigma of mental illness. Studies which compare the effects of various educational approaches to explain mental illness, such as neurobiological, psychosocial, and biopsychosocial focused educational interventions, will assist in

developing the most effective anti-stigma intervention without the potential for unintended consequences. For example, an increase in beliefs that individuals are less responsive to treatment, and unable to overcome their disabilities due to the biological basis of mental illness. Additionally, future research should explore the effects of video length on stigmatizing attitudes to determine the amount of intervention needed to affect attitudinal change. For example, it may be that the video used in the current study was not a sufficient length to affect a change in stigmatizing attitudes.

Furthermore, research examining interventions tailored to target groups such as landlords, legislatures, educators, and healthcare providers who hold positions that reflect power or social control of individuals with mental illness will be important to successfully reduce the public stigma of mental illness and the discrimination experienced by individuals with mental illness. Decreases in public stigma will also theoretically lead to decreases in self-stigma, or internalized public stigma, and result in an increase in help-seeking behavior and treatment compliance—leading to recovery and increased quality of life.

Conclusion

The stigma of mental illness can have an enormous impact on an individual's life by affecting self-perception, social life, work, housing, healthcare, help-seeking for mental health issues, and treatment compliance. The stigma of mental illness has affected the structure around the individual, resulting in individuals with mental illness being exposed to a host of untoward circumstances. An effective anti-stigma

intervention that is cost-effective, easy to produce, and easily distributed on a broad scale is greatly needed to combat the stigma of mental illness and reduce or eliminate prejudice and the discrimination experienced by individuals with mental illness. The results of the current study suggest that an intervention utilizing a brief educational video to reduce reported stigmatizing attitudes towards mental illness and help-seeking behavior is not sufficient. These results and the limitations of the current study highlight the importance of identifying valid and reliable research methods and tools, as well as further investigating the effectiveness of video-based interventions to combat the stigma of mental illness which can be easily produced and distributed on a large-scale.

REFERENCES

REFERENCES

- Ayala-Lopez, R. (2017). *Effects of video interventions on perceptions of mental health stigma in Latino college students* (Mater's thesis, California State University Stanislaus, Turlock, California). Retrieved from <http://scholarworks.csustan.edu/handle/011235813/1169>
- Beretvas, S. N., Meyers, J. L., & Leite, W. L. (2002). A reliability generalization study of the Marlowe Crowne Social Desirability Scale. *Educational and Psychological Measurement, 62*(4), 570-589.
- Bradbury, A. (2020). Mental health stigma: The impact of age and gender on attitudes. *Community Mental Health Journal*.
<https://doi-org.libproxy.csustan.edu/10.1007/s10597-020-00559-x>
- Callard, F., Sartorius, N., Arboleda-Florez, J., Bartlett, P., Helmchen, H., Stuart, H., Torborda, J., & Thornicroft, G. (2012). *Mental Illness, Discrimination and the Law: Fighting for Social Justice*. John Wiley & Sons Ltd, Hoboken NJ, USA.
- Corker, E., Hamilton, S., Henderson, C, Weeks, C., Pinfold, V., Rose, D., Williams, P., Flach, C., Gill, V., Lewis-Holmes, E., & Thornicroft, G. (2013). Experiences of discrimination among people using mental health services in England 2008-2011. *The British Journal of Psychiatry, 202*, 58-63.
- Corrigan, P.W., Bink, A. B., Fokuo, J. K., & Schmidt, A. (2015). The public stigma of mental illness means a difference between you are me. *Psychiatry*

Research, 226, 186-191.

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, 15(2), 37-70.

Corrigan, P. W. (2014). *The Stigma of Disease and Disability: Understanding Causes and Overcoming Injustices*. American Psychological Association, Washington DC, USA.

Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rüscher, N. (2012). Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatric Services*, 63(10), 963–973.

Corrigan, P. W., & Shapiro, J. R. (2010). Measuring the impact of programs that challenge the public stigma of mental illness. *Clinical Psychology Review*, 30, 907-922.

Corrigan, P. W., Kerr, A., & Knudsen, L. (2005). The stigma of mental illness: Explanatory models and methods for change. *Applied and Preventative Psychology*, 11, 179-190.

Corrigan, P. W., & Miller, F. E. (2004). Shame, blame, and contamination: A review of the impact of mental illness stigma on family members. *Journal of Mental Health*, 13(6), 537-548.

Corrigan, P. W. (1998). The impact of stigma on severe mental illness. *Cognitive and Behavioral Practice*, 5, 201-222.

Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. T. Gilbert (Series

Ed.) & S.T Fiske (Vol. Ed.), *The handbook of Social Psychology* (2, pp. 504-553). Boston, MA: McGraw-Hill.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Counseling Psychology*, 24(4), 349-354.

Cummings, J. R., Lucas, S.M., & Druss, B.G. (2013). Addressing public stigma and disparities among persons with mental illness: The role of federal policy. *American Journal of Public Health*, 103(5), 781-785.

Dewa, C. S., Loong, D., Trujillo, A., & Bonato, S. (2018). Evidence for the effectiveness of police based pre-booking diversion programs in decriminalizing mental illness: A systematic literature review. *PloS*, 13(6).

Farina, A., & Felner, R. D. (1973). Employment interviewer reactions to former mental patients. *Journal of Abnormal Psychology*, 82(2), 268-272.

Funny Videos [Catherine Linville]. (2016, April 14). *Amazing nature scenery* [Video]. YouTube. <https://youtu.be/mcTuirLIPyQ>

Gary, F. A. (2005). Stigma: Barrier to mental health care among ethnic minorities. *Issues in Mental Health Nursing*, 26, 979-999.

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice Hall.

Healthery [Catherine Linville]. (2018, Oct. 12). *Mental health statistics in America* [Video]. YouTube. https://www.youtube.com/watch?v=aCyd_3zqkhY

Henderson, C., Robinson, E., Evans-Lacko, S., Corker, E., Rebello-Mesa, I., Rose, D., & Thornicroft, G. (2016). Public knowledge, attitudes, social distance and

reported contact regarding people with mental illness 2009-2015. *Acta Psychiatrica Scandinavica*, 134(446), 23-33.

Henderson, C., Evans-Lacko, S., & Thornicroft, G. (2013). Mental illness stigma, help seeking, and public health programs. *American Journal of Public Health*, 103(5), 777-780.

Henderson, C., Evans-Lacko, S., Flach, C., & Thornicroft, G. (2013). Responses to mental health stigma questions: The importance of social desirability and data collection method. *The Canadian Journal of Psychiatry*, 57(3), 152-160.

Henderson, C., & Thornicroft, G. (2009). Stigma and discrimination in mental illness: Time to change. *The Lancet*, 373(9679), 1928-1930.

Holmes, E. P., & River, L. P. (1998). Individual strategies for coping with the stigma of severe mental illness. *Cognitive and Behavioral Practice*, 5, 231-239.

Jones, E., Farina, A., Hastorf, A., Markus, H., Miller, D. T., & Scott, R. (1984). *Social Stigma: The Psychology of Marked Relationships*. New York: Freeman.

Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality and Quantity*, 47(4), 2025-2047.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27, 336-385.

MacRae, C., Bondenhausen, G. V., Milne, A. B., & Jetten, J. (1994). Out of mind but back in sight: Stereotypes of the rebound. *Journal of Personality and Social Psychology*, 67, 808-817.

- Mayville, E., & Penn, D. L. (1998). Changing societal attitudes towards persons with mental illness. *Cognitive and Behavioral Practice, 5*, 241-253.
- Michaels, P. J., Corrigan, P. W., Buchholz, B., Brown, J., Arthur, T., Netter, C., & MacDonald-Wilson, K. L. (2014). Changing stigma through a consumer based stigma reduction program. *Community Mental Health Journal, 50*, 395-401.
- NAMI Montana [Catherine Linville]. (2013, April 25). *What is mental illness?* [Video]. YouTube. <https://youtu.be/YeFl3l74QZA>
- Parcesepe, A. M., & Cadassa, L. J., (2013). Public stigma of mental illness in the United States: A systematic literature review. *Administration and Policy in Mental Health, 40*, 384-399.
- Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry, 20*, 529-539.
- Sakellari, E., Leino-Kilpi, H., & Kalokerinou-Anagnostopoulou, A. (2011). Educational interventions in secondary education aiming to affect pupils' attitudes towards mental illness: A review of the literature. *Journal of Psychiatric and Mental Health Nursing, 18*, 166-176.
- Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P. W., Grabe, H. J., Carta, M. G., & Angermeyer, M. C. (2012). Evolution of public attitudes about mental illness: A systematic review and meta-analysis. *Acta Psychiatrica Scandinavica, 125*, 440-452.

