The Role of Contact and Empathy in Stigma toward Individuals with Mental Illness among Mental Health and Non-Mental Health Professionals

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This research is a product of the graduate program in Clinical Psychology at Eastern Illinois University. Find out more about the program.

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The Role of Contact and Empathy in Stigma toward Individuals with Mental Illness among Mental Health and Non-Mental Health Professionals

(TITLE)

BY

Quincy A. Knolhoff

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

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Abstract

This study was designed to help identify the factors that predict people’s stigmatized attitudes toward individuals with mental illness. Corrigan (2002) suggested that stigmatized beliefs about individuals with mental illness may be detrimental to the potential recovery of these individuals, their self-esteem, empowerment, and their integration into society. One factor that has been found to reduce this stigma is personal contact with mentally ill individuals (Corrigan et al., 2002). Additionally, research has shown that empathy and principled moral reasoning are negatively correlated with prejudice, or stigma (McFarland, 2010). The current study examined level of contact, employment in a mental health profession, and four measures of empathy (macro perspective-taking, cognitive empathy, self-other awareness, and affective response) as potential predictors of stigmatized attitudes. A total of 159 participants, obtained through convenience sampling, completed an online survey that included demographic items (e.g., age, gender, and status as a mental health professional), the Day Mental Illness Scale (Day, Edgren, & Eshleman, 2007), the Hackler Level-of-Contact Items (Hackler, 2011), and the Segal Interpersonal and Social Empathy Index (Segal, Cimino, Gerdes, Harmon, & Wagaman, 2013). The results indicate that gender is significantly related to stigma toward mentally ill individuals; women tend to have less stigma toward individuals with mental illness. Macro perspective-taking and affective response are also significantly related to stigma toward mentally ill individuals; the more of these empathy levels that one has, the less stigma they have toward individuals with mentally ill individuals. Limitations of the study and directions for future research are discussed.
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Author

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As Allport stated in his book, *The Nature of Prejudice*, "No corner of the world is free from group scorn" (1955, p. 4). Stigma has been defined as “an attribute that is deeply discrediting,” and has been known, since ancient times, as a mark separating a group of people from the rest of the world (Day, Edgren, & Eschleman, 2007). Stigma is not simply a bias, but a construct that encompasses cognition, emotions, and behaviors toward the outgroup. A stigma that is characteristic of individuals with mental illness is the mental illness itself, but the rest of the world projects prejudicial attitudes and discriminatory behavior onto this group of people. However, stigma has changed recently in the way that it is used in the literature. Stigma is now referred to mainly as a form of bias toward outgroups. In order to maintain consistency with the literature, throughout the rest of this paper the term “stigma” will be used to refer to the bias that the general public holds toward the mentally ill population, rather than an identifying feature of individuals with mental illnesses.

People are viewed as different and separate from others when they are facing stigma, which in the case of individuals with mental illness, generally means they are seen as inferior (Day et al., 2007). Stigmas exist for people based on their weight, ethnicity, sexual orientation, appearance, and other attributes. Social stigma also exists regarding people with mental illnesses (Corrigan, Edwards, Green, Diwan, & Penn, 2001). The effects of stigma on the lives of individuals with mental illness vary from person to person and manifest in diverse ways in the individual (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997). People can also react in different ways to stigma: some are
relatively unaffected by stigma, some are motivated to prove the world wrong about stigmatized attitudes, and others feel disempowered by the stigma.

Stigma separates the mentally ill from the rest of the world by reinforcing false beliefs about mental illness, such as the belief that people with schizophrenia are dangerous or that people with depression have poor hygiene (Link et al., 1997). Knowing about individuals' past struggles with mental illness, hospitalizations, and/or mental health treatment can cause people to hold stigmatized attitudes toward those individuals. These false beliefs may lead members of the general public to suggest that mentally ill individuals be removed or isolated from their community (Corrigan et al., 2002). Unfortunately, the isolation of these individuals may prevent them from learning appropriate behaviors, such as how to interact with others and manage their symptoms, therefore hindering their recovery process.

The main types of stigma that people with mental illness typically encounter include authoritarianism, benevolence, fear and exclusion, dangerousness, and personal responsibility (Corrigan et al., 2002; Corrigan, Edwards, Green, Diwan, & Penn, 2001; Holmes, Corrigan, Williams, Canar, & Kubiak, 1999). Social distancing may also occur, but it is considered by most researchers to be more of a discriminatory behavior than a form of stigma.

Authoritarianism is the attitude that anyone with a mental illness is inferior to the person with this attitude (Corrigan et al., 2001). Individuals with this attitude tend to believe that mentally ill individuals do not understand what is best for them and that they need to be forced to participate in treatment. Individuals with authoritarian personality types tend to be less tolerant of others, especially those who are viewed as being different
These individuals have difficulty understanding the varying ideas and opinions that others might have, as well as individual differences in physical and mental abilities. This lack of tolerance for differences in others leads people with authoritarian personalities to be more prejudicial in their views of others (Raden, 1989).

Benevolence is the attitude that mentally ill individuals cannot care for themselves, so they need to be coddled and treated like children (Corrigan et al., 2001). Benevolence is considered to be a negative perspective because it encourages mentally ill individuals to rely on others, even when they are capable of caring for themselves. This attitude can be frustrating to mentally ill individuals because they usually have a mental capacity equivalent to their age, so this attitude can seem condescending and inappropriate.

Fear and exclusion refer to the attitude that people with mental illnesses are unpredictable, should be feared, and should be kept away from the rest of society (Holmes et al., 1999). People who have this belief tend to think that mentally ill individuals should be institutionalized and isolated from the community.

Dangerousness is similar to fear and exclusion. People who have this attitude tend to think that mentally ill individuals, particularly those with schizophrenia, have such a severe form of mental illness that they will be inclined to commit heinous crimes. Thus, these mentally ill individuals should be isolated from others in order to protect the general community from such crimes (Corrigan et al., 2002). The media also frequently vilify individuals with mental illness, based on the belief of dangerousness (Corrigan & Watson, 2002).
Social distancing is a mindset exemplified by people not wanting a mentally ill individual to live next door to them, marry a family member, or lease their property (Corrigan et al., 2001). The purpose of this discriminatory behavior is to create distance between individuals and the mentally ill population so that the interactions with mentally ill individuals are as limited as possible.

