THE IMPACT OF MENTAL HEALTH STIGMA ON HIREABILITY

by

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Society tends to view those with mental illness as dangerous, impulsive, and unstable. These perceptions are often made quickly, with very little information available, and have lasting impacts (e.g., impacting job opportunities). The purpose of the current research is to examine stigma associated with various mental health disorders as compared to a physical health disorder or no disorder on perceptions of hireability of a candidate for a job. Undergraduate participants (N = 329) rated deidentified medical forms as part of a job application that varied in terms of diagnosis (depression, anxiety, bipolar disorder, or schizophrenia), past hospitalization (yes vs. no), medication use (yes vs. no), and gender (male, female, gender nonconforming) on hireability. It was hypothesized that stigma, as judged by lower ratings of hireability, would vary as a consequence of a mental health disorder. Additionally, it was hypothesized that past hospitalizations and medication use as a result of mental illness would affect hireability ratings. Finally, we examined how the perceiver’s own experiences with mental health impacted their hireability ratings. Results showed that hireability ratings varied by mental health diagnosis such that those without a mental health diagnosis or with a physical health diagnosis were significantly more likely to be hired compared to those with anxiety, depression, bipolar disorder, and schizophrenia, in that order. Perceiver mental health experience impacted ratings of hireability such that those with mental health experience themselves were more likely to hire others in general, while those with no mental health experience were less likely to hire applicants. Implications of this work include informing interventions that reduce
barriers in seeking mental healthcare, especially during the COVID-19 pandemic, when mental health symptoms are heightened.
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INTRODUCTION

Mental Health Stigma

One in five United States (U.S.) adults experience mental illness each year. The average time in between the onset of mental illness symptoms and treatment is eleven years (NAMI, 2021). Stigma is seen as the central reason why people who are in need of mental health services do not seek treatment, or when they do, they fail to follow through with the whole treatment plan. Stigma is stereotypes or negative views about others whose behavior does not fit into societal norms or appears to be inferior (WHO, 2001). More than half of the people with mental illness do not seek treatment for their disorders (American Psychiatric Association, 2021). There are dimensions of stigma based on the idea of danger, helplessness, and visibility. Society tends to view those with a mental illness as dangerous, impulsive, unstable, and odd (Mental Health Foundation, 2020). There is also an eagerness to blame those with the disorder and assume that they simply do not want to get better. Disorders that are more visible and disruptive also have more stigma associated with them, as schizophrenia is often more apparent to those around an individual than anxiety for example (Ahmedani, 2011). The specific diagnosis matters as there is more stigma associated with someone with schizophrenia than someone with depression, as people with depression tend to receive more sympathy, which could be a result of greater familiarity with the disorder (Rossler, 2016).

The types of stigma associated with mental health include social/public stigma, self-stigma, as well as institutional stigma. Social stigma refers to the negative or discriminatory attitudes others have about those who have a mental illness. Self-stigma
refers to the negative attitudes, and internalized shame, that people with mental illness have about their own condition. Institutional stigma refers to policies of government and organizations that limit opportunities for those with mental illness, whether it is intentional or not. This study is focused on social and internalized stigma. Stigma surrounding mental illness can also spread to those who support someone with a mental illness (American Psychiatric Association, 2021). The social stigma around mental illness can create unequal opportunities for those with a diagnosed mental illness as a large part of society see those with mental health problems as inferior – this can lead to getting denied housing, decreased access to services, and the creation of policies that further stigmatize this population (Ahmedani, 2011). The rate of unemployment is higher for U.S. adults with mental illness (5.8%) versus those without mental illness (3.6%) (NAMI, 2021). The stigma of mental illness is universal and media representations of mental illness often negatively influence perceptions and stigma of those with mental illness (American Psychiatric Association, 2021). It has been found that the general public often stigmatizes mental and behavioral disorders to a greater extent than physical disorders (Corrigan et al., 2001). Even if a person is not specifically targeted, the knowledge that shame is associated with mental illness is enough to cause people with a mental health diagnosis to feel bad about themselves and to feel less than others. This feeling of inferiority leads to a lack of self-confidence and disbelief in one’s capability (Corrigan, 2007). Mental health stigma can reduce the likelihood of getting treatment for one’s disorder, as well as lead to worsening symptoms. Mental health stigma can cause reduced hope, increased psychiatric symptoms, difficulties forming relationships with others, and more difficulties at work and in day-to-day life. A lack of understanding by
family, friends, and peers can lead to social isolation, fewer opportunities for work, school, and housing, inadequate mental health insurance coverage, as well as the belief that one is unable to improve their situation (American Psychiatric Association, 2021).