- Sharp, W., Hargrove, D. S., Johnson, L., & Deal, W. P. (2006). Mental health education: An evaluation of a classroom based strategy to modify help seeking for mental health problems. *Journal of College Student Development*, 47, 419-438.
- Stuart, H. (2006). Reaching out to high school youth: The effectiveness of a video-based antistigma program. *Canadian Journal of Psychiatry*, 51, 647-653.
- Taylor, M. S., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7, 225-240.
- Teplin, L. A. (1984). Criminalizing mental disorder: The comparative arrest rate of the mentally ill. *American Psychologist*, 39, 794–803.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report to the Surgeon General*. Retrieved October 28, 2014 from:
<http://www.surgeongeneral.gov/library/mentalhealth/home.html>
- Valentin, J. N. (2016). *Stigma and hiring individuals with intellectual disability* (Master's thesis, California State University Stanislaus, Turlock, California). Retrieved from <http://scholarworks.csustan.edu/handle/011235813/1034>
- Vasilogambros, M. (2018, March 21). *Thousands lose right to vote under 'incompetence' laws*. Stateline. Retrieved October 23, 2019, from <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2018/03/21/thousands-lose-right-to-vote-under-incompetence-laws>
- Vogel, D. L., Wade, N. G., & Ascherman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and

validity of a new stigma scale with college students. *Journal of Counseling Psychology*, 56(2), 301-308.

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, 53, 325-337.

Wahl, O., Susin, J., Lax, A., Kaplan, L., & Zatina, D. (2012). Knowledge and attitudes about mental illness: A survey of middle school students. *Psychiatric Services*, 63(7), 649-654.

Wahl, O. F. (1999). Mental health consumers' experience of stigma. *Schizophrenia Bulletin*, 25(3), 467-478.

Watson, A. C., Otey, E., Westbrook, A. L., et al., (2004). Changing middle schoolers' attitudes about mental illness through education. *Schizophrenia Bulletin*, 30, 563-572.

APPENDICES

APPENDIX A

CONSENT FORM

Reducing the Stigma of Mental Illness: Video Intervention for Widespread Use

1. **Summary:** This research study will examine perceptions towards mental illness, and attitudes toward help-seeking. If you agree to participate, you will be asked to answer survey questions regarding your attitudes about mental illness and help-seeking.
2. **Your right to withdraw/discontinue:** You are free to discontinue your participation at any time without penalty. You may also skip any survey questions that make you feel uncomfortable. Even if you withdraw from the study, you will receive any entitlements that have been promised to you in exchange for your participation.
3. **Benefits:** Participation in this research study does not guarantee any benefits to you. You will be paid the monetary benefit of fifty cents at the end. Additional possible benefits include the fact that you may learn something about how research studies are conducted, and you may learn something about this area of research (i.e., factors that are related to the stigma of mental illness and help-seeking behavior). There is no anticipated commercial profit related to this research.
4. **Additional information:** You will be given additional information about the study after your participation is complete.
5. **Costs:** If you agree to participate in the study, it may take up to 20 minutes to complete the survey. There are no costs to you beyond the time and effort required to complete the procedures listed above.
6. **Guarantee of Confidentiality:** All data from this study will be kept from inappropriate disclosure and will be accessible only to the researcher and the faculty advisor. Data collected online will be stored on a password-protected website and de-identified for analyses. The researchers are not interested in anyone's individual responses, only the average responses of everyone in the study. The researchers **will not** keep your research data to use for future research or other purposes.
7. **Risks:** The present research is designed to reduce the possibility of any negative experiences as a result of participation. Risks to participants are kept to a minimum. However, if your participation in this study causes you any concerns, anxiety, or distress, you may end your participation at any time, skip any survey question that makes you feel uncomfortable, and/or contact the Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Referral Helpline at 1-877-726-4727, to get general information on mental health and locate treatment services in your area, or the National Suicide Prevention Lifeline at 1-800-273-8255, to speak to a trained crisis

worker. You may also contact the researcher through her academic advisor, Dr. Jessica Lambert, Associate Professor, Department of Psychology and Child Development, California State University Stanislaus, at jlambert@csustan.edu. By contacting the researcher, you may receive: more information regarding the study and its outcome, resources for additional information on the research topic, and resources for mental health services.