Personal responsibility is the attitude that people with mental illnesses are responsible for their disorders and behaviors (Corrigan et al., 2002). This attitude is similar to the just world hypothesis that has been studied extensively by social psychologists (e.g., Furnham, 2003; Hafer & Bègue, 2005; Strömwall, Alfredsson, & Landström, 2012). The just world hypothesis is commonly known as victim blaming, which occurs when people are able to convince themselves that the negative events that others experience are due to the poor life decisions of those people. In other words, the difficulties that others experience would not happen to anyone who is not making those same poor life decisions. Belief in this hypothesis is popular because it is a way of comforting oneself concerning the misfortunes of others. In the case of mental illness, this attitude leads to a vicious cycle of becoming angry with individuals with mental illnesses for any symptomatic behavior, but then refusing to help the individual (Corrigan et al., 2002). People with this attitude tend to believe that mentally ill individuals do not deserve help because they have brought the illness upon themselves and they must learn to control their behaviors.

The Negative Impact of Stigma on the Lives of Mentally Ill Individuals

As Link and his colleagues (1997) found, even when mentally ill individuals are recovered and successfully managing their symptoms, the intensity of the stigma
associated with the illness does not decrease significantly over the following year. Moreover, this stigma tends to result in feelings of disempowerment among individuals with mental illness. As Corrigan (2002) suggested, empowerment is associated with successful symptom management, so disempowerment generally delays the recovery process for these individuals.

As Allport (1955) suggested, a common coping mechanism for dealing with discrimination is for individuals in the minority group to modify their own attitudes so that they become similar to those of the prejudiced individuals. Due to the pervasive nature of stigma in the lives of people with mental illnesses, these individuals may internalize the attitudes of others and begin to develop self-stigma. Self-stigma can lead to a lack of motivation on the part of the individual, and personal goals can be dismissed as unattainable, an attitude often supported by healthcare staff (Corrigan, Watson & Barr, 2006). Individuals with mental illness who are battling self-stigma are usually caught between feelings of low self-esteem and righteous anger directed toward those who discriminate against them.

The degree of stigma associated with mental illness seems to vary depending on the specific disorder (Day, Edgren, & Eshleman, 2007). For example, people with depression are less stigmatized than people with schizophrenia (Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999). Researchers have suggested that this difference is due to the prevalence of depression, and the fact that most people are likely to either have or know someone who has depression. People generally do not discriminate against close friends and family members; however, they do discriminate against "outsiders," those people with whom they are unfamiliar (Pescosolido et al., 1999). People with
schizophrenia are seen as outsiders by a majority of society due to their extreme symptoms and the misconceptions about the disorder in general (Day et al., 2007). Depression and anxiety, however, have been described as “less severe” and “more socially accepted” mental disorders, while schizophrenia and bipolar disorders are seen as extreme disorders that are looked down upon by society (Phelan, Link, Stueve, & Pescosolido, 2000). The difference in the stigma associated with these disorders is most likely due to the commonality of experiencing feelings of anxiety and depression, but hallucinations and disorganized thinking are not considered normal occurrences. Phelan and her colleagues (2000) have postulated that this distinction is due to the fact that most people do not understand the nature of psychosis. Thus, schizophrenia is seen as something alien and separate from more common mental disorders.

Day, Edgren, and Eshleman (2007) conducted two studies to examine stigmatized attitudes. In the first study, they administered the Day Mental Illness Stigma Scale to measure people’s attitudes toward mental illness. Participants completed a survey focused on one of four categories of mental illness: mental illness in general, schizophrenia, bipolar disorder, or depression. In the second study, the researchers administered the Day Mental Illness Stigma Scale to both a group of mentally ill individuals and a comparison group from a university campus. Each group completed two surveys, one from the perspective of the participant, and the other from the perspective of the other group. Thus, the mentally ill group completed their second survey from the perspective of someone from the general public, and the comparison group completed their second survey from the perspective of someone who is mentally ill.
The results from the first study showed that schizophrenia was the most negatively viewed condition. Bipolar disorder was treated much the same as schizophrenia, and depression had the highest ratings on treatability and recovery. General mental illness had the lowest scores for stigmatized attitudes and also had the most optimistic outlook. The results from the second study showed that comparison group members thought that interactions with others would cause greater anxiety and relationship disruption than was actually reported by the mentally ill participants. Mentally ill participants reported that they thought the general public would see psychiatric patients as having greater anxiety and relationship disruption than the comparison group members actually thought they would have. Psychiatric patients were more optimistic about their recovery than were the comparison group members when they responded from the perspective of someone with a mental illness; however, when psychiatric patients responded from the perspective of someone from the community, they also reported lower rates of recovery from mental illness.

Not only is there a distinction based on different diagnoses of mental illnesses, there is also a distinction between mental and physical illnesses (Corrigan, 2006). Specifically, physicians who treat mental disabilities are seen as inferior to physicians who treat physical disabilities.

The intensity of stigma toward individuals with mental illness can also be influenced by a person’s familiarity with these individuals. For example, Smith and Cashwell (2011) found that non-mental health professionals desired greater social distance from individuals with mental illness than did mental health professionals. This finding supports the idea that both contact and education reduce stigma. However,
professionals who identified themselves as social workers in the mental health field reported a desire for greater social distance than did professionals who identified themselves as either counselors or psychologists. Additionally, mental health professionals were less supportive of restricting the rights of individuals with mental illnesses than were non-professionals. Smith and Cashwell also found that men desired greater social distance than women, and male characters with a mental illness in vignettes were perceived as more dangerous than female characters with a mental illness.

Instead of surveying the public to examine their views regarding mental illness and people who have these illnesses, Wahl (1999) surveyed people with mental illnesses themselves. The purpose of his study was to determine in what ways the participants had been discriminated against, and how they had experienced negative stigma in their lives. Several participants shared that they had family members who refused to associate with them because of their mental illness. This negative feedback led most of the respondents to withhold the disclosure of their mental illness in certain situations (leasing a home, acquiring a job, etc.) due to the negative consequences that they had experienced in the past. The respondents also had the opportunity to make a statement that they wanted others to know about mental illness. Making such a statement is a prime example of how to give stigmatized individuals their voice back, which allows them to feel empowered and in turn improves the management of their symptoms.

Link and his colleagues (1997) found that secrecy and withdrawal are two common ways that people with mental illness combat the stigma associated with their illnesses. Secrecy is essentially withholding information concerning the mental illness. Sometimes even family members or close friends are kept in the dark about mental illness
diagnoses. According to Link and his colleagues, personal accounts have been reported in which children stopped talking to parents, siblings denied being in the same family, and friends completely disappeared from the lives of mentally ill individuals. Difficulties gaining jobs, leases for homes, volunteer positions, and insurance were some of the costs reported by individuals who disclosed their mental health information. Thus, it is not surprising that these individuals will frequently restrict the number of people with whom they share this information.

