4-20-2022

A Comparison of Stigma Levels for Individuals with Psychological Disorders and Individuals with Intellectual Disabilities

Isabella E. Wood
Ouachita Baptist University

A Comparison of Stigma Levels for Individuals with Psychological Disorders and Individuals with Intellectual Disabilities

Isabella E. Wood

Ouachita Baptist University

Dr. Allyson Phillips

4/20/2022

Abstract

This study compared nine aspects of stigmatization (blame, anger, pity, help, dangerousness, fear, avoidance, segregation, coercion) amongst schizophrenia, binge eating, and intellectual disabilities. The overall MANOVA was significant, $F(18, 183) = 89.95$, $p < .001$, Wilks' Lambda = .10. When the results for the dependent variables were considered separately, all nine dependent variables reached significance ($p < .001$). Schizophrenia scored highest in all categories except blame and pity. Blame was the highest for binge eating and pity was the highest for intellectual disabilities. Efforts to reduce stigmatization must be tailored to each disorder.

Keywords: Stigma, schizophrenia, binge-eating disorder, intellectual disability

Contents

Introduction …… 5

Stigma …… 5

Schizophrenia …… 9

Binge-Eating Disorder …… 11

Intellectual Disability …… 14

Religious Orientation …… 15

Rationale and Hypotheses …… 16

Method …… 18

Participants …… 18

Assessments and Measures …… 19

Materials …… 21

Procedure …… 22

Results …… 22

Analysis of Global Score …… 22

Analysis of Subtypes …… 23

Correlation Between Stigma and Religiosity …… 25

Discussion …… 27

Limitations …… 32

Future Directions …… 34

Conclusion …… 34

References …… 36

Table 1: Stereotype Scores by Diagnosis …… 45

Table 2: Correlations Global Stereotype Scores …… 46

Table 3: Correlations Subset Scores …….. 47

Appendix A: Vignettes …….. 48

A Comparison of Stigma Levels for Individuals with Psychological Disorders and Individuals with Intellectual Disabilities

Stigma is comprised of the negative attitudes expressed toward an individual. Stigma can have harmful effects such as stereotyping, prejudice, and discrimination. Individuals exhibit different levels of stigma depending on what they are stigmatizing. For example, depression is more stigmatized than anxiety (Lynch et al., 2021). The stigma associated with one psychological disorder may not compare to the stigma associated with another. Little research has been done comparing the stigma levels individuals express towards those with various psychological disorders compared to those with an intellectual disability. Further, limited research has been done comparing this to extrinsic and intrinsic religiosity. Religiosity seems to be correlated with levels of stigma that individuals express toward those with mental illness, but little research has been done on whether it correlates with intellectual disabilities (Johnson-Kwochka et al., 2020; Power & McKinney, 2014).

Knowing which diagnosis is more stigmatized can help further future research on which tactics may be needed to destigmatize these disorders/disabilities. It also gives insight into the level of difficulty there would be in destigmatizing certain disorders/disabilities. The current study compared the levels of stigma between schizophrenia, binge-eating disorder, and intellectual disabilities. We also examined the correlation between the levels of stigma and religiosity.

Stigma

Stigma is composed of five different elements: labeling others as different, negative stereotyping, the separation into in-groups and out-groups, the loss of status which results in

discrimination, and a loss of power (Link & Phelan, 2001). Power in this instance can mean the loss of authority or autonomy. Individuals with a mental illness experience public stigmatization which can lead to discriminatory interactions with individuals who perceive them as different. Not only do individuals with mental illness experience public stigmatization, but they also experience structural discrimination. Structural discrimination deals with discriminatory practices that can be the result of legislation or individual institutions (Rüsch et al., 2005). Legislation could allocate less funds toward mental health or make it less of a priority. Individual institutions can restrict opportunities for those with mental illness by denying them jobs (Knight et al., 2003).

Stigma has been shown to set in by adolescence (Ahmad et al., 2020; Chandra & Minkovitz, 2006; DuPont-Reyes et al., 2020). This means that once an individual reaches adolescence, they are likely to already have concepts that they have stigmatized and are unlikely to change their minds. Our study is being done with college students, so their answers should reflect this. This is a problem because stigmatization is shown to be the prevalent issue in how individuals treat those with a mental illness (Stier & Hinshaw, 2007). Once the stigma is set, it becomes increasingly harder to erase.

Stigmatizing leads to negative stereotyping because of the undesirable characteristics of mental illness (Brohan et al., 2010; Link & Phelan, 2001). This is also due to the unfavorable label that is placed upon them (Stier & Hinshaw, 2007). These undesirable characteristics include hallucinations, delusions, mood swings, limited speech, or compulsive behavior. People may ostracize these individuals from society, try to control their lives because they see them as irresponsible, or treat them like children (Corrigan & Watson, 2002). Individuals with a mental illness or intellectual disability may be ostracized because they are viewed as dangerous. This

fear can hinder those individuals from being a part of a community, having a hard time finding safe housing, and obtaining a job with benefits (Barlow et al., 2016; Knight et al., 2003). The authoritarian aspect, having their lives controlled by others, is brought about by coercive treatment. The public supports forcing individuals with a mental illness into psychiatric institutions, being coerced into voluntary hospitalization, or being court-mandated to take medication (Pescosolido, 2007). Treating individuals with a mental disorder as children assumes that they need to be cared for. These individuals may not need to be cared for, and instead, this treatment dehumanizes them.

Stereotypes have worsened the stigma placed upon those with mental illness/intellectual disabilities. Some of the more popular stereotypes, such as these individuals being deranged, unstable, and irrational, are used in everyday speech and have no actual reference to these individuals, but these words continue to perpetuate the stereotypes because of their meaning (Goddu et al., 2018; Kailes, 1985). The words that perpetuate mental illness stigma are those like "crazy", "dangerous", or "insane". Words that perpetuate the stigma surrounding intellectual disabilities are "stupid", "lazy", or "retarded." The term retard and its variations have become highly stigmatized in society. Intellectual disability used to be diagnosed as mental retardation, but due to the stigma surrounding the term, it was changed to intellectual disability (Schalock et al., 2007).

Any level of stigma can cause emotional problems and affect a person's willingness to seek professional help (Chandra & Minkovitz, 2006; Corrigan et al., 2014; Stier & Hinshaw, 2007). This could lead to individuals going undiagnosed or quitting their treatment plan. Clement et al. (2015) did a systematic review of qualitative and quantitative studies that found a significant effect of stigma on hindering those with mental illness from seeking professional

help. If they do seek professional help, then the diagnosis could also lead to further stigmatization at a structural level. States have the power to deny individuals with a known mental illness the right to vote, participate as a juror, and hold an elective office (Corrigan, Markowitz, et al., 2004). Discrimination, such as the failure of landlords to rent apartments to those with a history of mental illness or losing custody of a child, increases if others know the diagnosis (Stier & Hinshaw, 2007). In this instance, social distance refers to the rejection of a member of society based on their identification with a group, in this case, the group being those with a mental illness or intellectual disability. Individuals who have a mental illness or intellectual disability will be stigmatized whether they get help or not.

There are nine different subtypes into which stigma can be categorized: blame, anger, pity, help, dangerousness, fear, avoidance, segregation, and coercion. Other researchers classify these nine subtypes into the following dimensions: emotional responses (anger, pity, fear), casual attributes (blame), rejecting responses (help, avoidance, segregation, and coercion), and dangerousness (Corrigan et al., 2003). Emotional response represents the emotions an individual feels when they learn of someone else's disorder or disability. Casual attributes are attributes that a person will prescribe to someone who has a disorder or disability solely based on the stereotypes surrounding the disorder or disability. The rejecting responses category represents the unhelpful or negative responses an individual has towards a person with a disorder or disability. In the rejecting responses, help actually means being unlikely to help an individual who has a disorder. Lastly, dangerousness represents how likely a person is to believe that someone with a disorder or disability is a danger to the person's safety.

Corrigan et al. (2003) found an association amongst all four dimensions. Casual attributes lead to blaming individuals for their condition because the disorder is perceived as controllable.

The belief that individuals are at fault for their disorder then leads to emotional responses. When an individual has an emotional response, that response will then lead to rejecting response. This is due to the emotional responses primarily being negative emotions such as fear, anger, and decreased levels of pity. The dangerousness category increases the fear aspect of the emotional response. When an individual is afraid of a person with a disorder or disability, the individual will be more likely to support coercive efforts like forced hospitalization.