8. **Researcher Contact Information:** This research study is being conducted by Catherine Linville. The academic advisor is Dr. Jessica Lambert, Associate Professor, Department of Psychology and Child Development, California State University Stanislaus. If you have questions or concerns about your participation in this study, you may contact the researcher through Dr. Lambert at jlambert@csustan.edu.
9. **Results of the Study:** You may obtain information about the outcome of the study at the end of the academic year by contacting Dr. Lambert at jlambert@csustan.edu. You may also learn more about the results of the study by attending the California State University Stanislaus Psychology Department's Undergraduate Research Symposium at the end of the semester.
10. **Psychology Institutional Review Board Contact Information:** If you have any questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board of California State University Stanislaus at psychologyIRB@csustan.edu.
11. **Personal Copy of Consent Form:** You may print a blank, unsigned copy of this consent form now.
12. **Verification of Adult Age:** By clicking "I Agree" below, you attest that you are 18 years old or older.
13. **Verification of Informed Consent:** By clicking "I Agree" below, you are indicating that you have read and understand the information above, that all of your questions have been answered to your satisfaction, and that you freely consent to participate in this research study.

I agree

I do not agree

APPENDIX B
DEMOGRAPHIC QUESTIONNAIRE

Instructions: Please complete the following questions:

1. Please enter your age:
2. What is your gender?
 - a. Male
 - b. Female
 - c. Other
 - d. Decline to Answer
3. What is your race/ethnicity?
 - a. Caucasian
 - b. Latino/Hispanic
 - c. African American
 - d. Asian/Pacific Islander
 - e. Other
4. Years of education:
 - a. High School (12 years)
 - b. Community College (14 + years)
 - c. College Degree (16 + years)
 - d. Postgraduate Degree/Certification (18 + years)
 - e. Ph.D. (24 + years)
5. Please enter your yearly family income:
6. Have you or anyone you have known experienced mental illness (i.e., depression, anxiety, bi-polar, substance abuse, etc.)?
 - a. Yes
 - b. No
 - c. Not Sure
 - d. Decline to Answer

APPENDIX C

MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

Listed below are a number of statements concerning personal attitudes and traits. Please read each item and decide whether the statement is true or false as it applies to you. For each item, please check <i>True</i> or <i>False</i> .	True	False
	1	2
1. Before voting I thoroughly investigate the qualifications of all the candidates.	<input type="checkbox"/>	<input type="checkbox"/>
2. I never hesitate to go out of my way to help someone in trouble.	<input type="checkbox"/>	<input type="checkbox"/>
3. *It is sometimes hard for me to go on with my work if I am not encouraged.	<input type="checkbox"/>	<input type="checkbox"/>
4. I have never intensely disliked anyone.	<input type="checkbox"/>	<input type="checkbox"/>
5. *On occasion I have had doubts about my ability to succeed in life.	<input type="checkbox"/>	<input type="checkbox"/>
6. *I sometimes feel resentful when I don't get my way.	<input type="checkbox"/>	<input type="checkbox"/>
7. I am always careful about my manner of dress.	<input type="checkbox"/>	<input type="checkbox"/>
8. My table manners at home are as good as when I eat out at a restaurant.	<input type="checkbox"/>	<input type="checkbox"/>
9. *If I could get into a movie without paying and be sure I was not seen I would probably do it.	<input type="checkbox"/>	<input type="checkbox"/>
10. *On a few occasions I have given up doing something because I thought too little of my ability.	<input type="checkbox"/>	<input type="checkbox"/>

11. *I like to gossip at times.	<input type="checkbox"/>	<input type="checkbox"/>
12. *There have been times when I felt like rebelling against people in authority, even though I knew they were right.	<input type="checkbox"/>	<input type="checkbox"/>
13. No matter who I'm talking to, I'm always a good listener.	<input type="checkbox"/>	<input type="checkbox"/>
14. *I can remember "playing sick" to get out of something.	<input type="checkbox"/>	<input type="checkbox"/>
15. *There have been occasions when I took advantage of someone.	<input type="checkbox"/>	<input type="checkbox"/>
16. I am always willing to admit when I made a mistake.	<input type="checkbox"/>	<input type="checkbox"/>
17. I always try to practice what I preach.	<input type="checkbox"/>	<input type="checkbox"/>
18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.	<input type="checkbox"/>	<input type="checkbox"/>
19. *I sometimes try to get even rather than forgive and forget.	<input type="checkbox"/>	<input type="checkbox"/>
20. When I don't know something, I don't mind at all admitting it.	<input type="checkbox"/>	<input type="checkbox"/>
21. I am always courteous, even to people who are disagreeable.	<input type="checkbox"/>	<input type="checkbox"/>
22. *At times I have really insisted on having things my own way.	<input type="checkbox"/>	<input type="checkbox"/>
23. *There have been occasions when I felt like smashing things.	<input type="checkbox"/>	<input type="checkbox"/>
24. I would never think of letting someone else be punished for my wrong-doings.	<input type="checkbox"/>	<input type="checkbox"/>