People who are given the label of “mentally ill” are less likely to be employed than someone with a physical disability, or even someone who has a similar mental illness but is without the label of being mentally ill (Corrigan, 2006). This form of discrimination tends to occur even without the clear presence of abnormal behaviors. The label seems to be enough for people to have stigmatized attitudes and to discriminate toward mentally ill individuals. This effect was demonstrated in David Rosenhan’s (1973) classic study of “pseudopatients” in mental institutions. In his study, individuals without mental illnesses were admitted to mental institutions. These pseudopatients claimed to hear voices at their intake, but later reported that the auditory hallucinations were gone. Institution staff encouraged the pseudopatients to continue their treatment even in the absence of any symptoms. And in a follow-up study, when health professionals were told to expect people coming in as pseudopatients, they were more likely to think that the mentally ill individuals were actually healthy. Rosenhan’s study illustrates how people’s expectations about how mentally ill individuals behave can influence their behavior toward these individuals. Furthermore, the influence of these expectations can occur even in the face of opposing evidence.
Thus, even healthcare professionals can fall victim to these stigmatized attitudes. All too frequently, healthcare providers tend to exhibit authoritarian attitudes by forcing treatment decisions on mentally ill clients and taking away their power to make decisions in their own lives (Corrigan, 2006). Clients are able to understand when they are being discriminated against and treated differently from others, and this discrimination is likely to have a negative impact on their self-esteem (O’Rourke, 2001). Clients who are facing discrimination from their caregivers tend to have more negative attitudes and a slower recovery rate.

**Strategies for Reducing Stigma toward Mentally Ill Individuals**

Stigma is basically a form of prejudice, in which negative attitudes are held toward a specific group of individuals (Geyer, 1973). Prejudice is defined as an unjustified or incorrect attitude (usually negative) toward an individual based solely on the individual’s membership in an identifiable group, and discrimination is defined as an outward negative action toward a group of people that is based on prejudicial attitudes. Stigma is a negative view of a group of people based on certain attitudes that are held about that group. Prejudice is generally characterized as negative, and something that should be opposed. However, the mentally ill population is usually not included in this anti-prejudice movement.

A wealth of research has examined prejudicial attitudes and much of the literature suggests that cultural-environmental factors are to blame (Case, Greeley, & Fuchs, 1989; Levy, 1999); McFarland, 2010; Wittenbrink, 2004). Cultural-environmental factors refer to the sociocultural aspects of life, which include the attitudes of individuals with whom a
person grows up around, as well as any cultural norms that exist and are prominent in the life of a person (Shields, 2014).

Other research suggests that there could be biological bases for prejudice, such as the innateness of fearing those who are different from us for survival purposes (Dovidio & Gaertner, 1999; O'Rourke, 2001; Pisani, 1955). Psychological reasons for prejudice include the desire to be a part of a group that is closely knit, but also very separate and different from all other groups. This attitude could cause individuals to desire more separation from others who are less like them. For example, people could feel very strongly about separating themselves from individuals with mental illness, which could heighten the prejudicial attitudes toward these individuals.

Jorm and Oh (2009) reviewed the literature on factors that could predict increased social distance between individuals and those with mental illnesses. Their review spanned 50 years and showed that social distance begins to decrease during adolescence, but after young adulthood, social distance begins to increase. Encountering negative events in person or through the media that are related to mental illness can increase the social distance of some people. No significant gender differences are present in social distance, but more frequent interactions with mentally ill individuals are associated with less social distance, especially in the case of intimate experience either personally or within one's family. However, for mental health professionals, greater contact does not necessarily decrease their social distancing. Mental health professionals still consider their clients as inferior. The professionals carry out their daily duties without allowing themselves to develop relationships with their clients, which does not necessarily increase
psychological contact if the mental health professionals are still emotionally distant from their clients.

Jorm and Oh (2009) also found that people generally wanted greater social distance primarily from individuals with substance use disorders, then from those with schizophrenia, and finally, from those with anxiety or depression. People typically desired more social distance from men with mental illnesses than from women with mental illnesses. The origin of the mental illness also tends to play a role in determining social distance. If the disorder was seen as being due to a disease of the brain, then greater social distance was desired, as compared to when the disorder was due to a biochemical imbalance. However, genetic versus psychosocial origins played no role in determining social distance. The belief that mental illnesses are due to character weaknesses resulted in greater social distance, which explains the greatest social distance being desired for those with substance use disorders. Jorm and Oh found that only certain types of contact reduced the desired social distance, and they suggested that well-designed interventions could be the key to reducing social distance. They suggested that more research is needed to support this idea.

It is a challenge for individuals with mental illness to combat both the difficulties of the disability and the negative views of others (Corrigan & Watson, 2002). Allport suggested that prejudice only exists when false beliefs about groups of people are not adjusted after new evidence is presented. Several movements have been established to help reduce the stigma toward mentally ill individuals, and they are gaining momentum. Protest, education, and contact have been the three most prominent strategies for combatting stigmatized attitudes (Corrigan et al., 2002).
Protest is designed to “guilt” people out of thinking negatively about individuals with mental illnesses by pointing out the degrading nature of the negative connotations (Corrigan et al., 2001). The goal of protest is to suppress stigmatized views and attitudes. Attempts to suppress these attitudes are often done by using famous individuals in advertising their support of individuals with mental illness. Newspaper articles and radio and television advertisements are other ways of protesting stigmatized attitudes effectively through the media.

Education challenges the myths about mental illness by providing evidence from psychological studies (Corrigan et al., 2002). Empirical facts are used to disprove the false beliefs that mental illnesses make people dangerous and that people can control/prevent the development of mental illness. Research shows us that individuals with a college education are typically more tolerant of people in outgroups than are individuals with a high school or lower level of education (Akrami, Ekehammar, & Bergh, 2011; Allport, 1955). Additionally, research suggests that a need for cognitive closure, which is a desire for more information on a topic instead of ambiguity (Roets & Van Hiel, 2011), is relevant to discrimination because this need can potentially reduce negative prejudicial attitudes. People who discriminate against others could have only ambiguous information about other groups of people. They could desire more solidified information about the “outgroup,” and this information could give them the closure that they need to reduce or eliminate their prejudicial views.