Stigma can look different depending on the diagnosis of the individual. The differences depend on which of the nine subtypes of stigma the diagnosis is high in. The current study assessed the level of stigma for each of the nine subtypes for each diagnosis. We compared stigma levels amongst schizophrenia, binge-eating disorder, and intellectual disability.

Schizophrenia

Schizophrenia affects a person's ability to think, feel, or behave clearly. It often includes hallucinations, delusions, disordered behavior/speech, and often affects the person's social life in a negative way. To be diagnosed, an individual must have experienced at least two of the following symptoms for at least a month: delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, or negative symptoms. At least one of the symptoms must be delusions, hallucinations, or disorganized speech. They must also experience a disturbance in the social, personal, and work aspects of their lives, as well as this disturbance persisting for at least 6 months. Symptoms can be categorized as positive, negative, and disorganized. Positive symptoms can be described as an addition to normal functioning. These would be aspects like hallucinations and delusions. Negative symptoms are those that take away from normal functioning like apathy and anhedonia. (American Psychiatric Association, 2013). Anhedonia is characterized by the inability to experience pleasure and reduced motivation (Barlow et al.,

2016). Disorganized symptoms consist of rapid shifts in topics, repetition of words, inappropriate emotional responses, and lack of impulse control (American Psychiatric Association, 2013).

Some individuals with schizophrenia have attested to avoiding telling others about their diagnosis, hearing offensive comments, and being worried about how they are perceived by the world (Dickerson et al., 2002). Those who tell people about their diagnosis may lose friends or family members because they no longer wish to be associated with someone who has schizophrenia. Offensive comments that a person with schizophrenia can hear are derogatory towards those with schizophrenia. These derogatory comments could be calling someone with schizophrenia crazy or insane, or the comments could be saying that someone with schizophrenia is dangerous and needs to be locked up. Individuals with schizophrenia are worried about how they will be perceived by the world because once individuals know a person has schizophrenia, the individuals will treat them with contempt and negative attitudes. Doctors can act like they are not real people, landlords may not rent to them, and family members can think that they are dangerous (Knight et al., 2003). This can wear down on their self-esteem and self-view. They essentially become outcasts of society.

Schizophrenia is not a curable disorder as of today, but it is treatable and manageable. The most common methods of treatment are antipsychotic medication and psychological therapy (Malmberg et al., 2001). Treatment does not always lead to completely normal functioning. Antipsychotic medication can cause tardive dyskinesia, involuntary facial movements, and other involuntary movements. These side effects are undesirable characteristics in society. This can increase the stigma placed upon individuals with schizophrenia because it further sets them apart from the normal aspect of society (Sajatovic & Jenkins, 2007). Sibicky and Dovidio (1986) found that participants who were perceived to be seeking psychological therapy were considered

to be more, “defensive, awkward, insecure, sad, cold, and unsociable,” (p. 152) by other participants. Thus, both antipsychotic medication and psychological therapy are associated with stigma. Malmberg et al. (2001) found that there was no significant difference between just taking medication versus medication and psychotherapy for severe schizophrenia. They also found that those who only had therapy were less likely to be discharged from the hospital. This is due to the persistence of symptoms and the staff believing patients are not properly managing their symptoms. Medication is considered to be the best option despite the stigma and negative side effects.

Many with this diagnosis face problems with employment. A big contributing factor to the low unemployment rate is stigma (Corrigan & Watson, 2002). Many people think that those who exhibit schizophrenia are less competent. This can create a hostile work environment because people do not trust their coworkers with schizophrenia. Those with schizophrenia are also discriminated against during the hiring process, which can lead to them not being hired (Corrigan, Markowitz et al., 2004). They can even have a hard time getting vocational services to help them (Marwaha & Johnson, 2004). By not being able to attain jobs, they are left to stay on a long-term course of unemployment. The independent living, cognitive stimulation, and social skill opportunities that come with employment are often not an option for individuals with schizophrenia, which further diminishes their ability to get help.

Binge-Eating Disorder

Binge eating disorder can be described as the compulsion to eat an unusually large amount of food without the ability to stop. This happens at least once weekly for three months without compensatory measures (American Psychiatric Association, 2013). Compensatory measures would be ways that they try to make up for their binges. This could be through

exercise, using laxatives, diuretics, self-induced vomiting, and more. If they were using compensatory measures, then the diagnosis would be bulimia nervosa.

Those who binge eat usually do it in private. They have a fear of others finding out about their binge episodes, so they do it when no one is around and never talk about it (Barlow et al., 2016). This isolates the person who has this disorder from their social support, which can lead to the person feeling a lack of support and can further affect their mental health. If they feel like they have no one they can turn to, then they will continue in this cycle of binging.

Out of the DSM-diagnosed eating disorders, which include pica, rumination disorder, avoidant/restrictive food intake disorder, binge-eating, bulimia nervosa, and anorexia nervosa (American Psychiatric Association, 2013), people who have binge-eating disorder are considered most responsible for their condition (Puhl & Suh, 2015). Compared to participants who were obese, those with binge-eating disorder are blamed more for their condition (Bannon et al., 2009). This is due to individuals feeling more justified for their stigma. Since these individuals view binge-eating as controllable, they feel that their feelings of stigma are justified because those with binge-eating disorder should be able to control their eating habits. Those with binge-eating disorder are also blamed more for their disorder than those with major depressive disorder (Ebneter & Latner, 2013). This is due largely to the fact that binge-eating is considered to be more controllable than major depressive disorder. It is seen as a behavior they can control, and they are being lazy by not controlling their eating habits. Those with binge-eating disorder are also rejected by society because of their weight (Puhl & Suh, 2015). Since those who have binge eating disorder do not purge, they will only continue to gain weight. The more weight they gain, the more ostracized they become from society (Bannon et al., 2009).

Being ostracized from society has different components. Individuals with binge-eating disorder are seen as less intelligent, so they are less likely to be offered employment (Barlow et al., 2016). Being viewed as unintelligent also comes into play when trying to pay for college. For example, Crandall (1991) found a negative correlation between BMI scores and the financial support obese college students received. Likewise, parents would give more financial support to their skinnier children than their obese children. Further, people do not want to be their friends, so they have less social support. Peers assume that someone who is obese is lazy and self-indulgent, so they are unwilling to befriend them (Puhl & Brownell, 2001). People are not as willing to sell homes or rent those who are obese apartments because they view them as unreliable (Barlow et al., 2016).

Recent research has shown that binge-eating disorder may be caused by diminished impulse control dealing with the improper functioning of corticostriatal circuitry regulation (Kessler et al., 2016). Some could misinterpret this data by assuming that this means that those with binge-eating disorder need to control their impulses better. Individuals may feel more justified in saying that those with binge-eating disorder are responsible for their disorder. In reality, though, there is still not enough known about the cause of binge-eating disorder (Kessler et al., 2016), and all psychological disorders are looked at from the biopsychosocial model lens, which views etiology as a combination of biological, psychological, and social factors. If their corticostriatal circuitry regulation is not functioning properly, then there is a neurological explanation for why those with binge-eating disorder cannot control their impulses. This impairment can contribute to the problem and is not in their control; therefore, this is not a simple issue of behavioral impulse control.

Intellectual Disability

Intellectual disabilities are characterized by having below-average intellectual functioning as well as adaptive functioning impairments. Adaptive functioning is determined by comparing how well a person can handle judgment, reasoning, and independence compared to individuals in the same age range. Those with an intellectual disability can be described as *high functioning* or *low functioning*. Lower/higher functioning deals with the level of severity of the intellectual disability. This is based on their conceptual, social, and practical skills as well as their cognitive functioning (American Psychiatric Association, 2013). Individuals who have lower intellectual functioning are typically more stigmatized than those who are higher functioning (Phillips et al., 2019).