The Most Common and Least Understood Mental Health Disorders

Depression and anxiety disorders have the highest prevalence of all mental health disorders worldwide besides substance use disorders (Ritchie & Roser, 2018). Approximately 7% of U.S. adults have had at least one depressive episode. Sixty four percent of those with depression have experienced a severe impairment as a result. Nineteen percent of U.S. adults had an anxiety disorder in the last year, while 31.1% of people experience anxiety in their lifetime. The majority of those diagnosed with anxiety experience a mild impairment as a result (Mental Health America, 2021). The two disorders were included in this research because they are the most common, so I assumed that people would generally have a better understanding of these two mental illnesses, or know someone who has experienced one or both of these mental illnesses. Bipolar disorder and schizophrenia have the lowest prevalence of all mental health disorders in the world besides eating disorders (Ritchie & Roser, 2018). Four percent of adults experience bipolar disorder at some point in their lifetime. The majority of those with bipolar disorder (82.2%) experience a serious degree of impairment, using the Sheehan disability scale. A smaller percent (0.25% - 0.64%) of the U.S. population have schizophrenia. Schizophrenia and bipolar disorder were included in this study as they have a lower prevalence, and are generally less understood and as a result, further
stigmatized. Although schizophrenia impacts less of the population, there are significant concerns associated with the disorder (Mental Health America, 2021).

    Anxiety disorders are the most common of mental health disorders and impact about 30% of adults throughout their life. Women tend to experience anxiety disorders more than men do. To be diagnosed with an anxiety disorder, the anxiety must disrupt one’s ability to function normally as well as be out of proportion to the situation. Common symptoms of generalized anxiety disorder include feelings of fatigue, restlessness, muscle tension, difficulty concentrating, and problems sleeping. Anxiety can also lead to panic attacks which can include a variety of symptoms such as chest pain, feeling detached, trembling or shaking, rapid heart rate, feeling shortness of breath, feeling light-headed, nausea, feeling detached, and fear of dying (American Psychiatric Association, 2021). People with anxiety are generally viewed as having a personal weakness. People do not always view anxiety as a real medical illness and believe that those with anxiety could snap out of it if they wanted to (Beyond Blue, 2020).

    Depression negatively affects how a person thinks, feels, and acts. Depression can cause feelings of sadness and loss of interest in activities that were once enjoyable. This mental health disorder includes emotional and physical problems that can cause an inability to function properly. Symptoms of depression may include loss of energy and increased fatigue, feelings of worthlessness, difficulty concentrating, feeling sad, and thoughts of death or suicide. Symptoms must last at least two weeks and there must be an observable difference in the level of functioning in order to get diagnosed with depression. Depression effects about 1 in 6 people at some point in their life. The average onset of depression is during the late teen years to mid-twenties, and women are more
likely than men to experience depression (American Psychiatric Association, 2013). People tend to view those diagnosed with depression as lesser people. They may believe those with depression are incapable of normal life, and cannot be depressed if they are young, successful, and beautiful, although that is not the case. (Rossler, 2016).

Bipolar disorder causes changes in a person’s mood, energy, and ability to function. People with bipolar disorder experience intense emotional states that generally occur in separate periods that can last days to weeks. They are categorized as manic/hypomaniac, meaning abnormally happy or an abnormally irritable mood, and depressive, where they display a sad mood. People with bipolar disorder usually will have periods of time consisting of a neutral mood state. The average age of onset is 25 years old. People tend to view those with bipolar disorder as crazy, more likely to commit crimes, and may also assume those with this diagnosis cannot live independently. There is also a lot of ignorance associated with this diagnosis as people commonly say phrases such as “everyone’s a little bipolar” or “wow you’re so bipolar” referring to when people change their mind often or have a sudden change of emotion. (Rossler, 2016).

Schizophrenia affects less than 1% of the U.S. population. Symptoms of schizophrenia can include delusions, hallucinations, disorganized speech, trouble thinking, and lack of motivation. Despite the misconceptions commonly associated with schizophrenia, it appears that most people diagnosed with schizophrenia are not more dangerous or violent than anyone else (Singh, Serper, Reinarth, & Fazel, 2011). Limited healthcare services can lead to homelessness and multiple hospitalizations, but most people with schizophrenia live with their families, in group homes, or on their own. Men and women experience schizophrenia at similar rates but there may be an earlier onset
age in males than in females. Men often experience initial symptoms in their late teens and early twenties, while women tend to show the first signs of the illness in their twenties and early thirties. Schizophrenia can cause episodes where a person is unable to distinguish between real and unreal experiences. Symptoms of schizophrenia include hallucinations, hearing and seeing things that do not exist, paranoia, and distorted perceptions. Symptoms can also include a loss or decrease in the ability to express emotion, make plans, or experience pleasure. Disorganized symptoms include confused and disordered thinking and speak, issues thinking logically as well as bizarre behavior. Cognition can also be affected in those with schizophrenia leading to attention, concentrations, and memory problems (American Psychiatric Association, 2021). Those with schizophrenia are generally viewed in a negative way. People may refer to those who have this diagnosis as psycho, crazy, bonkers, violent, and evil. Those with schizophrenia are often viewed as dangerous and unpredictable (Rossler, 2016). People commonly assume that schizophrenia is incredibly rare. While it is less common than other disorders, schizophrenia still affects 20 million people worldwide (WHO, 2021). People often believe that those with schizophrenia have a split personality, or are severely disabled, that it is the result of a bad upbringing, or that it is strictly genetic – so there is either nothing that can be done, or that the “bad genes” need to not be passed on to future generations (Rossler, 2016).