Contact is the amount of interaction that a person has with individuals with mental illness (Corrigan et al., 2002). Contact can take many forms, and positive experience seems to be the most effective strategy for reducing prejudice (Christ et al.,
Contact includes recovered mentally ill individuals sharing their life stories with people, or there can be an arranged interaction period between members of the community and individuals with mental illnesses. Research has shown that those who have more contact with other groups tend to see fewer differences between groups than those who have less contact (Allport, 1955; Curtis, Timbers, & Jackson, 1967; Wagner, Christ, Pettigrew, Stellmacher, & Wolf, 2006). However, Allport postulated that the only type of contact resulting in attitude change is when individuals work together to accomplish a common goal. Intergroup contact has been shown to decrease implicit prejudice as well as group biases, while challenging inconsistencies in prejudicial attitudes has been shown to be more effective in decreasing individual biases (Dovidio & Gaertner, 1999; Henry & Hardin, 2006).

Watson, Corrigan, Larson, and Sells (2007) found that group identification can help combat the negative effects of stigma. Group identification refers to a group of people who are in residential community health settings, group therapy sessions, or are receiving mental health treatment from the same facility. Groups of people tend to become more cohesive and unified when they are collectively threatened (Allport, 1955). Group identification displaces hostility and replaces it with a common desire for security. Knowing that there are other people who are dealing with the same issues can help individuals in their own recovery process by providing support and a sense of community. Friendships can develop in these groups, putting a positive spin on receiving treatment and giving group members something to which they can look forward. Watson and her colleagues found that group identification acts as a buffer against stigma directed at the group or individuals.
Hackler (2011) examined the influence of contact on stigma toward mental illness by using videos of individuals with mental illness to increase contact levels in an effort to reduce stigma. The results show that these videos did reduce stigmatized attitudes in the short term, but there was no long-term change.

**The Role of Empathy in Reducing Stigma**

Empathy is the ability to put oneself in a position similar to that of another person in such a way that the experiences of that other person can be understood, felt, and expressed (Hojat, 2009). Research has shown that empathy and principled moral reasoning are negatively correlated with prejudice, or stigma, whereas authoritarianism and social dominance are positively correlated with prejudice (McFarland, 2010). Client satisfaction, compliance, and positive outcomes are all related to the presence of empathy in clinical caregivers (Hojat, 2009). When empathy levels of professionals are higher than sympathy levels, client experiences tend to be more positive, and objectivity for clinical decision-making is kept intact. Higher empathy can also prevent professional burnout. Goals of increasing empathy include enhancing the understanding of concerns and experiences of clients and effectively communicating this understanding to the client, verbally as well as nonverbally.

The use of nonverbal cues is one way to portray interest and concern for the client, as well as an understanding of what the client is saying. Mimicking the language patterns and certain body cues of the client is an excellent way to communicate nonverbal empathy. Videotaping interactions with clients informs caregivers of positive and negative responses and the consequences of such responses (Hojat, 2009). When training clinicians, it is important to incorporate a mentorship that focuses on teaching empathy,
which can be done through role-plays. In order to understand the struggles of certain clientele, role-playing with students in the position of their clients can increase awareness and a deeper understanding of the situations of their clients (Hojat, 2009).

Shadowing clients is another way clinicians can show empathy for their clients (Hojat, 2009). If clinicians are able to shadow one of their clients, it allows them to see the client as a person rather than as a diagnosis. When clients are shadowed, it increases their satisfaction with their care and decreases their anxiety. Sharing common experiences tends to draw people together, and this is no different for individuals in hospitals or similar facilities.

Interpersonal empathy is a form of empathy in which the internal state of another individual is understood in a manner that allows the person to respond in a more sensitive way that is most beneficial for the other individual (Segal, Cimino, Gerdes, Harmon, & Wagaman, 2013). Social empathy is a form of empathy that allows people to fully understand the discrimination and injustices present in the lives of others through perceiving their life experiences (Segal et al., 2013). Interpersonal empathy has been studied extensively in the fields of psychology and neuroscience, but social empathy is a newer concept that has not yet been widely examined in the literature. However, Segal and her colleagues (2013) hypothesized that both types of empathy are vital for therapists to adequately relate to their clients and make them feel comfortable.

Another aspect of empathy studied by Segal and colleagues (2013) is affective response, which is the ability to feel and express the emotions of another person without knowing the origin of the feelings. According to Segal and her colleagues, perceiving the experiences of someone else, especially to the extent that it feels as if one is going
through the event with the other individual, typically results in an affective response similar to the feelings experienced by the other individual. Another component of empathy is cognitive empathy. An individual purposefully taking the psychological viewpoint of the other person exemplifies cognitive empathy. Another different component of empathy is self-other awareness, which is the ability to differentiate the experiences of another person from the experiences of oneself is important for the empathetic process to be considered a conscious action. To be able to consciously express empathy for another person acknowledges a capacity to show empathy.

Another component of empathy is macro perspective-taking, which allows an individual to experience an event in the life of another individual, to the extent that it will elicit a very similar affective response (Segal et al., 2013). The cognitive processing of an event is established if this perspective-taking step is completed. Macro perspective-taking also allows the experiences of an individual very different from oneself to be thoroughly understood. These four components (affective response, cognitive empathy, self-other awareness, and macro perspective-taking) are the factors identified by the Interpersonal and Social Empathy Index created by Segal and her colleagues (2013).

The Current Study

The current study is a follow-up study to one in which Knolhoff (2016) examined similar constructs of effect of contact and empathy on stigma. The purpose of the current study is to identify the predictors of stigmatized attitudes toward mentally ill individuals. Once these factors are identified, healthcare providers and professionals in the field of community mental health can begin to establish prevention techniques.
The hypotheses for the current study are as follows:

- Lower levels of contact with mentally ill individuals is the strongest factor leading to higher stigmatized attitudes, followed by low macro perspective-taking, low cognitive empathy, low self-other awareness, and low affective response, respectively.

- Men have stronger stigmatized attitudes than women toward individuals with mental illness.

- Non-mental health professionals have stronger stigmatized attitudes than mental health professionals toward individuals with mental illness.

Method

Participants

One hundred fifty-nine participants, obtained through convenience sampling, completed an online survey. Ninety mental health professionals from mental health facilities across the country were contacted via email; however, ten of those surveys (11%) had to be thrown out due to there being no score reported for one or more of the main scales (stigma, contact, or all of the 4 empathy scales). The average number of years that the mental health professionals had been employed in the mental health field was 10 years. Contact information for mental health facilities was obtained from the 2016 National Directory of Mental Health Treatment Facilities (SAMHSA, 2016).