The stigmatization of individuals with an intellectual disability is not a new concept and can be seen throughout time. Mackleprang and Salsgiver (1996) discussed the unfair treatment and ideologies that surround those with a disability from ancient times until the 1990s. Disabilities were seen as brought up by evil spirits or the effects of sin. The common ideology was to hide those with a disability away from society or leave them to die. Pelleboer-Gunnink et al. (2021) has found that the stigma toward those with an intellectual disability is still prominent today. They found that the stigma surrounding those with an intellectual disability can be thought of in positive and negative traits. A positive trait would be friendliness. This is considered a problem because individuals without an intellectual disability will assume that all individuals with an intellectual disability are overly friendly. This can lead to people without an intellectual disability overstepping normal societal boundaries with individuals with an intellectual disability. Negative traits would be unintelligent and dependent. If an individual believes that someone with an intellectual disability is unintelligent or dependent upon them, then those with an intellectual

disability can be treated without respect. This leads to those with an intellectual disability being unable to make their own decisions and not being taken seriously (Ali et al., 2016; Pelleboer-Gunnink et al., 2021)

Students with intellectual disabilities are more likely to internalize stigma compared to students without an intellectual disability, which can lead to low self-esteem. They are also more at risk of developing mental health issues (Ditchman et al., 2013). Negative correlations have been seen between the level of internalized stigma and the quality of life for individuals with an intellectual disability (Mak & Cheung, 2008). People tend to pity those with intellectual disabilities which does more harm than good. It can be seen as degrading to have people pity them and treat them as though they are not fully accepted into society (Phillips et al., 2019). This can result in a greater level of internalized stigma.

People are more likely to have positive perceptions about individuals with intellectual disabilities if they have more positive interactions with them. People having more positive perceptions of individuals with intellectual disabilities is also true for those who have more knowledge about what an intellectual disability is (Phillips et al., 2019). However, recent studies have shown that care providers may also be stigmatizing their clients (Bigby et al., 2009; Horsfall et al., 2010; Pelleboer-Gunnink et al., 2021). While care providers may have more contact and knowledge than the average person, they are still prone to thinking less of those with an intellectual disability. They may feel the need to be overprotective or not let their clients make informed decisions. This stigma increases the more severe the intellectual disability is.

Religious Orientation

Johnson-Kwochka et al. (2020) has shown that there is a correlation between religiosity and stigmatization of mental disorders. The current study is looking into the relationship between

stigmatization of mental disorders with intrinsic religiosity, extrinsic-social religiosity, and extrinsic-personal religiosity. The idea of intrinsic and extrinsic religious orientation was derived by Gordon Allport. He used religious orientation to describe the motives of individuals and to describe prejudice (Kahoe, 1985). Later, extrinsic religiosity was separated into different types, extrinsic-social and extrinsic-personal (Johnson-Kwochka et al., 2020).

Extrinsic religiosity involves using religion for social gain or personal comfort. It is more of a means to an end rather than a personal relationship with God. It can be sorted into two different types: social and personal. Extrinsic-social is about social gain and how you are perceived in society. Extrinsic-personal is when one uses religion as a means to make themselves feel better during hard times and only during hard times. The personal aspect deals with wanting to find comfort (Johnson-Kwochka et al., 2020; Power & McKinney, 2014). Extrinsic-social religiosity has been shown to have a positive correlation with mental illness stigma (Allport & Ross, 1967; Johnson-Kwochka et al., 2020).

Intrinsic religiosity is when someone lives life the way their religion directs and tends to have a more relationship-based religion. They are not trying to gain something from being religious, but instead, they do religion for themselves and can find comfort in it. This is different from extrinsic-personal religiosity because they are not using religion to find comfort in a bad situation, but instead, internalize their religion so that it brings them peace and comfort in every situation (Johnson-Kwochka et al., 2020).

Rationale and Hypotheses

Stigma has constantly been an obstacle that needs to be overcome. Knowing what ways disorders and disabilities are stigmatized helps with combating the stigma because research can focus on targeting those specific areas. It also helps to know how religiosity affects the level of

stigma because religion is a large part of peoples' lives. By taking highly stigmatized mental disorders and comparing them to an intellectual disability, we provided additional insights into which is more stigmatized. We also tested to see if extrinsic or intrinsic religiosity is correlated with the level of stigma.

Schizophrenia has been shown to be highly stigmatized in society. Those with schizophrenia are stereotyped as dangerous and uncontrollable (Brohan et al., 2010; Corrigan et al., 2003; Corrigan, Markowitz et al., 2004; Corrigan & Watson, 2002; Johnson-Kwochka et al., 2020; Knight et al., 2003). There has been an increase in advocacy of mandated treatment for those with mental illness, specifically those who have schizophrenia (Monahan et al., 2003). We hypothesized that schizophrenia will be significantly higher than binge-eating disorder and intellectual disabilities on the stigma subtypes *anger, help, dangerousness, fear, avoidance, segregation,* and *coercion*.

Due to the lack of research on the topic, there is little evidence that points to whether mental illnesses are more or less stigmatized compared to intellectual disabilities. Scior et al., (2013) have shown that social distance was higher for those with schizophrenia than intellectual disability but did not show a difference in interaction with the individuals. Those with intellectual disabilities are treated as though they are children which increases the amount of pity individuals feel for them (Bigby et al., 2009; Ditchman et al., 2013), though Corrigan and Watson (2002) found that individuals with schizophrenia were less likely to be pitied. Based on this, we hypothesized that intellectual disabilities will be stigmatized more for the subtype *pity*.

Compared to eating disorders, individuals with schizophrenia have been more stigmatized and perceived as more dangerous (Johnson-Kwochka et al., 2020), though binge-eating is predicted to be deemed more controllable though (Johnson-Kwochka et al., 2020;

Stewart et al, 2006). Since individuals with intellectual disabilities are believed to be dependent and incompetent (Pelleboer-Gunnink et al., 2021), they are not seen as the cause of their disorder. Our hypothesis was that binge-eating disorder would be more stigmatized than schizophrenia and intellectual disabilities for the subtype *blame* because it represents controllability.

Johnson-Kwochka et al. (2020) found that extrinsic-social religiosity had a positive correlation with stigma for mental illness. Based on their study, we hypothesized that extrinsic-social religiosity will have a positive correlation with schizophrenia and binge-eating disorder. Very limited research has been done on this specific topic, so there is little evidence to support any further hypotheses regarding the other aspects of religiosity with intellectual disabilities. Consequently, extrinsic-personal and intrinsic religiosity were included only in an exploratory nature.

Method

Participants

This study was taken by 276 participants at a faith-based liberal arts university in the southern United States. Students may have been offered course credit by their professors or points in their social club, but otherwise, no compensation was given. We were unable to use 75 participants' data because of failure to complete the survey; 7 of the participants did not complete anything after the demographics section, and 68 participants were removed because they did not complete all of the vignettes.

Participants had an age range of 18-68 (n = 177, M = 19.95, SD = 3.85). Of the 201 participants' that were kept, 155 were females, 43 were males, and 3 were non-binary/third gender. Six percent identified as African American/Black, 3.5% as Asian/Pacific Islander, 86.6% as Caucasian/White, 6% as Hispanic/Latino/a, 2.5% as American Indian, and 0.5% as other. Of

the sample, 191 were Christian, 4 were non-religious, 4 were Agnostic, 1 was Omnist, and 1 did not specify their religion.

Assessments and Measures

Age Universal I-E Scale

The Age Universal I-E Scale (Maltby, 1999) was used to determine religiosity and consisted of 12 questions measuring three different types of religiosity. Of the 12 questions, 6 items measured intrinsic religiosity ($\alpha = .90$), 3 measured extrinsic-personal religiosity ($\alpha = .69$), and 3 measured extrinsic-social religiosity ($\alpha = .76$). Each question was rated on a scale of 1-3 with 1 being *no*, 2 as *not certain*, and 3 as *yes*. An example of an intrinsic religiosity question is, "I enjoy reading about my religion." For extrinsic-personal religiosity, it would be, "I pray mainly to gain relief and protection." An example of extrinsic-social religiosity is, "I attend religious services because it helps me make friends."

Level of Familiarity Scale

Participants also answered the Level of Familiarity Scale (LOF; Corrigan, 2012). The scale had 11 statements to gauge how familiar a person was with mental illness. Participants were to mark by each statement that represented their experience with mental illness. Each statement has a ranked score of 1-11 to determine how intimate the participant was with mental illness. Statements ranged from, "I have never observed a person that I was aware had a severe mental illness," (ranked 1) to "I have a severe mental illness," (ranked 11). Out of the statements they choose, whichever was ranked the highest became their score. For example, if a participant chose "I have watched a movie or television show in which a character depicted a person with mental illness," (ranked 3) and "I have worked with a person who had a severe mental illness at my place of employment," (ranked 6), they would receive a score of 6. A score of 1 means little

intimacy, 7 means medium intimacy, and 11 means most intimate. The reliability for the means was 0.83 (Corrigan, Edwards et al., 2001).