Mental disorders have a long history of judgment and stigmatization associated with them. Society tortured and killed those with mental illness for centuries. Mental illness was viewed as punishment from the gods during the middle ages - those with mental illness were thought to be possessed by devils, so they were burned at the stake,
put in jails, or chained to their beds in asylums. During the Enlightenment, institutions were created in order to help and support those with mental disorders. However, with the Nazi reign in Germany, stigma surrounding mental illness increased once again as those with a psychiatric disability were sterilized or murdered. Structural discrimination of mental illness continues to be a serious issue. There is no country, society, or culture where people with mental illness have the same societal value as those without mental illness (Rossler, 2016).
MENTAL HEALTH STIGMA AND HIREABILITY

Mental Health Stigma Impacts Hiring Decisions

One area in which stigma has major impacts on those with mental health disorders includes employment opportunities. A study by Gassam (2017) focused on depression disclosure and unemployment status. Gassam used Weiner’s attribution theory (1995) to understand how framing during a job interview affects perceptions, hireability, and stigmatization. Depression attribution (biology, psychology, and no depression) as well as the independent variable of employment status, which was either an 8-month unemployment status or no unemployment status, were observed to see how perceptions of warmth, competence, and hireability differed in each case. Participants were given different scenarios in a 3 (depression attribution) x 2 (employment status) between subject’s design and then answered a series of questions regarding a job applicant. Depression attribution affected hireability ratings in the sense that someone with depression was less likely to be hired than an applicant with no depression. There was an interaction effect of depression and unemployment that lead to lower ratings of competence, although the unemployment duration alone did not impact hireability ratings (Gassam, 2017).

In another study by Kapoor (2017), individuals with depression were less likely to be employed than those with a physical illness. This also occurred when applicants with depression were compared to applicants with hypothyroidism, which creates similar symptoms. Applicants with depression were still less likely to be hired even when similarly evaluated to the other applicants with hypothyroidism (Kapoor, 2017).
In a review of the literature, 8 of 10 examined studies highlighted that applicants with mental health problems were rated as less employable than candidates with no disability or with a physical disability (Brohan et al., 2012). It appears that those who disclose their mental illness may often be viewed as less hirable, so there is a disadvantage when applying for a job.

**Type of Mental Health Diagnosis**

Not only does presence of a mental illness impact hiring decisions, but the type of mental health diagnosis is also a factor that contributes to whether a candidate is seen as hirable or not. In Brohan et al.’s (2012) review, 54% of employees said they would never/occasionally employ someone who was currently depressed, while 66% would never/occasionally employ someone with schizophrenia.

In addition, hireability may change as a consequence not only of diagnosis, but also the interaction of diagnosis, treatment seeking, and gender of the candidate. For example, Moss-Racusin and Miller (2015) conducted a study to learn more about mental health stigma and reactions to those with mental illness seeking treatment. Those experiencing major depressive disorder were rated as less likable, competent, and hirable than applicants without major depressive disorder. Depressed male targets who sought out professional treatment experienced less stigma than a male target who did not seek treatment. Female applicants seeking treatment were not rated any differently than those not seeking treatment (Moss-Racusin & Miller, 2015).
Past Mental Health Experience

Another factor that contributes to hiring decisions may be one’s experience with mental health themselves. Those who have experienced mental health disorders, either themselves or with family or friends, may have less stigma surrounding mental health disorders. For example, the level of social contact a person had with someone who had a mental health issue as well as previously employing someone with a mental illness led employers to be more likely to hire someone with a mental illness (Brohan et al., 2012).

The Contribution of Treatment Seeking (Hospitalization and Medication Use)

A longitudinal study on adolescents followed 80 American adolescents for 6 months after they were discharged from their first psychiatric hospitalization. Seventy percent of adolescents reported experiencing stigma, while disrespect or devaluation was more common than social rejection as a result of hospitalization (Moses, 2014).