25. I never resent being asked to return a favor.	<input type="checkbox"/>	<input type="checkbox"/>
26. I have never been irked when people expressed ideas very different from my own.	<input type="checkbox"/>	<input type="checkbox"/>
27. I never make a long trip without checking the safety of my car.	<input type="checkbox"/>	<input type="checkbox"/>
28. *There have been times when I was quite jealous of the good fortune of others.	<input type="checkbox"/>	<input type="checkbox"/>
29. I have almost never felt the urge to tell someone off.	<input type="checkbox"/>	<input type="checkbox"/>
30. *I am sometimes irritated by people who ask favors of me.	<input type="checkbox"/>	<input type="checkbox"/>
31. I have never felt that I was punished without cause.	<input type="checkbox"/>	<input type="checkbox"/>
32. *I sometimes think when people have a misfortune they only got what they deserved.	<input type="checkbox"/>	<input type="checkbox"/>
33. I have never deliberately said something that hurt someone's feelings.	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX D

COMMUNITY ATTITUDES TOWARD MENTAL ILLNESS QUESTIONNAIRE

Please select the response that best describes your agreement with each statement below.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
	1	2	3	4	5
1. As soon as a person shows signs of mental disturbance, he should be hospitalized.	<input type="checkbox"/>				
2. More tax money should be spent on the care and treatment of the mentally ill.	<input type="checkbox"/>				
3. The mentally ill should be isolated from the rest of the community.	<input type="checkbox"/>				
4. The best therapy for many mental patients is to be part of a normal community.	<input type="checkbox"/>				
5. *Mental illness is an illness like any other.	<input type="checkbox"/>				
6. *The mentally ill are a burden on society.	<input type="checkbox"/>				
7. *The mentally ill are far less of a danger than most people suppose.	<input type="checkbox"/>				
8. *Locating mental health facilities in a residential area downgrades the neighborhood.	<input type="checkbox"/>				
9. There is something about the mentally ill that makes it easy to tell them from normal people.	<input type="checkbox"/>				
10. The mentally ill have for too long been the subject of ridicule.	<input type="checkbox"/>				
11. A woman would be foolish to marry a man who has suffered from mental illness, even	<input type="checkbox"/>				

though he seems fully recovered.					
12. As far as possible mental health services should be provided through community-based facilities.	<input type="checkbox"/>				
13. *Less emphasis should be placed on protecting the public from the mentally ill.	<input type="checkbox"/>				
14. *Increased spending on mental health services is a waste of tax dollars.	<input type="checkbox"/>				
15. *No one has the right to exclude the mentally ill from their neighborhood.	<input type="checkbox"/>				
16. *Having mental patients living within residential neighborhoods might be good therapy, but the risks to residents are too great.	<input type="checkbox"/>				
17. Mental patients need the same kind of control and discipline as a young child.	<input type="checkbox"/>				
18. We need to adopt a far more tolerant attitude toward the mentally ill in our society.	<input type="checkbox"/>				
19. I would not want to live next door to someone who has been mentally ill.	<input type="checkbox"/>				
20. Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community.	<input type="checkbox"/>				
21. *The mentally ill should not be treated as outcasts of society.	<input type="checkbox"/>				
22. *There are sufficient existing services for the mentally ill.	<input type="checkbox"/>				
23. *Mental patients should be encouraged to assume the responsibilities of normal life.	<input type="checkbox"/>				

24. *Local residents have good reason to resist the location of mental health services in their neighborhood.	<input type="checkbox"/>				
25. The best way to handle the mentally ill is to keep them behind locked doors.	<input type="checkbox"/>				
26. Our mental hospitals seem more like prisons than like places where the mentally ill can be cared for.	<input type="checkbox"/>				
27. Anyone with a history of mental problems should be excluded from taking public office.	<input type="checkbox"/>				
28. Locating mental health services in residential neighborhoods does not endanger local residents.	<input type="checkbox"/>				
29. *Mental hospitals are an outdated means of treating the mentally ill.	<input type="checkbox"/>				
30. *The mentally ill do not deserve our sympathy.	<input type="checkbox"/>				
31. *The mentally ill should not be denied their individual rights.	<input type="checkbox"/>				
32. *Mental health facilities should be kept out of residential neighborhoods.	<input type="checkbox"/>				
33. One of the main causes of mental illness is a lack of self-discipline and will power.	<input type="checkbox"/>				
34. We have the responsibility to provide the best possible care for the mentally ill.	<input type="checkbox"/>				
35. *The mentally ill should not be given any responsibility.	<input type="checkbox"/>				
36. Residents have nothing to fear from people coming into their neighborhood to obtain mental health services.	<input type="checkbox"/>				