Attribution Questionnaire Short Form

The Attribution Questionnaire Short Form (AQ-27; Corrigan, 2012) measures nine different stigma factors: blame, anger, pity, help, dangerousness, fear, avoidance, segregation, and coercion. The AQ-27 includes 27 items that are scored on a Likert-type scale from 1-9 with 1 being *not at all/not likely* and 9 being *very much/very likely*. There were three questions per subscale and all three questions for avoidance are reverse scored.

Blame represents how others perceive the controllability of someone's mental illness. An example would be, "How responsible, do you think, is Harry for his present condition?" Anger is feeling anger at a person because of their mental illness, so an example of a question would be, "How irritated would you feel by Harry?" Pity measures how much sympathy a person has towards someone who is overcome by their mental illness. A question that represents this is, "How much concern would you feel for Harry?" Help measures how likely someone would be willing to help someone with a mental illness. One of the questions that measures this would be, "How certain would you feel that you would help Harry?" Dangerousness can be thought of as how safe it is to be around a person with a mental illness. An example would be, "I would feel threatened by Harry." Fear is how fearful someone is of a person with mental illness because they think that they might be dangerous. A question that represents this would be, "How frightened of Harry would you feel?" Avoidance measures how much someone would be willing to avoid someone with a mental illness, and an example would be, "If I were a landlord, I probably would rent an apartment to Harry." Segregation describes wanting to put those with a mental illness into an institution. One of the questions that measures this asks, "How much do

you think an asylum, where Harry can be kept away from his neighbors, is the best place for him?" Coercion measures how likely someone is to force an individual to take their medication or get treatment. A question that represents this is, "How much do you agree that Harry should be forced into treatment with his doctor even if he does not want to?"

In addition to the subscales, the AQ-27 can be used to measure the global stereotype score. Peterson (2018) created a global stereotype score by combining the sum of each subscale's scores together. A higher score indicates a higher level of stigma. We modified her global stereotype score by reverse scoring help. This is because a lower score indicates more stigma for the subscale help. By reversing the scores, we hope to see a more accurate measure of global stereotype levels. The reliability for the global stereotype score was .89 for the schizophrenia condition, .75 for the binge-eating disorder condition, and .78 for the intellectual disability condition.

Materials

Participants were asked to read three different vignettes in a randomized order. The vignettes portrayed someone with schizophrenia (Appendix A; Corrigan et al., 2003), binge-eating disorder (Appendix B; adapted from Ebneter & Latner, 2013), and an intellectual disability (Appendix C; Morin, 2013). Each vignette is about a paragraph long, told in the third person point of view, describing their lives based on their disorder. The binge-eating disorder vignette was modified to have a male-gendered name, Mark, and shortened to be more consistent in length with the other vignettes.

The AQ-27 was modified by name for each vignette it was attached to. Harry was used for the schizophrenia vignette, so the name used in the AQ-27 was Harry. For the intellectual

disability vignette, Raphael was used, so in turn, it was the name used for that AQ-27. Lastly, Mark was used for the binge-eating disorder vignette, so that name was used in that AQ-27.

Procedure

This study was conducted solely online through Qualtrics. Participants had to agree to the informed consent before the software would allow them to move onto the demographics. After the demographic section, the first measurement they received was the Age Universal I-E Scale. Next was the Level of Familiarity Scale. For the last three measurements, all participants received each vignette (schizophrenia, binge-eating, intellectual disability) followed by the AQ-27 for each vignette. Although all participants received each one of these, they saw the vignettes in a randomized order. After the three vignettes and three AQ-27s, a debriefing form was given.

Results

Analysis of Global Score

A one-way repeated-measures ANOVA was performed to investigate the effect of diagnosis (schizophrenia, intellectual disability, or binge eating disorder) on global stereotype scores. Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 78.38$, $p < .001$, therefore Greenhouse-Geisser corrected tests are reported ($\varepsilon = .64$). The results found a significant difference in global stereotype scores based on diagnosis, $F(1.287, 126.104) = 451.23$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on the global stereotype score than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$), and individuals with an intellectual disability scored significantly higher on the global stereotype score than individuals with binge-eating disorder ($p = .045$).

Analysis of Subtypes

A one-way repeated-measures multivariate analysis of variance (MANOVA) was performed to investigate the effect of diagnosis (schizophrenia, intellectual disability, or binge eating disorder) on nine components of stigmatizing attitudes and beliefs (blame, anger, pity, help, dangerousness, fear, avoidance, segregation, and coercion). See Table 1 for group means and standard deviations. The overall MANOVA reached significance, $F(18, 183) = 89.95$, $p < .001$, Wilks' Lambda = .10. Univariate follow-up was conducted on each component of stigma with post hoc pairwise comparisons using Bonferroni corrections. For Blame, Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 45.12$, $p < .001$, therefore Huynh-Feldt corrected tests are reported ($\varepsilon = .84$). The results found a significant difference in blame based on diagnosis, $F(1.675, 334.982) = 252.63$, $p < .001$. Specifically, individuals with binge-eating disorder scored significantly higher on blame than individuals with schizophrenia ($p < .001$) and individuals with intellectual disability ($p < .001$), and individuals with schizophrenia scored significantly higher on blame than individuals with intellectual disability ($p < .001$).

For Anger, Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 31.48$, $p < .001$, therefore Huynh-Feldt corrected tests are reported ($\varepsilon = .88$). The results found a significant difference in anger based on diagnosis, $F(1.759, 351.755) = 129.97$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on anger than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$), and individuals with binge-eating disorder scored significantly higher on anger than individuals with an intellectual disability ($p = .001$).

For Pity, Mauchly's test indicated that the assumption of sphericity had not been violated, $\chi(2) = 2.89$, $p = .236$. The results found a significant difference in pity based on

diagnosis, $F(2, 400) = 19.88$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on pity than individuals with binge-eating disorder ($p < .001$), and individuals with an intellectual disability scored significantly higher on pity than individuals with binge-eating disorder ($p < .001$).

For Help, Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 16.37$, $p < .001$, therefore Huynh-Feldt corrected tests are reported ($\varepsilon = .94$). The results found a significant difference in help based on diagnosis, $F(1.87, 374.04) = 115.20$, $p < .001$. Specifically, individuals with schizophrenia scored significantly lower on help than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$), and individuals with binge-eating disorder scored significantly higher on help than individuals with an intellectual disability ($p = .002$).

For Dangerousness, Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 143.91$, $p < .001$, therefore Greenhouse-Geisser corrected tests are reported ($\varepsilon = .66$). The results found a significant difference in dangerousness based on diagnosis, $F(1.32, 264.063) = 1211.53$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on dangerousness than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$).

For Fear, Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 237.49$, $p < .001$, therefore Greenhouse-Geisser corrected tests are reported ($\varepsilon = .59$). The results found a significant difference in fear based on diagnosis, $F(1.179, 235.735) = 792.06$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on fear than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$).

For Avoidance, Mauchly's test indicated that the assumption of sphericity had not been violated, $\chi(2) = 1.86$, $p = .395$. The results found a significant difference in avoidance based on diagnosis, $F(2, 400) = 389.61$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on avoidance than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$), and individuals with an intellectual disability scored significantly higher on avoidance than individuals with binge-eating disorder ($p < .001$).

For Segregation, Mauchly's test indicated that the assumption of sphericity had been violated, $\chi(2) = 208.76$, $p < .001$, therefore Greenhouse-Geisser corrected tests are reported ($\varepsilon = .61$). The results found a significant difference in segregation based on diagnosis, $F(1.212, 242.466) = 613.49$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on segregation than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$).

For Coercion, Mauchly's test indicated that the assumption of sphericity had not been violated, $\chi(2) = 2.23$, $p = .327$). The results found a significant difference in coercion based on diagnosis, $F(2, 400) = 1329.76$, $p < .001$. Specifically, individuals with schizophrenia scored significantly higher on coercion than individuals with an intellectual disability ($p < .001$) and individuals with binge-eating disorder ($p < .001$), and individuals with an intellectual disability scored significantly higher on coercion than individuals with binge-eating disorder ($p < .001$).