A comparison group of 100 non-mental health professionals was reached via Amazon Mechanical Turk, an online survey website. With this group of participants, 21 surveys had to be thrown out (21%). One survey was removed because the participant
reported their gender as "other," but this was the only survey to report this option, so that response was removed so as to not skew the results of the effect of gender on stigma responses. One of survey had marked the same highest response for every question and marked every option on the contact scale. Several of these surveys had no responses recorded whatsoever on any of the questions. A few others were thrown out because they, too, were missing a score on one of the main scales (stigma, contact, or all of the 4 empathy scales). Individuals completing these surveys with Amazon Mechanical Turk received a small amount of remuneration ($0.50) for their participation in survey research. Only 12 participants out of the whole sample size were unemployed. Thirty-two states from the US were represented in the sample size, with 7 participants from other countries and 17 participants that chose to not report their state of employment. The majority of the participants were from Illinois, with 31 participants, and Kentucky, with 24 participants. The majority of the participants were also in the age range of 20-39. Fifty-six of the participants were males, while the majority of the participants were females. Finally, a majority of the participants had either a bachelor's or master's degree.

**Materials**

The survey consisted of five parts: a demographic section, the Day Mental Illness Scale (Day, Edgren, & Eshleman, 2007), the Hackler Level-of-Contact Items (Hackler, 2011), and the Segal Interpersonal and Social Empathy Index (Segal, Cimino, Gerdes, Harmon, & Wagaman, 2013). The demographic section included items about age, gender, and status as a mental health professional.

The Day Mental Illness Scale (Day et al., 2007) is a 28-item scale that uses a 7-point Likert rating system (1 = completely disagree; 7 = completely agree) to assess the
degree to which respondents hold stigmatized attitudes about individuals with mental illness. The scale consists of factors with reliability coefficients (Cronbach’s alpha values) that range from 0.71-0.90.

The Hackler Level-of-Contact Items (Hackler, 2011) is a scale with 12 statements that are rank-ordered (from 1 to 12) to indicate the level of contact the participant has had with mentally ill individuals. The items have a reliability coefficient of 0.83.

The Segal Interpersonal and Social Empathy Index (Segal et al., 2013) is a 14-item scale that uses a 7-point Likert rating system (1 = completely disagree; 7 = completely agree) to assess the degree of empathy of the participant. The index utilizes a four-factor model and it has a reliability coefficient (Cronbach’s alpha) of 0.85. The four subscales have been separated in order to determine which type of empathy is more predictive of stigma scores. These four subscales include macro perspective-taking (4 items), cognitive empathy (4 items), self-other awareness (3 items), and affective response (3 items). Following completion of the survey, participants were directed to a debriefing statement that explained the purpose of the study, including the predicted outcomes.

**Procedure**

The survey was completed via a survey software system called Qualtrics. This software allows researchers to create surveys that can be taken electronically and accessed via the internet. A link was generated by Qualtrics to post on the Amazon Mechanical Turk website, which allowed those participants to access the survey. At the end of those surveys, the participants were given a code generated by Mechanical Turk to
enter into the Qualtrics survey to ensure the validity and individuality of those responses. These individuals then received a payment of $0.50 for participating in the study.

The mental health professionals that were contacted to participate in this study were either contacted via personal relations and connections to mental health professionals in the area, or by email addresses obtained off the internet and from the 2016 National Directory of Mental Health Treatment Facilities (SAMHSA, 2016). A link was included in these emails that allowed the mental health professionals to sign up to participate in the study using their own personal email. Using this method, each mental health professional was sent an individualized link to the survey that allowed each person to anonymously submit one's own survey responses.

As for the procedure for completing the survey, once the informed consent section was completed, participants answered the demographic questions before completing the Day Mental Illness Scale (Day et al., 2007), the Level-of-Contact Items (Hackler, 2011), and the Segal Interpersonal and Social Empathy Index (Segal et al., 2013) (see the appendix for a copy of the complete survey).

**Statistical Treatment**

The stigma score was calculated by summing the scores for each of the 28 items (5 of the items are reverse scored), resulting in a score from 28 to 196. The contact score was calculated by summing the scores for each marked statement, resulting in a score from 0 to 78. The macro perspective-taking score was calculated by summing the scores for each item, resulting in a score from 4 to 28. The cognitive empathy score was calculated by summing the scores for each item, resulting in a score from 4 to 28. The self-awareness score was calculated by summing the scores for each item, resulting in a
score from 3 to 21. Finally, the affective response score was calculated by summing the scores for each item, resulting in a score from 3 to 21. A multiple regression analysis was conducted on the stigma, contact, and empathy scores. The predictor variables were contact, affective response, cognitive empathy, self-other awareness, and macro perspective-taking. The dependent variable was stigma. The multiple regression analysis showed how well contact, and types of empathy, predicted stigmatized views toward individuals with mental illness. The influence of gender and mental health vs. non-mental health professional on stigmatized attitudes was also examined using two individual independent t-tests.

Results

A hierarchical multiple regression analysis was conducted to identify the most salient predictors of the overall stigma scores. In the first step, gender, contact, macro perspective-taking, and affective response were used as the predictors. At an alpha level of .05, the relationship between the set of predictors and stigma was found to be statistically significant, $R^2 = .32, F(4, 152) = 18.24, p < .001$. Female participants had lower levels of stigma than did male participants, $p = .001$. Participants with higher macro perspective-taking scores had lower levels of stigma, $p = .001$. Participants with higher affective response scores also had lower levels of stigma, $p = .03$. Gender accounted for 5% of the variance in stigma. Macro perspective-taking also accounted for 5% of the variance in stigma. Affective response accounted for 2% of the variance in stigma.
In the second step, cognitive empathy, self-other awareness, and employment in the mental health field were added to determine if they can predict stigma over and above gender, contact, macro perspective-taking, and affective response. The results indicate that these added measures do not provide added predictive value, $R^2 = .02$, $F(3, 149) = 1.84, p = .14$. Contact was predictive of stigma, $p = .05$. It accounted for 2% of the variance in stigma. The more contact a person has with mental illness the lower their stigma. Macro perspective-taking was still predictive of stigma, $p = .02$. It accounted for 2% of the variance in stigma. If macro perspective-taking was higher, then stigma was lower. Gender was still predictive of stigma, $p = .001$. It accounted for 5% of the variance in stigma. Female participants have lower levels of stigma. Cognitive empathy was now predictive of stigma, $p = .02$. It accounted for 2% of the variance in stigma. If cognitive empathy was higher, then stigma was lower. Affective response was no longer significant, and self-other awareness and employment in the mental health field were also not significant. A summary of the results of the hierarchical multiple regression analysis is found in Table 1.