In a study comparing patients who were hospitalized for medical reasons and for psychiatric reasons, over half of the people with past psychiatric hospitalizations hid this from their coworkers, while none of those hospitalized for medical reasons did (McCarthy et al. 1995). Fewer than 15% of those with a previous psychiatric hospitalization will keep a job for five years. It is unclear whether past hospitalization impacts employment opportunities because it acts as a marker for extreme symptoms and/or if it creates additional stigma that impacts employers’ decisions and behaviors (i.e., stigma) towards their employees (Botterbusch & Osgood 1997).
HOW TO COMBAT MENTAL HEALTH STIGMA

In order to combat mental health stigma, the context in which those with mental illness are referred to needs to change. An issue occurs when a person with schizophrenia is referred to as a schizophrenic. The term schizophrenic indicates that this person’s mental illness characterizes the whole person. It is important to use person first language, so that this does not turn into further stigma suggesting that the schizophrenic man is scary and dangerous. This situation can easily turn into further stigmatization of mental health, creating the idea that the mentally ill person who is scary and dangerous needs to be locked away. This idea then leads to structural stigma such as mentally ill people are unreliable and therefore should not be hired, etc. Three of the most effective and important ways to combat stigma include accurate information and education about mental illness. The next step is to protest against unfair descriptions of mental illness and call out the stigmas and stereotypes about mental illness that are said. A final way to combat mental health stigma is contact with people who have a mental illness, to make a connection with them and decrease the automatic stigma and stereotypes we have been programmed to think about those with a mental illness (Rossler, 2016). The Contact Hypothesis (Allport, 1954) has a long history in social psychology of reducing intergroup conflict. In this study, I will extend this hypothesis by examining the contribution of social contact with mental illness (self, close other, or no contact) on stigma related to hiring decisions of a candidate for a job with or without various mental health disorders.
PURPOSE AND HYPOTHESES

No research to date has examined mental health stigma in this way, varying medication use, past hospitalizations, mental health disorder, and gender and examining their effects on ratings of perceived warmth, stability, openness, competence, and hireability. Therefore, this research has the ability to examine what factors are related to more or less stigma in the general population, especially among young adults. Young adults aged 18-25 are less likely to receive mental health services than adults aged 26 and older. About two thirds of young adults with a mental illness are not receiving needed mental health services (Substance Abuse and Mental Health Services Administration, 2014).

In addition, this is a particularly important time to study stigma associated with mental health disorders as there has been an increase in mental health issues as a result of the COVID-19 pandemic (e.g., because of social isolation, major life events such as job loss, and anxiety related to the virus). In a study conducted by the Center for Disease Control and Prevention (CDC) during June 2020, 40.9% of US adults reported at least one adverse mental or behavioral health condition (3-4 times higher than data collected in 2019), with even higher rates for young adults than any other group (Thompson et al., 2021). By understanding what factors predict stigma, we can create effective interventions that target young adults in order to break down barriers in healthcare seeking and discussing mental health with their friends, family, and healthcare professionals, especially during a time when mental health symptoms are likely increasing and undiagnosed/untreated.
Therefore, the purpose of the current research is to close the gaps in understanding mental health stigma. I aim to examine what effect different disorders as well as the contributions of medication use and past hospitalizations have on mental health stigma and hireability, in particular. I expected that the most stigma, as judged by hireability ratings, will be in the order of schizophrenia, then bipolar disorder, depression, and anxiety. I also hypothesized that those disorders combined with hospitalization and/or medication use will have the highest amount of stigma associated with them compared to when neither of those aspects (medication use or past hospitalizations) are present. I expect that participants who had more access to those with mental health disorders will display less mental health stigma in their hireability ratings.
METHOD

Participants

In total, 400 University of Maine undergraduate students participated in this study for partial course credit. The final sample size was N = 330 after accounting for those who did not complete the study or did not respond correctly to the attention check questions. The participants were an average age of 19 (SD = 2.32), with an age range from 18-39. There were 172 male participants, 154 female participants, 2 gender non-conforming participants, and 2 participants who indicated something else on the form. The participants were mostly white, male, and not Hispanic or Latino.

Procedure

This study was an online, anonymous rating study. Participants were asked to take on the role of a person in a hiring position at a summer camp. They were told that they would only see one aspect of each applicant’s job application (e.g., work history, references, or medical history form) when in reality all participants always only saw made-up medical history forms (see Appendix A for an example). These medical history forms allowed for the manipulation of mental health diagnosis (depression, anxiety, bipolar disorder, schizophrenia, or no disorder), past hospitalizations, and current medication use as well as applicant, or target, information (e.g., gender).

Physical illness varied randomly across forms as research has shown that less stigma tends to be associated with physical ailments compared to mental and behavioral issues (Corrigan et al., 2001). Participants were randomly assigned to 24 different
medical history forms and then asked to make ratings on the perceived competency, openness, warmth, and stability of each target as well as how likely they would be to hire each applicant based on the part of the application they were reviewing on a 1 to 7 Likert scale from not at all to extremely.