Correlation Between Stigma and Religiosity

The relationship between diagnosis (schizophrenia, binge-eating disorder, intellectual disability) and religiosity (intrinsic religiosity, extrinsic-social religiosity, extrinsic-personal religiosity) was investigated using Pearson's correlation coefficient. See Table 2 for the full correlation matrix. There was a small, positive correlation between the global stereotype score

for intellectual disability and extrinsic-personal religiosity, $r = .18$, $n = 160$, $p = .02$, with high intrinsic religiosity being associated with higher stigma for intellectual disabilities.

The relationship between stigma factors (blame, anger, pity, help, dangerousness, fear, avoidance, segregation, coercion) for each diagnosis (schizophrenia, binge-eating disorder, intellectual disability) and religiosity (intrinsic religiosity, extrinsic-social religiosity, extrinsic-personal religiosity) was investigated using Pearson's correlation coefficient. See Table 3 for the full correlation matrix. There was a small, positive correlation between dangerousness for schizophrenia and intrinsic religiosity, $r = .15$, $n = 200$, $p = .034$, with high intrinsic religiosity being associated with higher dangerousness for individuals with schizophrenia. There was a small, negative correlation between blame for intellectual disability and intrinsic religiosity, $r = -.15$, $n = 200$, $p = .03$, with high intrinsic religiosity being associated with less blame for individuals with an intellectual disability. There was a small, positive correlation between pity for intellectual disability and intrinsic religiosity, $r = .23$, $n = 200$, $p = .001$, with high intrinsic religiosity being associated with more pity for individuals with an intellectual disability. There was a small, positive correlation between help for intellectual disability and intrinsic religiosity, $r = .20$, $n = 200$, $p = .004$, with high intrinsic religiosity being associated with more help for individuals with an intellectual disability. There was a small, negative correlation between fear for intellectual disability and intrinsic religiosity, $r = -.20$, $n = 200$, $p = .005$, with high intrinsic religiosity being associated with less fear for individuals with an intellectual disability. There was a small, negative correlation between segregation for intellectual disability and intrinsic religiosity, $r = -.16$, $n = 200$, $p = .027$, with high intrinsic religiosity being associated with less fear for individuals with an intellectual disability. There was a small, positive correlation between help for binge-eating disorder and intrinsic religiosity,

$r = .22$, $n = 200$, $p = .001$, with high intrinsic religiosity being associated with less blame for individuals with binge-eating disorder.

Discussion

The results of this direct comparison of disorders support our initial hypotheses and provide validation of the variation of stigmatization amongst diagnoses. For global stereotype scores, schizophrenia was stigmatized more than intellectual disabilities and binge-eating disorder, and intellectual disabilities were stigmatized more than binge-eating disorder. This is in line with our other data that shows schizophrenia being more stigmatized in most subtypes and intellectual disabilities being more stigmatized than binge-eating in most subtypes. Previous research has shown stigma to be high in most of the subtypes (Brohan et al., 2010; Corrigan et al., 2003; Corrigan, Markowitz et al., 2004; Corrigan & Watson, 2002; Johnson-Kwochka et al., 2020; Knight et al., 2003; Monahan et al., 2003).

Schizophrenia was more stigmatized than intellectual disabilities for blame, anger, help, dangerousness, fear, avoidance, segregation, and coercion. Schizophrenia was more stigmatized than binge-eating disorder for anger, pity, help, dangerousness, fear, avoidance, segregation, and coercion. Binge-eating disorder was more stigmatized for blame than schizophrenia and intellectual disabilities. Binge-eating disorder was also more stigmatized than intellectual disabilities for anger. Intellectual disabilities were more stigmatized than binge-eating disorder for pity, help, avoidance, and coercion.

As seen in previous literature (Bannon et al., 2009; Puhl & Suh, 2015) individuals with binge-eating disorder are blamed more for their disorder. This is true in our study in comparison to both schizophrenia and intellectual disabilities. Our findings also show that individuals with schizophrenia are blamed more for their disorder than individuals with an intellectual disability.

This may be because individuals with an intellectual disability are more likely to be seen as harmless (Pelleboer-Gunnink et al., 2021) while those with schizophrenia are seen as dangerous (Knight et al., 2003).

People experienced more anger towards individuals with schizophrenia than binge-eating disorder and intellectual disabilities, and they are more likely to be angry at individuals with binge-eating disorder than individuals with an intellectual disability. This anger is because the individual has this disorder. Individuals may be angrier towards those with schizophrenia because they are not seen as productive members of society but instead as a hindrance (Corrigan, Markowitz et al., 2004; Marwaha & Johnson, 2004). People may have more anger towards individuals with binge-eating disorder than individuals with an intellectual disability because those with binge-eating disorder are viewed as lazy and unproductive (Ebneter & Latner, 2013).

Participants were also more likely to pity those with schizophrenia and an intellectual disability than those with binge-eating disorder. Further, individuals with an intellectual disability were more likely to experience pity than those with schizophrenia. This is largely due to the stereotype that those with an intellectual disability have the mentality of a child and should be treated as a child (Pelleboer-Gunnink et al., 2021; Wilton & Fudge Schormans, 2020). In contrast, individuals with schizophrenia are viewed as dangerous (Knight et al., 2003), so those with schizophrenia are less likely to be pitied. Binge-eating disorder is viewed as treatable (Mond & Hay, 2008), as opposed to intellectual disabilities which are viewed as helpless causes (Fine & Asch, 1988). This can lead to individuals feeling sorrier for those with intellectual disabilities because their condition is chronic.

Individuals were less likely to help those with schizophrenia as opposed to those with an intellectual disability or binge-eating disorder and less likely to help someone with an intellectual

disability than someone with binge-eating disorder. As Knight et al. (2003) has shown, those with schizophrenia are seen as dangerous. This leads to individuals being less likely to help them because they do not want to be hurt. Individuals may be more likely to help someone with binge-eating disorder, as opposed to someone with an intellectual disability, because they may feel like they do not have the ability to help someone with an intellectual disability. Individuals with intellectual disabilities are treated poorly because people misunderstand how to interact with them (Ali et al., 2016; Mackleprang and Salsgiver, 1996; Mak & Cheung, 2008; Pelleboer-Gunnink et al., 2021). With more interaction, people can better understand how to interact with someone who has an intellectual disability (Phillips et al., 2019). This lack of understanding of how to interact may transfer over to not understanding how to help them.

In congruence with previous literature (Knight et al., 2003), schizophrenia is seen as dangerous. Individuals are more likely to think someone with schizophrenia is dangerous rather than someone with an intellectual disability or binge-eating disorder. We see the same results with fear because fear is based on how dangerous an individual is (Corrigan, 2012). Therefore, individuals are more fearful of people with schizophrenia than those with binge-eating disorder or an intellectual disability.

Individuals are more likely to avoid someone with schizophrenia as opposed to those with an intellectual disability or binge-eating disorder. They are also more likely to avoid someone with an intellectual disability than someone with binge-eating disorder. For schizophrenia, this avoidance may be because they are perceived as dangerous (Knight et al., 2003). People may be more likely to avoid someone with an intellectual disability because they perceive that individual as different or because they have misconstrued notions on how to interact with someone who has an intellectual disability. Pelleboer-Gunnink et al. (2021) have

shown that individuals tend to treat those with intellectual disabilities as if they are children. People may assume that they cannot have intellectually stimulating conversations with an individual with an intellectual disability, or that they will need to treat someone with an intellectual disability like a child in their interactions. Gilmore and Cuskelly (2014) have shown that people tend to devalue individuals with intellectual disabilities. They also discredit the ability of those with intellectual disabilities to emotionally connect and effectively communicate.

Segregation is higher for those with schizophrenia than those with binge-eating disorder and those with an intellectual disability. Individuals are more likely to exclude them from the community or send them to an institution. This might be because of their perceived dangerousness (Knight et al., 2003) or because of the undesirable characteristics that schizophrenia may produce. Their symptoms are not viewed favorably by society and can get them excluded from communities that do not wish to have those with schizophrenia in their neighborhood (Barlow et al., 2016; Brohan et al., 2010; Link & Phelan 2001).