Additionally, a 2 (gender) X 2 (employment or nonemployment in a mental health profession) multivariate analysis of variance was conducted to examine the influence of gender and employment in a mental health profession on measures of empathy. At an alpha level of .05, results indicate that there was no significant interaction between gender and mental health profession for any of the measures of empathy. However, there was a significant main effect of gender on affective response, $F(1, 153) = 12.18, p = .001$, $\eta^2_p = .07$. Female participants had higher levels of affective response ($M = 12.37, SD = 2.14$) than male participants ($M = 10.79, SD = 2.91$). A graphical representation of this
finding can be found in Figure 1. There were also significant main effects of employment in a mental health profession for macro perspective-taking, $F(1, 153) = 13.11, p < .001, \eta_p^2 = .08$, cognitive empathy, $F(1, 153) = 11.15, p = .001, \eta_p^2 = .07$, self-other awareness, $F(1, 153) = 7.56, p = .007, \eta_p^2 = .05$, and affective response, $F(1, 153) = 4.21, p = .04, \eta_p^2 = .03$. Mental health professionals were more likely to have higher levels of macro perspective-taking ($M = 15.62, SD = 2.82$), cognitive empathy ($M = 15.97, SD = 2.81$), self-other awareness ($M = 11.06, SD = 2.16$), and affective response ($M = 12.33, SD = 2.28$) than non-mental health professionals ($M = 13.60, SD = 3.46$ for macro perspective-taking, $M = 14.12, SD = 3.24$ for cognitive empathy, $M = 9.87, SD = 2.46$ for self-other awareness, $M = 11.27, SD = 2.71$ for affective response). A summary of the results of the analysis of variance can be found in Table 2. Graphical representations of the main effects can be found in Figures 2, 3, 4, and 5.

**Discussion**

The goal of this study was to identify qualities or characteristics that are predictive of people having negative views toward individuals with mental illness. Gender, macro perspective-taking, cognitive empathy, and contact were found to be predictive of stigma. Participants with lower levels of contact with mentally ill individuals were hypothesized to have higher levels of stigma. Higher levels of contact were indeed significantly correlated with lower levels of stigma, as were higher levels of macro perspective-taking and cognitive empathy. Additionally, women had lower levels of stigma than men. These results are consistent with the findings from Corrigan and his colleagues (2002), who identified contact as the most important factor in successfully reversing stigma toward those with mental illness. Other researchers have also found
inverse correlations between contact and stigma (e.g., Allport, 1955; Curtis, Timbers, & Jackson, 1967; Wagner, Christ, Pettigrew, Stellmacher, & Wolf, 2006). Hackler (2011) found similar differences in stigma between participants who watched videos to simulate contact with individuals with mental illnesses, and those participants who were not exposed to the videos.

Participants with lower levels of the four measures of empathy (macro perspective-taking, cognitive empathy, self-other awareness, and affective response) were hypothesized to have higher levels of stigma. Two of the empathy measures, macro perspective-taking and cognitive empathy, were found to be inversely correlated with stigma, but the other two measures, self-other awareness and affective response, were not found to be significant predictors of stigma. These findings are consistent with the literature, as shown by McFarland (2010), who found that lower levels of empathy are correlated with higher levels of prejudice. Hojat (2009) also found that mental health professionals tend to have higher levels of empathy.

Men were hypothesized to have higher levels of stigma than women toward individuals with mental illness. Segal and her colleagues (2013) found that women tend to have higher levels of empathy than men, and Smith and Cashwell (2011), found that women had lower levels of stigma and prejudice toward others than men. In the current study, women were found to have higher empathy levels, as well as lower stigma levels.

The results of this study did not show significant differences between participants who were employed in the mental health field and those not employed in the mental health field. Non-mental health professionals were hypothesized to have higher levels of stigma than mental health professionals toward individuals with mental illness. This
hypothesis was generated in part on the basis of research conducted by Smith and Cashwell (2011), who suggested that because mental health professionals have more contact with mental illness compared to people not employed in a mental health profession, they tend to show less stigma toward individuals with mental illness. However, Corrigan (2006) reported that mental health professionals can sometimes adopt authoritarian attitudes, which are correlated with higher levels of stigma.

**Strengths of the Study**

A strength of this study is the relatively large sample size. For example, Link and his colleagues (1997) used only 84 participants in their study, and the current study had a sample size of 157. The current study was also able to reach a wide geographical range of individuals, as well as mental health professionals across the country. Ten of the 50 states were represented among the mental health professionals, with most of them in the Midwest in Illinois and Kentucky, but also a few participants from Maine, Maryland, New York, and New Jersey in the Northeast, Michigan and Nebraska also in the Midwest, Arkansas in the Southeast, and Nevada in the West.

The inclusion of multiple types of empathy to determine their relative importance in stigmatized attitudes is another strength of the study. The fact that both contact and empathy were included as variables, as well as gender and employment in the mental health field, is a strength of the study because it was not limited to one variable. The study was able to identify the most important predictors of stigma out of the group of variables instead of focusing on the relationship of one variable to stigma in isolation of other factors. The relationship of multiple variables to each other, as well as to stigma,
were examined in a single study, a strategy that provides more information about predictors of stigma.

**Limitations of the Study**

One limitation of the study is that a number of items included in the scales addressed some fairly sensitive issues (e.g., opinions about individuals with mental illness, whether the participant is close to someone with a mental illness, whether the participant has a mental illness), which raises the possibility of a social desirability response set. Strahan-Gerbasi (1972) has done research on social desirability, which is the degree to which a participant responds based on a desire to make oneself appear more socially acceptable. When individuals are asked questions of a sensitive nature, they tend to respond in a way that is more favorable than how they truly feel about the topic. People tend to respond in this way without consciously knowing that they are doing so. Social desirability could have influenced the participants of this study to report being more empathic and less stigmatized in their views than they actually are.