There was a total of 60 medical forms based on the various combinations of the independent variables listed above. The participants were asked to provide some basic demographic information as well as answer if they had ever been diagnosed with a mental illness, or if a close friend or family member had been.

**Measures**

Impression ratings of each target’s perceived openness, competence, stability, and warmth were rated by participants using a 7-point Likert scale that included ratings from 1 (low) to 7 (high), though these ratings will not be discussed further throughout this study. Participants also rated how likely they would be to hire each applicant on a 1-7 Likert scale from very unlikely to very likely. Hireability was the main dependent variable for the current thesis. Participant demographic information such as race, gender, and age were collected from each participant as well as mental health diagnoses/family history with mental illness questions after all ratings were made to determine if people’s level of stigma against mental health varied based on exposure to those with a diagnosis (see Appendix A for all measures).
RESULTS

The purpose of this study was to understand how diagnosis, medication use, hospitalization history, and gender interact to contribute to mental health stigma and hireability. Although it is illegal to ask about an applicant’s mental health status, hireability was used as a proxy in this study to address overall mental health stigma, and lead to a better understanding of mental health stigma in general. Because hireability ratings of physical illness alone and no illness were not significantly different from each other, these two diagnosis categories were collapsed into one category for all further analyses. An analysis of variance (ANOVA) was conducted to examine the effect of medication use (yes vs. no), hospitalization (yes vs. no), and diagnosis (schizophrenia, bipolar disorder, depression, anxiety, physical illness/no illness) on ratings of hireability. The results supported the first hypothesis, showing there was a main effect of diagnosis such that the most stigma, and lowest hireability ratings, were for those with schizophrenia, then bipolar disorder, followed by depression, anxiety, physical illness and no illness \[F(5,42) = 68.89, p < .001\].

Figure 1: Effect of Diagnosis on Hireability Ratings
The second hypothesis examined whether hospitalization would have a significant effect on the applicant’s hireability, such that a history of hospitalization for mental health reasons compared to no hospitalization history, would be rated as less hirable, and whether this effect interacted with or depended on the diagnosis. There was no significant main effect of hospitalization \([F(1,42) = .20, p = .66]\). There was a significant interaction between hospitalization and diagnosis on hireability ratings \([F(3,42) = 4.04, p < .05]\). Decomposition of the simple effects showed that anxiety was the only diagnosis for which the likelihood of being hired significantly increased as a result of not being hospitalized compared to being hospitalized. For all the other diagnoses there was a trend that hireability ratings were higher if the participants were hospitalized, although they were not significantly different from each other. There was no significant main effect of medication use, or interaction with medication and any other variable.

![Figure 2: Effects of Hospitalization on Hireability Ratings](image-url)
Finally, I tested the last hypothesis that those who had mental health experience would show less stigma towards those with mental health diagnoses compared to those with no mental health experience. An ANOVA was conducted in order to determine the effect of perceiver mental health experience or social contact (any mental health experience vs. no mental health experience) and diagnosis on hireability ratings. There was a significant main effect of perceiver mental health experience such that participants who had experience with mental health rated all applicants as significantly more hirable than those without mental health experience \([F(1,42) = 24.38 \ p < .001]\). There were no significant interactions with perceiver mental health experience and any other variables.

![Figure 3: Interaction of Perceiver Mental Health Experience and Diagnosis on Hireability Ratings](image-url)
DISCUSSION

This research sought to examine the effect that diagnosis, medication use, and past hospitalizations had on perceived hireability ratings of a candidate for a job. The diagnosis of the applicant significantly affected their likelihood of being hired. The results of this study support the hypothesis that those diagnosed with schizophrenia are the most stigmatized in terms of hiring decisions followed by those with bipolar disorder, depression, and anxiety. What is most astounding is that hireability ratings on average go down one whole point when a mental health condition is introduced (i.e., from no illness to anxiety) and even further down when that condition is depression, bipolar disorder, or schizophrenia (almost 3 whole points).

Hospitalization also had a significant effect on an applicants’ hireability. Similar to Moss-Racusin and Miller’s (2015) study, when applicants sought treatment (hospitalization), they were rated as more hirable and perceived with less stigma compared to when they did not seek treatment (not hospitalized), except for when diagnosed with anxiety. Anxiety was the only diagnosis where participants were less likely to be hired if they were hospitalized as a result of their diagnosis, while all other applicants were more likely to be hired if they were hospitalized for their diagnosis than if they were not. One explanation for this is that if a person needed to be hospitalized for anxiety, it may be seen as a very drastic case as anxiety is relatively normalized in our society. The higher ratings for those with depression (although a very slight difference), bipolar disorder, and schizophrenia may have been a result of thinking that those who have been hospitalized have been treated for their mental illness and have it under
control. Surprisingly, medication use had no impact on hireability ratings. One explanation for this is that undergraduate students are part of a generation where medication use, especially for mental illness treatment, is becoming normalized.