As shown in Pescosolido (2007), forced institutionalization (coercion) is supported by the public. Individuals are more likely to endorse coercion for individuals with schizophrenia than those with binge-eating disorder and intellectual disabilities. They are also more likely to endorse coercion for individuals with an intellectual disability than those with binge-eating disorder. This may be due to intellectual disabilities and schizophrenia being seen as uncontrollable. The reasoning would be that since these disorders are not controllable, then they need to be kept where they can be looked after. Furthermore, individuals with schizophrenia can have disorganized behavior which can lead to them not being able to care for themselves or being viewed as a threat to themselves and others (Humphreys et al., 1992). This in turn can lead people to believe institutionalization is the best option for those with schizophrenia. Since many

view those with intellectual disabilities as dependent (Pelleboer-Gunnink et al., 2021), forcing those individuals into a constant care facility would be seen as a good way to make sure they have someone to depend on who can help. Individuals with binge-eating disorder are only seen as a danger to their own health, not to other people (Reas, 2017). Since there is no concern for them inflicting damage upon society, forced institutionalization is not seen as a solution.

Small correlations were found between the stigma of mental illness and religiosity. Most of the correlations were found between stigma for intellectual disabilities and intrinsic religiosity. Our hypotheses concerning extrinsic-social religiosity found no support from the data as there were no correlations found between any stigma for any of the disorders and extrinsic religiosity. The correlations found will be discussed further in the limitations section.

Many programs have tried to reduce the stigma associated with mental illness. Dalky (2012) provided an overview of which programs showed positive effects in reducing mental illness. Education and contact-based programs have been shown to reduce the likelihood of an individual supporting segregation and coercion. These positive effects were still seen after a 1-week follow-up (Corrigan, Watson et al., 2004). Masuda et al. (2007) have shown that acceptance and commitment therapy (ACT) can reduce stigmatization. ACT is a behavioral and educational intervention that can reduce in-group bias. By using biogenetic-based or psychosocial-based explanation models, a reduction of stereotypes and social distance can be seen (Lincoln et al., 2008). Furthermore, the biogenetic model can help reduce blame.

When looking to reduce stigmatization, education efforts must be tailored to the unique stigma for each disorder. As shown in this study, each disorder is stigmatized more based on different subtypes. Working to reduce blame for an intellectual disability would not be as helpful as working to reduce blame for binge-eating. Before selecting a program to reduce stigma for a

disorder, educators must know which stigma subtype the disorder is high in and which program has been shown to reduce the stigma associated with those subtypes.

Limitations

A limitation to our study is a problem with generalizability. Participants were obtained from a convenience sample of mostly white females from a faith-based university. Furthermore, those who decided to participate may have been different from those who did not participate. A more diverse sample would be needed to generalize to the average college student. To generalize to the general public, there would need to be a more diverse sample including age, religion, race, education level, etcetera.

Among those who did participate, there was a problem with failure to complete the survey. This could be due to interference while taking the survey, the construction of the survey, or participants willingly discontinuing the survey. Since the survey was completely anonymous online, there is no way to tell if participants willingly failed to complete the survey or had other circumstances that hindered them from finishing. The survey was long, so the number of questions may have dissuaded people from completing the survey. There was also a problem with the failure of participants to report their age. We speculate that this may be due to the construction of the survey. Age was the first answer participants were required to answer and was at the top of the screen. This question may have been easy for them to miss if they were not paying close attention.

Another limitation is with the correlations we found between stigma and religiosity because some correlations did not match with previous literature. Small positive correlations were found between dangerousness for schizophrenia and intrinsic religiosity, pity and help for intellectual disabilities and intrinsic religiosity, and help for binge-eating disorder and intrinsic

religiosity. Previous literature (Allport & Ross, 1967; Johnson-Kwochka et al., 2020) has not found links between intrinsic religiosity and higher stigma. Due to previous literature, the large sample size, and the correlations being small, we do not believe these correlations provided accurate insight into a relationship between stigmatization and religiosity. We also do not believe the negative correlations found -blame, fear, and segregation for intellectual disability and intrinsic religiosity- provide accurate insight. This is due to the correlations being small, which indicates a lack of practical significance, and having no support from previous literature.

We had hypothesized there would be correlations between extrinsic-social religiosity and stigma, but instead, we did not find any correlations between extrinsic-social religiosity and stigma. The bulk of our correlations were found between intrinsic religiosity and stigma. This may be due to a social desirability response on the Age-Universal I-E scale. The majority of participants described themselves as Christians, and Christianity has a large emphasis on a personal, unselfish connection with God. This could have led participants to respond in a way that they believe reflects how a Christian should respond.

The Level of Familiarity Scale was not a valid measure to use as a covariate in our study. We found no significant correlation between familiarity and stigmatization, a necessary assumption for running an analysis of covariance. However, we still believe that familiarity is a good covariate for stigmatization. Many studies (Corrigan, Edwards et al., 2001; Corrigan, Green et al., 2001; Corrigan & Nieweglowski, 2019; Holmes et al., 1999; Link & Cullen, 1986; Penn et al., 1994) have shown this to be the case. We believe this discrepancy is due to participants not understanding what a severe mental illness is. Over half of the participants said they know someone with a severe mental illness or have a severe mental illness themselves. According to NAMI (2022), only 5.6% of adults experienced a mental illness in 2020. Of our participants,

12.4% of them said they had a severe mental illness. Based on the unlikelihood of this data, we believe participants are misinformed on what a severe mental illness is.

Future Directions

Future research should use a more diverse sample of religions to investigate the correlations between religiosity and stigma. Other research should also look into using familiarity as a covariate for distinguishing between the types of stigma between disorders. If the same familiarity scale is used, then it is recommended to have a disclaimer about what a severe mental illness is, but it is recommended that a more reliable and valid measure of familiarity be implemented.

Mental disorders other than schizophrenia and binge-eating disorder should be compared to intellectual disabilities as well. More common disorders, such as anxiety and depression, should be explored because individuals may be more familiar with the disorders. Comorbid diagnoses should be compared to singular disorders as well because having a comorbid diagnosis is common, and this comparison can give us further insight into stigmatization.

Lastly, research should look into education efforts based on the types of stigma each disorder is high in. For example, our research showed that binge-eating disorder was stigmatized more for the subtype blame. Future research should see if the biogenetic-based explanation model can reduce the stigma associated with blame for binge-eating disorder. This should be done for all disorders.

Conclusion

Stigmatization is one of the major challenges to acceptance of individuals with psychological disorders and intellectual disabilities. By comparing schizophrenia, binge-eating disorder, and intellectual disability, we have shown that the stigma for each disorder is unique.

No one program will be able to reduce the stigmatization of all disorders. To reduce stigma, programs must be tailored to reduce the subtypes of stigma that each disorder is high in.

References

Ahmad, S. I., Leventhal, B. L., Nielsen, B. N., & Hinshaw, S. P. (2020). Reducing mental-illness stigma via high school clubs: A matched-pair, cluster-randomized trial. *Stigma and Health, 5*(2), 230-239. https://doi-org.ezproxy.obu.edu:2443/10.1037/sah0000193

Ali, A., King, M., Strydom, A., & Hassiotis, A. (2016). Self-reported stigma and its association with socio-demographic factors and physical disability in people with intellectual disabilities: Results from a cross-sectional study in Englan. *Social Psychiatry and Psychiatric Epidemiology, 51*(3), 465-474.

Allport, G. W., & Ross, J. M., (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5*(4), 432-443.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). http://doi.org/10.1176/appi.books.9780890425596

Bannon, K. L., Hunter-Reel, D., Wilson, G. T., & Karlin, R. A. (2009). The effects of causal beliefs and binge eating on the stigmatization of obesity. *International Journal of Eating Disorders, 42*(2), 118-124. http://doi-org.ezproxy.obu.edu:2443/10.1002/eat.20588

Barlow, D. H., Durand, V. M., & Hofmann, S. G. (2016). *Abnormal psychology: An integrative approach.* Toronto, Ontario: Nelson Education.

Bigby, C., Clement, T., Mansell, J., & Beadle-Brown, J. (2009). 'It's pretty hard with our ones, they can't talk, the more able bodied can participate': Staff attitudes about the applicability of disability policies to people with severe and profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*(4), 363-376.