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 37. *Virtually anyone can become mentally ill. | <input type="checkbox"/> |
| 38. *It is best to avoid anyone who has mental problems. | <input type="checkbox"/> |
| 39. *Most women who were once patients in a mental hospital can be trusted as babysitters. | <input type="checkbox"/> |
| 40. *It is frightening to think of people with mental problems living in residential neighborhoods | <input type="checkbox"/> |

APPENDIX E

SELF-STIGMA OF SEEKING HELP QUESTIONNAIRE

Please select the response that best describes your agreement with each statement below.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
	1	2	3	4	5
1. I would feel inadequate if I went to a therapist for psychological help.	<input type="checkbox"/>				
2. *My self-confidence would NOT be threatened if I sought professional help.	<input type="checkbox"/>				
3. Seeking psychological help would make me feel less intelligent.	<input type="checkbox"/>				
4. *My self-esteem would increase if I talked to a therapist.	<input type="checkbox"/>				
5. *My view of myself would not change just because I made the choice to see a therapist.	<input type="checkbox"/>				
6. It would make me feel inferior to ask a therapist for help.	<input type="checkbox"/>				
7. *I would feel okay about myself if I made the choice to seek professional help.	<input type="checkbox"/>				
8. If I went to a therapist, I would be less satisfied with myself.	<input type="checkbox"/>				

9. *My self-confidence would remain the same if I sought professional help for a problem I could not solve.
10. I would feel worse about myself if I could not solve my own problems.

APPENDIX F

DEBRIEFING FORM

Reducing the Stigma of Mental Illness: Video Intervention for Widespread Use

Thank you for participating in this study! We are interested in exploring the use of an educational video for reducing mental health stigma. This study was designed to assess the effectiveness of using an educational approach, via a short video, to decrease stigmatizing attitudes towards individuals with mental illness. By stigma, I mean the stereotypes (i.e., labels), prejudice (i.e., generalized attitudes), and discrimination (i.e., behavior towards individuals with label) associated with having a mental illness. The researchers were interested in determining if providing factual information regarding mental illness would successfully reduce stigmatizing attitudes towards individuals with mental illness. Past research has suggested that educational video interventions are an effective means for reducing mental health stigma and may also decrease the stigma associated with help-seeking for psychological services. We expect to find similar results in our study.

All the information we collected in this study will be kept safe from inappropriate disclosure, and there will be no way of identifying your responses in the data archive. We are not interested in anyone's individual responses; rather, we want to look at the general patterns that emerge when all the participants' responses are put together. We ask that you do not discuss the nature of the study with others who may later participate in it, as this could affect the validity of our research conclusions.

If you have any questions about the study or would like to learn about the results of the study, you may contact the researcher (Catherine Linville) through her academic advisor, Dr. Jessica Lambert, Associate Professor, Department of Psychology and Child Development, California State University Stanislaus, at jlambert@csustan.edu. You may also learn more about the results of the study by attending the California State University Stanislaus Psychology Department's Undergraduate Research Symposium at the end of the semester. If you have questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board of California State University Stanislaus at psychologyIRB@csustan.edu. If participation in the study caused you any concern, anxiety, or distress, you may contact the Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Referral Helpline at 1-877-726-4727, to get general information on mental health and locate treatment services in your area, or the National Suicide Prevention Lifeline at 1-800-273-8255, to speak to a trained crisis worker. You may also contact the researcher through her academic advisor, Dr. Jessica Lambert, Associate Professor, Department of Psychology and Child Development, California State University Stanislaus, at jlambert@csustan.edu. By contacting the researcher, you may receive: more information regarding the study and

its outcome, resources for additional information on the research topic, and resources for mental health services.

If you would like to learn more about this research topic, we suggest the following references:

Corrigan, P. W., Kerr, A., & Knudsen, L. (2005). The stigma of mental illness: Explanatory models and methods for change. *Applied and Preventative Psychology*, 11, 179-190.

Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry*, 20, 529-539.