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Mental Illness Stigma: An Examination of the Effects of Label and Gender on College Students Perceptions of Depression and Alcohol Abuse

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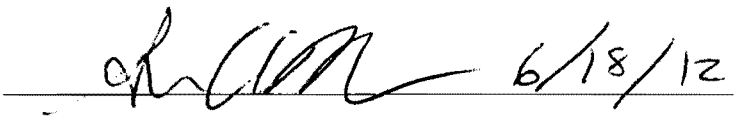

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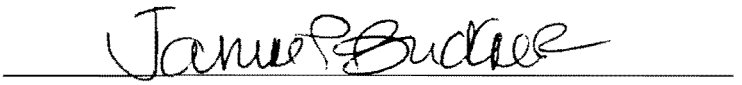

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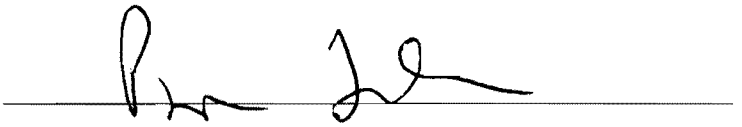

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Abstract

Mental illness stigma is a serious social issue that can lead to lasting social and emotional consequences for sufferers of mental illness. It is believed that the negative reactions associated with mental illness are part of the reason that a majority of mental illness sufferers actively choose not to seek help (Link & Phelan, 2001; Phelan & Basow, 2007). The public's reaction to those with mental illness is the result of preconceived notions that society holds about mental illness (Link & Phelan, 2001; Wirth & Bodenhausen, 2009). There are many factors that influence mental illness stigma, including some that were examined in the current experiment: presence of a mental illness label (whether or not described as having a "mental illness"), type of mental illness (depression versus alcohol abuse), and gender of the person with the diagnosis (Hayward & Bright, 1997; Phelan & Basow, 2007). The current study sought to address the effect of these three variables on college students' impressions of a hypothetical student. The results suggest that only type of mental illness has a statistically significant effect on perceptions of mental illness, such that participants were more sympathetic, on average, toward the characters suffering from depression than alcohol abuse, and believed they had a more genuine mental illness. On the other hand, participants were more socially tolerant, on average, of the character with alcohol abuse than depression, and believed they had a higher ability to function socially. Additionally, there was an interaction between gender and mental illness type, such that the male character with depression was seen as more maladjusted, on average, than the male character with alcohol abuse, a finding not true for female characters. It is possible that the mental illness label provided for the vignettes was not apparent; the mental illness label may have been more influential on perceptions if the label were more specific or embed within the vignette rather than above the vignette.

Introduction

It is predicted that nearly 50% of the American population will be diagnosed with some form of a mental illness at some point in their life (Martin, Pescosolido, & Tuch, 2000). Of the population that is diagnosed with a mental illness, it is reported that less than 30% actually seek out and successfully complete treatment (Corrigan, 2004). These statistics are alarming when one considers the number of mental illness cases that can be successfully treated or managed with mental health services and treatment. It is believed that the negative reactions and societal rejection associated with mental illness are part of the reason that a majority of mental illness sufferers actively choose not to seek help (Link, Cullen, Frank & Wozniak, 1987). The public's reaction to and social distancing from those with mental illness may be the result of preconceived notions that society holds about sufferers of mental illness. Moreover, the formation of these damaging beliefs is influenced in large part by the depiction of mental illness in the media (Dingfelder, 2009).

The media is one of many extremely influential factors that shape the public's ideas and opinions of the mentally ill. In addition, the media are the most commonly cited source of information regarding symptoms and behaviors associated with mental illness (Stuart, 2006; Wahl, 1992). Some influential sources of information about mental illness are the internet, the news, and movies that portray people suffering from mental illness (Link, 1987). Reports of mental illness from these sources are often inaccurate and misleading. The majority of stories about mental illness focus on the most serious mental disorders, highlighting bizarre symptoms, dangerous behavior, and criminal activity (Hayward & Bright, 1997; Stuart, 2006; Wahl, 1992). Consequently, it is evident that the public forms stereotypes on illusory information, which results in mistreatment of individuals diagnosed with a mental illness.

This paper will introduce mental illness as well as the common stereotypes that are held by the general public with regards to mental illness. Next, the effect that belief in stereotypes has on people with mental illness is addressed. Specifically, the process by which stereotypes lead to negative outcomes, or the stigmatization process, will be described. In addition, other factors, such as gender, social dominance orientation, and label, will be discussed because these factors may influence the stigma associated with mental illness. Finally, the current study, which was originated from the stigmatization process as well as the other factors described, will be discussed.

Mental Illness and Perceptions

Mental Illnesses. Mental illness is a form of disease that is differentiated by psychological impairment and includes changes in cognitive functioning, behavior, and disturbances of emotion. There are a number of different mental illnesses – including depression, substance abuse, anxiety disorders, schizophrenia, and many others – each of which is defined by specific symptoms and varies in its degree of severity and its prevalence within a population (Dingfelder, 2009; NIMH, 2010). The lifetime prevalence of a mental illness such as depression is around 16.5 percent of adults in the United States, considerably high as compared to a mental illness such as schizophrenia with a lifetime prevalence of one percent (NIMH, 2010).