Brohan, E., Slade, M., Clement, S., & Thornicroft, G. (2010). Experiences of mental illness stigma, prejudice and discrimination: A review of measures. *BMC Health Services Research, 10,* 80-90. http://doi-org.ezproxy.obu.edu:2443/10.1186/1472-6963-10-80

Chandra, A., & Minkovitz, C. S. (2006). Stigma starts early: Gender differences in teen willingness to use mental health services. *Journal of Adolescent Health, 38*(6), 754-e1-754.e8. http://doi-org.ezproxy.obu.edu:2443/10.1016/j.jadohealth.2005.08.011

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. S. L., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*(1), 11-27.

Corrigan, P. W. (2012). TOOLKIT for Evaluating Programs Meant to Erase the Stigma of Mental Illness. Evaluating-Programs-Meant-to-Erase-the-Stigma-of-Mental-Illness.pdf

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), 37-79.

Corrigan, P. W., Edwards, A. B., Green, A., Diwan, S. L., & Penn, D. L. (2001). Prejudice, social distance, and familiarity with mental illness. *Schizophrenia Bulletin, 27*(2), 219-225.

Corrigan, P. W., Green, A., Lundin, R., Kubjack, M. A., & Penn, D. L. (2001). Familiarity with and social distance from people with serious mental illness. *Psychiatric Services, 52,* 953-958.

Corrigan, P. W., Markowitz, F. E., & Watson, A. C. (2004). Structural levels of mental illness and discrimination. *Schizophrenia Bulletin, 30*(3), 481-491.

Corrigan, P. W., Markowitz, F. E., & Watson, A. C., Rowan, D., & Kubiak, M. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior, 44*(2), 162-179.

Corrigan, P. W., & Nieweglowski, K. (2019). How does familiarity impact the stigma of mental illness?. *Clinical Psychology Review, 70*, 40-50.

Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness. *World Psychiatry, 1*(1), 16-20.

Corrigan, P. W., Watson, A. C., Warpinski, A. C., & Gracia, G. (2004). Implications of educating the public on mental illness, violence and stigma. *Psychiatric Services, 55,* 577-580.

Crandall, C. S. (1991). Do heavy-weight students have more difficulty paying for college? *Personality Social Psychology Bulletin 17*, 606-611.

Dalky, H. F. (2012). Mental illness stigma reduction interventions: review of intervention trials. *Western Journal of Nursing Research, 34*(4), 520-547.

Dickerson, F. B., Sommerville, J., Origoni, A. E., Ringel, N. B., & Parente, F. (2002). Experiencing of stigma among outpatients with schizophrenia. *Schizophrenia Bulletin, 28*(1), 143-155. http://doi-org.ezproxy.obu.edu:2443/10.1093/oxfordjournals.schbul.a006917

Ditchman, N., Werner, S., Kosyluk, K., Jones, N., Elg, B., & Corrigan, P. W. (2013). Stigma and intellectual disability: Potential application of mental illness research. *Rehabilitation Psychology, 58*(2), 206-216. http://doi-org.ezproxy.obu.edu:2443/10.1037/a0032466

DuPont-Reyes, M. J., Villatoro, A. P., Phelan, J. C., Painter, K., & Link, B. G. (2020). Adolescent views of mental illness stigma: An intersectional lens. *American Journal of*

Orthopsychiatry, 90(2), 201-211. http://doi-org.ezproxy.obu.edu:2443/10.1037/ort0000425

Ebneter, D. S., & Latner, J. D. (2013). Stigmatizing attitudes differ across mental health disorders: A comparison of stigma across eating disorders, obesity, and majorly depressive disorder. *Journal of Nervous and Mental Disease, 201*(4), 281-285. http://doi-org.ezproxy.obu.edu:2443/10.1097/NMD.0b013e318288e23f

Fine, M., & Asch, A. (1988). Disability beyond stigma: Social interaction, discrimination, and activism. *Journal of Social Issues 44*(1), 3-21.

Gilmore, L., & Cuskelly, M. (2014). Vulnerability to loneliness in people with intellectual disability: An explanatory model. *Journal of Policy and Practice in Intellectual Disabilities, 11*(3), 192-199.

Goddu, A. P., O'Connor, K. J., Lanzkron, S., Saheed, M. O., Saha, S., Peek, M. E., Haywood, C., & Beach, M. C. (2018). Do words matter? Stigmatizing language and the transmission of bias in the medical record. *Journal of General Internal Medicine, 33*(5), 685-691.

Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. (1999). Changing public attitudes about schizophrenia. *Schizophrenia Bulletin, 25*, 447-456.

Horsfall. J., Cleary, M., & Hunt, G. E. (2010). Stigma in mental health: Clients and professionals. *Issues in Mental Health Nursing, 31*(7), 450-455.

Humphreys, M. S., Johnstone, E. C., MacMillan, J. F., & Taylor, P. J. (1992). Dangerous behavior preceding first admissions for schizophrenia. *The Bristish Journal of Psychiatry, 161*(4), 501-505.

Johnson-Kwochka, A. V., Stull, L. G., & Saylers, M. P. (2020). The impact of diagnosis and religious orientation on mental illness stigma. *Psychology of Religion and Spirituality.* http://doi-org.ezproxy.obu.edu:2443/10.1037/rel0000384

Kahoe, R. D. (1985). The development of intrinsic and extrinsic religious orientations. *Journal for the Scientific Study of Religion, 24*(4), 408-412.

Kailes, J. I. (1985). Watch your language, please!. *Journal of Rehabilitation, 51*(1), 68-69.

Kessler, R. M., Hutson, P. H., Herman, B. K., & Potenza, M. N. (2016). The neurobiological basis of binge-eating disorder. *Neuroscience & Biobehavioral Reviews, 63*, 223-238.

Knight, M. T., Wykes, T., & Hayward, P. (2003). 'People don't understand': An investigation of stigma in schizophrenia using interpretative phenomenological analysis (IPA). *Journal of Mental Health, 12* (3), 209-222.

Lincoln, T. M., Arens, E., Berger, C., & Rief, W. (2008). Can antistigma campaigns be improved? A test of the impact of biogenetic psychosocial causal explanations on implicit and explicit attitudes of schizophrenia. *Schizophrenia Bulletin, 34*, 984-994.

Link, B. G., & Cullen, F. T. (1986). Contact with the mentally ill and perceptions of how dangerous they are. *Journal of Health and Social Behavior, 27,* 289-303.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*(1), 363-385. http://doi-org.ezproxy.obu.edu:2443/10.1146/annurev.soc.27.1.363

Lynch, H., McDonagh, C., & Hennessy, E. (2021). Social anxiety and depression stigma among adolescents. *Journal of Affective Disorders, 281*, 744-750.

Mackelprang, R. W., & Salsgiver, R. O. (1996). People with disabilities and social work: Historical and contemporary issues. *Social Work, 41*(1), 7-14.

Mak, W. W., & Cheung, R. Y. (2008). Affiliate stigma among caregivers of people with intellectual disability or mental illness. *Journal of Applied Research in Intellectual Disabilities, 21*(6), 532-545.

Malmberg, L., Fenton, M., & Rathbone, J. (2001), Individual psychodynamic psychotherapy and psychoanalysis for schizophrenia and severe mental illness. *Cochrane Database of Systematic Reviews*, (3). https://doi.org/10.1002/14651858.CD001360

Maltby, J. (1999). The internal structure of a derived, revised, and amended measure of the religious orientation scale: The 'age-universal' i-e scale-12. *Social Behavior & Personality: An International Journal, 27*(4), 407-412. http://doi.org/10.2224/sap.1999.27.4.407

Marwaha, S., & Johnson, S. (2004). Schizophrenia and employment. *Social Psychiatry and Psychiatric Epidemiology, 39*(5), 337-349.

Mental health by the numbers. NAMI, (2022, February). Retrieved from https://www.nami.org/mhstats

Masuda, A., Hayes, S.C., Fletcher, L. B., Seignourel, P. J., Bunting, K., Herbst, S. A., Twohig, M. P., & Lillis, J. (2007). Impact of acceptance and commitment therapy versus education on stigma toward people with psychological disorders. *Behaviour Research and Therapy, 45*(11), 2764-2772.