Additionally, the participants who completed the surveys online for a monetary reward might not have taken the study seriously. One survey that was thrown out had been completed without answering one single question. Another study had all of the Likert scale questions marked with the same response, and all of the contact statements had been checked. This evidence suggests that the participants were not taking the study seriously and were either marking everything or nothing, and were simply clicking through the questions of the survey without thoroughly reading or considering the content.
Another possible confound is the order of the items presented. Asking questions about attitudes toward people with mental illnesses could have led participants to respond in a more empathetic way to the following questions concerning contact and empathy. This attitude could skew the results to portray the participant as more empathetic than they actually are. Causing an individual to think deeply about how empathetic they are could lead them to feel more empathy when considering individuals with mental illnesses than they normally would because they have been predisposed to think in this way.

Conclusions

The findings show the importance of contact and some forms of empathy as influences on stigmatized attitudes. These findings suggest that efforts to combat stigma toward the mentally ill population should focus on increasing the level of contact that people have with these individuals, increasing the various levels of empathy that people have for one another, and identifying ways to help foster more tolerance and acceptance of others, particularly among men. Increasing the level of contact between the general public and individuals with mental illness could be beneficial in helping people recognize some of the false beliefs that typically contribute to stigma and negative views of this population. Increasing contact could also help individuals with mental illness to be more comfortable around members of the general public and even enhance their social skills to foster more positive interactions with others.

Increasing the empathy that people have for one another could allow people, in general, to be more tolerant of their differences and focus more closely on aiding and supporting one another in positive and productive ways. Additionally, fostering more tolerance and acceptance among the male population would likely reduce stigma.
These findings can be used as part of a rationale for developing outreach programs designed to ensure that individuals with mental illness are exposed to society so that people in the community can have more contact with members of this population and, hopefully, reduce their stigma. Some of the common misconceptions about individuals with mental illness (e.g., being unable to communicate, care for themselves, or act in an appropriate manner) could be alleviated. The current findings should also be encouraging to the administrators of mental institutions that have a mission to integrate their clients into the community.

Further research could be beneficial in determining a threshold of sorts as far as contact is concerned. Probing further into the role of contact could serve to identify specific types of contact that are most beneficial, as well as the ways that contact could be implemented into programs designed to reduce stigma. Such programs could also incorporate strategies for increasing the levels of empathy that people have for others.
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Table 1.

Hierarchical Regression Analysis for Variables Predicting Overall Stigma ($N = 157$)

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<td>0.28</td>
<td>3.37</td>
<td>0.001</td>
</tr>
<tr>
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<td>0.03</td>
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</table>

*Note. $R^2 = 0.32$ for Step 1 ($p < 0.001$); $\Delta R^2 = 0.02$ for Step 2 ($p = 0.14$).*
Table 2.

ANOVA SUMMARY TABLE

Summary of Multiple Analysis of Variance of Gender and Employment in a Mental Health Profession on Macro Perspective-Taking, Cognitive Empathy, Self-Other Awareness, and Affective Response (N = 157)

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<th>Sources of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>( \eta^2 )</th>
<th>Power</th>
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<td>p</td>
<td>$\eta^2$</td>
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Figure 1.

Gender vs. Affective Response

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Mental Health Professional vs. Macro Perspective-Taking
Figure 3.

**Mental Health Professional vs. Cognitive Empathy**

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<td></td>
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Employment in a Mental Health Profession
Figure 4.

Mental Health Professional vs. Self-Other Awareness

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<td>11.06</td>
</tr>
<tr>
<td>Non-Mental Health Prof.</td>
<td>9.87</td>
</tr>
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</table>
Figure 5.

Mental Health Professional vs. Affective Response

Employment in a Mental Health Profession

Stigma

12.33

11.27
Appendix A

CONSENT TO PARTICIPATE IN RESEARCH

You are invited to participate in a study conducted by Quincy Knolhoff, a graduate clinical psychology student at Eastern Illinois University under the supervision of Dr. William Addison from the EIU Psychology Department.

The purpose of this study is to examine factors involved in attitudes about people with mental illness.

If you agree to participate in this study, you will be asked to provide demographic information (e.g., gender, age, etc.), and complete several scales designed to measure attitudes toward people with mental illness. The entire process will take you about 15 minutes.

There is little or no risk associated with participation in this study. Possible benefits of participation in this study include a better understanding about mental illness.

No one will have access to information that could be used to identify you, and the information to be collected will remain strictly confidential and will be disclosed only with your permission or as required by the law.

Participation in this study is completely voluntary. If you agree to take part in this study, you may withdraw at any time without penalty. You may also refuse to provide any information that you do not wish to provide.

If you have any questions or concerns about this research, you may contact:

Dr. William Addison  
217-581-6417  
weaddison@eiu.edu (Email)

Quincy Knolhoff  
618-314-1915  
qaknolhoff@eiu.edu (Email)

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board  
Eastern Illinois University  
600 Lincoln Ave.  
Charleston, IL  61920  
Telephone: (217) 581-8576  
E-mail: eiuirb@www.eiu.edu

I voluntarily agree to participate in this study. I understand that I am free to withdraw my consent and discontinue my participation at any time. By continuing, I hereby give my consent to participate in this study.
Appendix B

Survey Items

Start of Block: Demographics

Q1.1 Are you currently employed?
   ○ Yes (1)
   ○ No (2)

Q1.2 If so, in what state are you employed?

Q1.3 Are you employed as a professional in the mental health field?
   ○ Yes (1)
   ○ No (2)

Q1.4 If so, how many years have you been employed in a mental health profession?

Q1.5 How old are you?

Q1.6 What is your gender?
   ○ Male (1)
   ○ Female (2)
   ○ Other (3)
Q1.7 What is your highest level of education?

○ Did not finish high school (1)
○ High school diploma (2)
○ Some college (3)
○ Associate's degree (4)
○ Bachelor's degree (5)
○ Master's degree (6)
○ Doctoral degree (7)

End of Block: Demographics

Start of Block: Stigma Questions

Q2.1 There are effective medications for mental illnesses that allow people to return to normal and productive lives.

○ Strongly agree (1)
○ Agree (2)
○ Somewhat agree (3)
○ Neither agree nor disagree (4)
○ Somewhat disagree (5)
○ Disagree (6)
○ Strongly disagree (7)
Q2.2 I don't think that it is possible to have a normal relationship with someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.3 I would find it difficult to trust someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.4 People with mental illnesses tend to neglect their appearance.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.5 It would be difficult to have a close meaningful relationship with someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.6 I feel anxious and uncomfortable when I’m around someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.7 It is easy for me to recognize the symptoms of mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.8 There are no effective treatments for mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.9 I probably wouldn't know that someone had a mental illness unless I was told.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.10 A close relationship with someone with a mental illness would be like living on an emotional roller coaster.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.11 There is little that can be done to control the symptoms of mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.12 I think that a personal relationship with someone with a mental illness would be too demanding.