When participants had experience with mental health themselves, they rated the applicants as significantly more hirable generally than those who had no experience. It seems that those who have experienced stigma as a result of mental illness may look at others in a more positive light, while those who have not may rate others more harshly. This echoes Brohan et al.’s (2011) study which showed that applicants were more likely to be hired by employers who had employed someone with a mental illness before. In my study, those who knew someone with a mental health diagnosis as well as had mental health experience themselves were more likely to hire someone with a mental illness than those who had no mental health experience.

Even if participants caught on to the true nature of the study by observing the changing mental health diagnoses on the form, mental health stigma was still displayed. In real life, it is likely that mental health stigma would be even more present as no one would be observing their likelihood of hiring a potential applicant, leading to a more drastic difference in hireability ratings for the different diagnoses.

Limitations

While the current research had many strengths, there are several limitations that should be addressed in future research. First, the sample was not very diverse in terms of race, age, or gender identity. Another limitation of the study is an overall small number of participants, causing some cells to only have one rating when examining the contribution
of hospitalization, diagnosis, medication use, and gender identity of the target applicant as well as perceiver mental health experience, so I could not determine if all of these differences interacted with each other in circumstances, so I not include these specific findings in this study. Future research should recruit a larger and more diverse sample to examine the contributions of medication use and gender identity to the already established stigma related to diagnosis and hospitalizations. Finally, we did not ask participants about specific experiences with mental health diagnoses, so we do not know if the number of experiences or impact of those experiences played a role in reducing mental health stigma in terms of their ratings of hireability. Future research should ask more specific questions about past mental health issues in order to unentangle exactly what it is about past experience that reduces stigma.

How Mental Health Stigma Affects the Workplace

The current research documented that mental health stigma exists among undergraduates. If they hold these stigmas about who is qualified to work, it is likely that they will perpetuate these biases in their work environments and social lives and mental health will continue to go undiagnosed and untreated. The American Psychiatric Association (2019) found that around half of workers were concerned about discussing mental health issues at their job and more than one in three were concerned that they may face retaliation or even be fired if they asked about receiving mental health care.

Therefore, it is important to consider ways in which companies and researchers can create effective interventions to reduce stigma and develop welcoming and supportive environments for those who have mental health diagnoses. Talking openly
about mental health and being conscious of language used can help reduce mental health stigma. Normalizing mental health treatment, showing compassion for those with mental illness, and encouraging equality between physical and mental illness can also help reduce mental health stigma (American Psychiatric Association, 2021). Some ways to minimize stigma in the workplace include person-to-person contact between employees and those who are in recovery from severe mental illness that are willing to talk about their experience (The National Alliance on Mental Illness, 2015). These results support this approach as those who had prior mental health experience, either themselves or with others in their lives, showed less stigma in terms of their hireability ratings compared to those who had no previous mental health experience. Creating specific programs and approaches to address mental health stigma as well as communicating the company’s commitment to focusing on mental health can help reduce stigma. Being welcoming of those who need accommodations and training leaders to recognize the signs of mental illness and how to make referrals when needed is another way to help reduce mental health stigma in the workplace (American Psychiatric Association, 2021). Also, a continuous education process teaching others what mental health is and where and how to get help can also reduce stigma in the workplace (The National Alliance on Mental Illness, 2015).
Diagnosis, hospitalization, and perceiver mental health experience had significant effects on applicants’ likelihood of being hired. The diagnosis that faced the most stigma was schizophrenia, then bipolar disorder, depression, anxiety, and finally physical illness or no illness. Those who had been hospitalized as a result of their diagnosis were more likely to be hired, except for those diagnosed with anxiety, who were less likely to be hired. Perceivers who had experienced mental health diagnoses themselves rated all groups as more hirable while those with no mental health experience rated all applicants as less hirable. This research documented that mental health stigma is present in mock hiring decisions among undergraduate students and may be even higher for those who have not had mental health experience. This research will inform interventions that reduce barriers in mental healthcare seeking, especially during the COVID-19 pandemic, when mental health symptoms are increasing and untreated.
REFERENCES


APPENDICES
# APPENDIX A: MATERIALS USED FOR THE STUDY

## COMPREHENSIVE MEDICAL HISTORY FORM

### Personal Information

<table>
<thead>
<tr>
<th>Preferred Name:</th>
<th>DOB:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender:</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>20</td>
</tr>
</tbody>
</table>

### Medications (current prescription and nonprescription, vitamins, and supplements)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Frequency</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>20mg</td>
<td>1/day</td>
<td>for depression</td>
</tr>
</tbody>
</table>

### Hospitalizations

<table>
<thead>
<tr>
<th>Year</th>
<th>Reason</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Medical History: Have you ever had any of the following?