Monahan, J., Swartz, M., & Bonnie, R. J. (2003). Mandated treatment in the community for people with mental disorders. *Health Affairs, 22*(5), 28-38.

Morin, D., Crocker, A. G., Beaulieu-Bergeron, R., & Caron, J. (2013). Validation of the attitudes toward intellectual disability- ATTID questionnaire. *Journal of Intellectual Disability Research, 57*(3), 268-278.

Mond, J. M., & Hay, P. J. (2008). Public perceptions of binge eating and its treatment. *International Journal of Eating Disorders, 41*(5), 419-426.

Pelleboer-Gunnink, H. A., van Oorsouw, W. M., van Weeghel, J., & Embregts, P. J. (2021). Stigma research in the field of intellectual disabilities: A scoping review on the perspective of care providers. *International Journal of Developmental Disabilities, 67*(3), 168-187.

Pelleboer-Gunnink, H. A., van Weeeghel, J., & Embregts, P. J. (2021). Public stigmatization of people with intellectual disabilities: A mixed-method population survey into stereotypes and their relationships with familiarity and discrimination. *Disability and Rehabilitation, 43*(4), 489-497.

Penn, D. L., Guyana, K., Daily, T., Spaulding, W. D., Garbin, C. P., Sullivan, M. (1994). Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin, 20,* 567-574.

Pescosolido, B. A., Fettes, D. L., Martin, J. K., Monahan, J., & McLeod, J. D. (2007). Perceived dangerousness of children with mental health problems and support for coerced treatment. *Psychiatric Services, 58*(5), 619-625.

Peterson, K. C. (2018). The effect of the type of mental disorder on mental health stigma. http://digitalcommons.wku.edu/cgi/viewcontent.cgi?article=3340&context=theses

Phillips, B. A., Fortney, S., & Swafford, L. (2019). College students' social perceptions toward individuals with intellectual disability. *Journal of Disability Policy Studies, 30*(1), 3-10. http://doi.org/10.1177/1044207318788891

Power, L., & McKinney, C. (2014). The effects of religiosity on psychopathology in emerging adults: Intrinsic versus extrinsic religiosity. *Journal of Religion and Health, 53*(5), 1529-1538.

Puhl, R., & Brownell, K. D. (2001). Bias, discriminations, and obesity. *Obesity Research, 9*(12), 788-805.

Reas, D. L. (2017). Public and healthcare professionals' knowledge and attitudes toward binge eating disorder: A narrative review. *Nutrients, 9*(11), 1-17

Rüsh, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences and initiatives to reduce stigma. *European Psychiatry, 20*(8), 529-539.

Sajatovic, M., & Jenkins, J. H. (2007). Is antipsychotic medication stigmatizing for people with mental illness? *International Review of Psychiatry, 19*(2), 107-112.

Schalock, R. L., Luckasson, R. A., & Shogren, K. A. (2007). The renaming of mental retardation: Understanding the change to the term intellectual disability. *Intellectual and Developmental Disabilities, 45*(2), 116-124.

Scior, K., Potts, H. W., & Furnham, A. F. (2013). Awareness of schizophrenia and intellectual disability and stigma across ethnic groups in the UK. *Psychiatry Research, 208*(2), 125-130. http://doi-org.ezproxy.obu.edu:2443/10.1016/j.psychres.2012.09.059

Stewart, M. C., Keel, P. K., & Schiavo, R. S. (2006). Stigmatization of anorexia nervosa. *International Journal of Eating Disorders, 39*(4), 320-325. http://doi-org.ezproxy.obu.edu:2443/10.1002/eat.20262

Sibicky, M., & Dovidio, J. F. (1986). Stigma of psychological therapy: Stereotypes, interpersonal reactions, and the self-fulfilling prophecy. *Journal of Counseling Psychology, 33*(2), 148-154.

Stier, A. & Hinshaw, S. P. (2007). Explicit and implicit stigma against individuals with mental illness. *Australian Psychologist, 42,* 106-117. http://doi-org/10.1111/ap.2007.42.2.106

Wilton, R., & Fudge Schormans, A. (2020). 'I think they're treating me like a kid': Intellectual disability, masculinity and place in Toronto, Canada. *Gender, Place & Culture, 27*(3), 429-451.

Table 1.
Stereotype Subscores by Diagnosis

Scale	*M*	*SD*	Range
Schizophrenia			
Blame	6.91	3.78	3-19
Anger	11.84	6.28	3-27
Pity	20.96	4.90	5-27
Help	17.66	5.64	3-27
Dangerousness	19.88	5.47	5-27
Fear	17.77	6.38	3-27
Avoidance	20.86	4.96	3-27
Segregation	16.25	6.64	3-27
Coercion	17.58	4.66	3-27
Intellectual Disability			
Blame	4.68	2.92	3-18
Anger	5.59	3.52	3-20
Pity	21.00	4.84	5-27
Help	21.44	4.80	6-27
Dangerousness	4.10	2.75	3-19
Fear	3.95	2.64	3-22
Avoidance	14.63	5.91	3-27
Segregation	4.23	2.72	3-20
Coercion	12.41	4.74	3-25
Binge-Eating Disorder			
Blame	11.89	5.43	3-25
Anger	6.74	4.77	3-24
Pity	19.27	5.09	4-27
Help	22.40	4.50	4-27
Dangerousness	4.05	2.81	3-19
Fear	3.92	2.55	3-19
Avoidance	8.47	5.20	3-26
Segregation	3.83	2.32	3-17
Coercion	9.97	4.42	3-23

Table 2.
Correlations Global Stereotype Scores

	Intrinsic Religiosity	Extrinsic-Personal Religiosity	Extrinsic-Social Religiosity
Schizophrenia	.038	.057	-.042
Intellectual Disability	-.047	.151	.155
Binge-Eating Disorder	-.034	.183*	.076

Note. *p < .05

Table 3.
Correlations Subset Scores

Scale	Intrinsic Religiosity	Extrinsic-Personal Religiosity	Extrinsic-Social Religiosity
Schizophrenia			
Blame	.058	.063	.104
Anger	.07	.066	.004
Pity	.126	-.098	-.009
Help	.101	-.077	-.005
Dangerousness	.150*	.024	-.028
Fear	.132	.057	-.004
Avoidance	.046	.009	-.052
Segregation	.059	.021	-.112
Coercion	.108	.005	-.041
Intellectual Disability			
Blame	-.154*	.025	.031
Anger	-.068	.058	.123
Pity	.229*	.056	-.085
Help	.202*	-.026	-.075
Dangerousness	-.126	-.022	-.014
Fear	-.199*	-.034	.027
Avoidance	-.094	.076	.053
Segregation	-.157*	-.071	.008
Coercion	.127	.023	.05
Binge-Eating Disorder			
Blame	.127	.069	-.057
Anger	.036	.039	.11
Pity	.10	-.033	-.016
Help	.223*	-.043	-.098
Dangerousness	-.014	.063	.014
Fear	-.034	.107	.049
Avoidance	.022	.076	.054
Segregation	.018	.084	.047
Coercion	.069	.078	.034

Note. *p < .05

Appendix A

Schizophrenia

Harry is a 30-year-old single man with schizophrenia. The last time his symptoms got worse, he heard voices and believed his neighbors were planning to hurt him. He attacked his landlady in the belief that she was in on a plot. When the police escorted him to the hospital, he tried to grab for the officer's gun. He attacked an orderly in the emergency room and had to be put into restraints. He only quieted down after he was given large doses of medication.

Binge-Eating Disorder

Mark is a 19-year-old student. When Mark gets home from school he often goes to the fridge for a small snack; however, Mark finds that after eating the snack he is unable to stop eating and continues to eat a large amount of food. He may binge eat, for example, on an apple, two slices of cheesecake, a bag of cookies, a jam sandwich and three glasses of milk in one sitting. Later in the evening he will eat dinner and sometimes he loses control with this also and eats the extra helping that he was planning to save for the next day. Mark feels guilt and sadness after he has eaten like this and despises the shape of his body.

Intellectual Disability

Raphael is an adult with ID. He communicates using sounds and gestures. He is able to show by gestures that he needs to go to the toilet. Since Raphael has major coordination problems, he requires constant assistance when he moves around and always has to be accompanied on outings. He also has trouble with various movements. He is able to feed himself with an adapted spoon, but he drops food.