☐ Strongly agree (1)
☐ Agree (2)
☐ Somewhat agree (3)
☐ Neither agree nor disagree (4)
☐ Somewhat disagree (5)
☐ Disagree (6)
☐ Strongly disagree (7)

Q2.13 Once someone develops a mental illness, he or she will never be able to fully recover from it.

☐ Strongly agree (1)
☐ Agree (2)
☐ Somewhat agree (3)
☐ Neither agree nor disagree (4)
☐ Somewhat disagree (5)
☐ Disagree (6)
☐ Strongly disagree (7)
Q2.14 People with mental illnesses ignore their hygiene, such as bathing and using deodorant.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.15 Mental illnesses prevent people from having normal relationships with others.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.16 I tend to feel anxious and nervous when I am around someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.17 When talking with someone with a mental illness, I worry that I might say something that will upset him or her.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.18 I can tell that someone has a mental illness by the way he or she acts.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.19 People with mental illnesses do not groom themselves properly.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.20 People with mental illnesses will remain ill for the rest of their lives.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.21 I don't think that I can really relax and be myself when I'm around someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.22 When I am around someone with a mental illness, I worry that he or she might harm me physically.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.23 Psychiatrists and psychologists have the knowledge and skills needed to effectively treat mental illnesses.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.24 I would feel unsure about what to say or do if I were around someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.25 I feel nervous and uneasy when I’m near someone with a mental illness.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.26 I can tell that someone has a mental illness by the way he or she talks.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q2.27 People with mental illnesses need to take better care of their grooming (bathe, clean teeth, use deodorant).

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)
Q2.28 There are effective medications for mental illnesses that allow people to return to normal and productive lives.

○ Strongly agree (1)
○ Agree (2)
○ Somewhat agree (3)
○ Neither agree nor disagree (4)
○ Somewhat disagree (5)
○ Disagree (6)
○ Strongly disagree (7)

End of Block: Stigma Questions

Start of Block: Contact Items

Q3.1 Please read each of the following statements carefully. After you have read all the statements, place a check by the statements that best depict your exposure to persons with severe mental illness.

____ I have watched a movie or television show in which a character depicted a person with a mental illness. (1)
____ My job involves providing services/treatment for persons with severe mental illnesses. (2)
____ I have observed, in passing, a person I believe may have had a severe mental illness. (3)
____ I have observed persons with severe mental illnesses on a frequent basis. (4)
____ I have a severe mental illness. (5)
____ I have worked with a person who had a severe mental illness at my place of employment. (6)
____ I have never observed a person that I was aware had a severe mental illness. (7)
____ My job includes providing services to persons with severe mental illnesses. (8)
____ A friend of the family has a severe mental illness. (9)
____ I have a relative with a severe mental illness. (10)
____ I have watched a documentary on the television about severe mental illness. (11)
____ I live with a person who has a severe mental illness. (12)
Q4.1 I take action to help others even if it does not personally benefit me.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

Q4.2 I am comfortable helping a person of a different race or ethnicity than my own.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

Q4.3 It is important to understand the political perspectives of people I do not agree with.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)
Q4.4 I believe that people who face discrimination have added stress that negatively impacts their lives.

○ Does Not Describe Me At All (1)
○ Slightly Describes Me (2)
○ Describes Me Well (3)
○ Describes Me Quite Well (4)
○ Describes Me Very Well (5)

End of Block: Macro Perspective-Taking Items

Start of Block: Cognitive Empathy Items

Q5.1 I can consider my point of view and another person's point of view at the same time.

○ Does Not Describe Me At All (1)
○ Slightly Describes Me (2)
○ Describes Me Well (3)
○ Describes Me Quite Well (4)
○ Describes Me Very Well (5)
Q5.2 I am good at understanding other people's emotions.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

Q5.3 When I see a person experiencing a strong emotion, I can accurately assess what that person is feeling.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

Q5.4 I can tell the difference between someone else's feelings and my own.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

End of Block: Cognitive Empathy Items

Start of Block: Self-Other Awareness Items
Q6.1 I am aware of what other people think of me.
   ○ Does Not Describe Me At All (1)
   ○ Slightly Describes Me (2)
   ○ Describes Me Well (3)
   ○ Describes Me Quite Well (4)
   ○ Describes Me Very Well (5)

Q6.2 I am aware of other people's emotions.
   ○ Does Not Describe Me At All (1)
   ○ Slightly Describes Me (2)
   ○ Describes Me Well (3)
   ○ Describes Me Quite Well (4)
   ○ Describes Me Very Well (5)

Q6.3 I can explain to others how I am feeling.
   ○ Does Not Describe Me At All (1)
   ○ Slightly Describes Me (2)
   ○ Describes Me Well (3)
   ○ Describes Me Quite Well (4)
   ○ Describes Me Very Well (5)

End of Block: Self-Other Awareness Items

Start of Block: Affective Response Items
Q7.1 When I see someone receive a gift that makes that person happy, I feel happy myself.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

Q7.2 When I am with someone who gets sad news, I feel sad for a moment, too.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

Q7.3 Hearing laughter makes me smile.

- Does Not Describe Me At All (1)
- Slightly Describes Me (2)
- Describes Me Well (3)
- Describes Me Quite Well (4)
- Describes Me Very Well (5)

End of Block: Affective Response Items
DEBRIEFING STATEMENT

Thank you for participating in this study. We know that you are very busy, so we appreciate the time that you generously devoted to this research.

The purpose of this study is to identify the role that contact and empathy play in people's attitudes toward individuals with mental illness. The results are expected to show that contact and various types of empathy (e.g., cognitive empathy, affective response) are predictive of stigma toward individuals with mental illness, and that contact is the best predictor.

It is important that you do not discuss this study with anyone else until the study is completed. If you have any questions or concerns, or would like to know more about the results of the study, you may contact either of the following individuals:

Student Researcher:
Quincy Knolhoff
Email: qaknolhoff@eiu.edu
Number: 618-314-1915

Faculty Sponsor:
Dr. William Addison
Email: weaddison@eiu.edu
Number: 217-581-6417

Thank you again for your participation!