- [ ] Acid Reflux
- [ ] Anxiety
- [ ] Bipolar Disorder
- [ ] Cancer
- [ ] Chronic Pain
- [ ] Heart Disease
- [ ] Alcoholism
- [ ] Asthma
- [ ] Cholesterol Problem
- [x] Depression
- [ ] Migraines
- [ ] Schizophrenia
- [ ] Allergies
- [ ] Coagulation Problem
- [ ] Diabetes
- [ ] High Blood Pressure
- [ ] Thyroid Problems
- [ ] Other medical problems
Using their application please rate them on the following characteristics:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>very low</th>
<th>low</th>
<th>mildly low</th>
<th>moderate</th>
<th>mildly high</th>
<th>high</th>
<th>very high</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Warmth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How likely would you be to hire this applicant for the position of a summer camp counselor?

From extremely unlikely (1 star) to extremely likely (7 stars)

⭐⭐⭐⭐⭐⭐ 5
What is your gender?

- Male
- Female
- gender non-conforming
- transgender
- other
- prefer not to answer

I consider myself a member of the following racial group (check all that apply):

- White
- Black or African American
- Asian
- Native Hawaiian or Pacific Islander
- American Indian or Alaska Native
- Other

I consider myself a member of the following ethnic group:

- Hispanic or Latino
- Not Hispanic or Latino

Have you or anyone you know ever been diagnosed with a mental illness?

- Yes, I have
- Yes, someone I know has
- No
- Yes, I have and someone I know has
- Prefer not to answer
APPENDIX B: IRB APPROVAL

APPLICATION COVER PAGE

KEEP THIS PAGE AS ONE PAGE – DO NOT CHANGE MARGINS/PRINTS!!!!!!!!!

PLEASE SUBMIT THIS PAGE AS WORD DOCUMENT

APPLICATION FOR APPROVAL OF RESEARCH WITH HUMAN SUBJECTS
Protection of Human Subjects Review Board, 400 Corbett Hall

(Any text inside gray areas)

PRINCIPAL INVESTIGATOR: Cassidy McCusker EMAIL: cassidy.mccusker@maine.edu

CO-INVESTIGATOR: EMAIL:

FACULTY SPONSOR: Mollie A. Ruben EMAIL: mollie.ruben@maine.edu

TITTLE OF PROJECT: Perception of Mental Health Stigma

START DATE: Aug 31, 2020

PI DEPARTMENT: Psychology

STATUS OF PI: FACULTY/STAFF/GRADUATE/UNDERGRADUATE (F,S,G,U) U

If PI is a student, is this research to be performed:

☒ for an honors thesis/senior thesis/capstone? ☐ for a master’s thesis?

☐ for a doctoral dissertation? ☐ for a course project?

☒ other (specify)

Submitting the application indicates the principal investigator’s agreement to abide by the responsibilities outlined in Section I.E. of the Policies and Procedures for the Protection of Human Subjects.

Faculty Sponsors are responsible for oversight of research conducted by their students. The Faculty Sponsor ensures that he/she has read the application and that the conduct of such research will be in accordance with the University of Maine’s Policies and Procedures for the Protection of Human Subjects of Research. REMINDER: if the principal investigator is an undergraduate student, the Faculty Sponsor MUST submit the application to the IRB.

Email this cover page and complete application to UMRIC@maine.edu

***************************************************************************************************

FOR IRB USE ONLY Application # 2020-07-07 Review (F/E): E Expedited Category: I.I.3.g

ACTION TAKEN:

☒ Judged Exempt; category Modifications required? Accepted (date)
☐ Approved as submitted. Date of next review: by Degree of Risk:
☒ Approved pending modifications. Date of next review: by Degree of Risk: Minimal

Modifications accepted (date): 7/31/2020
Not approved (see attached statement)

☒ Judged not research with human subjects

FINAL APPROVAL TO BEGIN 7/31/2020

Date 10/2018
You are invited to participate in a research project being conducted by Cassidy McCusker, a student in the Department of Psychology at the University of Maine and Mollie Ruben, Assistant Professor of Psychology at the University of Maine. The purpose of the research is to understand how first impressions impact hiring decisions. You are being invited to participate in this study because you are at least 18 years of age and a student at the University of Maine. You will receive 1 SONA research credit or 2 points extra credit in approved courses for participation in this study.

What Will You Be Asked to Do?

If you decide to participate, you will be asked to review one aspect of different applicant’s job applications. After each application, you will be asked to rate the applicants on warmth, openness, stability, and competence and how likely you would be to hire the applicant for the position. You will also be asked to complete some demographic information and health information about yourself. It may take approximately 30 minutes to participate.

Risks

- Except for your time and inconvenience, there are no risks to you from participating in this study.

Benefits

- While this study will have no direct benefit to you, this research may help us learn more about how first impressions relate to one’s likelihood of being hired. This information will help us understand which aspects of a job application make an applicant more or less likely to be hired.

Compensation

- You will receive 1 SONA credit for participating in this study or 2 points extra credit if completing this for an approved course (e.g., PSY230). You may skip as many questions as you feel uncomfortable answering, but you must get to the end of the survey to receive extra credit for a class as well as to receive SONA credit. A link at the end of the survey will direct you to a different page to enter your name and email to either receive SONA credit or compile a list of students to send to instructors that have agreed to grant extra credit. This information will not be tied to your data.

Confidentiality
Your name will not be collected in this survey, and therefore, will not be associated with any of the research findings. All data collected via Qualtrics will be downloaded and deleted from Qualtrics following the completion of data collection which is anticipated to be completed by September 2021. Data will be kept indefinitely in accordance with guidelines of the American Psychological Association. Data will be kept on a password-protected computer in a locked office.

Voluntary

Your participation is voluntary. You may skip any questions that you wish not to answer without the loss of credit, but you must get to the end of the survey to receive credit. You may also stop participation at any time by exiting from the survey.

Contact Information

If you have any questions about this study, please contact Mollie Ruben 207/581-2049 (mollie.ruben@maine.edu) or Cassidy McCusker 207/209-6942 (assidy.mccusker@maine.edu). If you have any questions about your rights as a research participant, please contact the Office of Research Compliance, University of Maine, 207/581-2657 (or e-mail umric@maine.edu).

Your continuation with this study indicates that you have read and understood the above information and agree to participate

Click the “Continue” button to indicate that you consent to participate and begin the survey.
APPENDIX D: GENERAL RECRUITMENT LANGUAGE ON SONA

Study Name: Impressions of Job Applicants
Study Type: Online Survey
Duration: 30 minutes
Credits: 1 credit

Description: You must be at least 18 years of age to participate in this study. In this anonymous online study, you will be asked to rate a series of real job applicants using only one aspect of their applications on warmth, openness, stability, and competence and how likely you would be to hire the applicant for the position. You will also be asked to complete some demographic information about yourself and medical history information. Responses are anonymous. The entire study will take approximately 30 minutes to participate. You will receive 1 SONA credit for completing the study.
APPENDIX E: DEBRIEFING STATEMENT

The purpose of this study is to understand whether varying amounts of mental health information (e.g., medication, hospitalization, diagnoses) impact first impression judgments and hireability. We plan to look at your responses with everyone else’s responses in the aggregate form to examine—on average, how do perceivers view those with and without a mental health history?

This study is important because we need to understand more about the stigma surrounding mental health in order to decrease and eliminate it. The stigma associated with mental health contributes to people not receiving adequate care as well as more stress associated with asking for help and receiving treatment. We were expecting to find more stigma associated with certain disorders such as schizophrenia and bipolar disorder as they are widely misunderstood, with less stigma surrounding depression and anxiety as they are more talked about in the media. We also expect that more stigma will be associated with those who have been hospitalized and take medication for their mental illness versus those who do not.

Thank you for your participation in this important research. We kindly ask that you not disclose the purpose of this research to anyone else who may participate in the study. If others know the purpose of this study ahead of time, it could bias their responses.
APPENDIX F: PARTICIPANT INSTRUCTIONS

Thank you for participating in this study! Please complete this survey as if you are part of a hiring staff for a summer camp. You will be judging how competent, warm, stable, and open each applicant appears to be based on the part of their application you are reviewing. You may be reviewing their resume, cover letter, health history, references, or their background check. The summer camp will be for children aged 5-12. We are looking for applicants that will be good with children as well as responsible as their parents are trusting us with their children for 4-6 weeks. We’re looking for your real, honest opinion, so it’s okay to go with your first instinct. We’re interested in how these ratings correlate with people’s hiring ability.
Cassidy McCusker was born in Portland Maine in 1999. She graduated from Cheverus High School in 2017. She started her undergraduate career at the University of Maine in 2017. Cassidy is a psychology major and has a minor in child development and family relations. She started working in Dr. Schwartz-Mette’s Peer Relations Lab in the spring of her first year of college. She also worked in Dr. Ruben’s EPIC lab starting in the fall of her second year. Cassidy will begin a job as the Senior Camp Operations Coordinator at Seeds of Peace Camp in Otisfield Maine. She wants to pursue a master’s degree in Social Work and eventually become a Licensed Clinical Social Worker and start her own private practice after spending time working on a team in a psychiatric hospital. She intends to travel as much as possible throughout her life.