With such a large percentage of the United States population experiencing mental impairment at some point in their life, it is fascinating that a considerable number of public misconceptions about mental illness exist. For instance, depression is perceived to be a more "genuine" mental disorder than substance abuse. While both depression and alcohol abuse are recognized mental illnesses in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000), depression has been associated with true cognitive

dysfunction, whereas substance abuse such as an alcohol problem has been seen as a character flaw (Wirth & Bodenhuasen, 2009). In spite of the fact that both depression and substance abuse are perceived differently by the public, both mental illnesses include in their etiology a possible genetic cause or environmental factor such as a remarkable life stressor. This fact reinforces that public misconceptions of mental illness are antiquated and a hindrance for many to receive treatment.

Interestingly, studies of perceptions of both depression and substance abuse have found that people perceive sufferers of both disorders as being dangerous and likely to become violent. These two attributes, being dangerous and violent, are linked to social distance, which is the desire to be separated from a particular person or group in a specific social setting. However, neither of these mental illnesses is actually associated with violence mental illnesses (Angermeyer & Matschinger, 2005; Hayward & Bright, 1997; Martin, Pescosolido, & Tuch, 2000).

Additionally, depression and substance abuse are two disorders that are commonly associated with a specific gender. Depression is more likely to be linked to women and alcohol abuse is more likely to be attributed to men (Schnittker, 2000; Wirth & Bodenhausen, 2009). Moreover, studies of impressions of mentally ill people report that men and women who present with a mental illness that is not typically associated with their gender, are viewed more negatively (Schnittker, 2000). Consequently, women who display symptoms of depression and men who display symptoms of alcohol abuse are more socially tolerated than when the reverse is true (Schnittker, 2000; Wirth & Bodenhausen, 2009).

Common Stereotypes. The stigma or negative reaction that occurs in response to mental illness exists because of a lack of understanding about mental illness, such as the type of

behaviors and symptoms that occur with mental illness (Corrigan & Penn, 1999; Hayward & Bright, 1997). As a result of the general lack of understanding of mental illness in the public, there are four specific stereotypes that exist (Hayward & Bright, 1997). These specific stereotypes are that all people with mental illness are dangerous, are responsible for their condition, are not likely to recover, and deviate from social norms (Angermeyer & Matschinger, 2005; Hayward & Bright, 1997). Moreover, it is belief in these specific stereotypes that activates the stigmatization process (Angermeyer & Matschinger, 2005).

The perception that people that suffer from a mental illness are dangerous and violent is among the most common stereotypes held by the public. This belief is highly inaccurate; empirical research has documented that only a small portion of people with mental illness are actually violent (Corrigan et al., 2009; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). The perception that a person is dangerous means that they are unpredictable and threatening; therefore, if a non-mentally ill person were to come in contact with him or her, that person's safety and comfort would be compromised (Feldman & Crandall, 2007; Jorm & Griffiths, 2008; Link & Cullen, 1986). As a result of this commonly held belief, research supports the strong association between perceived dangerousness and social distance, such that participants report greater desire for social distance from people with mental illness if they believe that person is dangerous or violent, on average, than if they were not believed to be violent (Corrigan et al., 2009; Angermeyer & Matschinger, 2005; Link & Cullen, 1986). Moreover, the degree to which the public believes the stereotype that people with mental illness are dangerous is based on the level of familiarity or exposure to people with mental illness (Angermeyer & Matschinger, 2005; Corrigan, Green, Lundin, Kubiak, & Penn, 2001; Link & Cullen, 1986).

Link and Cullen (1986) assessed perceptions of dangerousness of two randomly chosen community samples. One hundred and fifty three participants responded to questionnaires about the level of contact with persons with mental illness as well as beliefs about how dangerous people with mental illness are. Contact with persons with mental illness essentially means the amount of exposure to mental illness; a low level of contact would be exposure through the media, whereas a high level of contact would be working closely with a person or having a person with mental illness in a close group of friends. Link and Cullen (1986) found that the amount of exposure a person had to mental illness correlated with his or her beliefs about how dangerous people with mental illness are. That is the more contact participants had with people who have a mental illness, the less likely the participants were to endorse beliefs that people with mental illness are dangerous. Whereas, participants who reported lower levels of contact with people with mental illness were more likely to believe people with mental illness are dangerous. Thus, these findings suggest that any positive contact with people with mental illness leads to decreased perceptions of dangerousness. Moreover, this is a negative correlation, such that increased contact with people with mental illness is predicted to lead to decreased stereotype beliefs.

The second commonly held stereotype that leads to stigmatization of the mentally ill is that people with mental illness are responsible for their condition. This notion of responsibility for a persons' condition is referred to as the attribution of responsibility (Hayward & Bright, 1997). Attribution of responsibility or casual attributions are the explanation provided for the cause of a behavior (Boyson & Vogel, 2008; Corrigan, 2000; Corrigan et al., 2009; Hayward & Bright, 1997; Wirth & Bodenhausen, 2009). More specifically, behavior can have an internal cause in which the person is in control of and responsible for a behavior or it can have an

external cause in which the cause of the behavior is situational or the person has no control (Corigan, 2000; Wirth and Bodenhausen, 2009). In terms of this stereotype, the attribution of responsibility is internal because the public believes that a person with a mental illness is in control of their behavior and actively chooses to be the way he or she is (Boysen & Vogel, 2008; Corrigan et al., 2001; Hayward & Bright, 1997). When behaviors are given an external attribution – that is, the behavior is considered out of the persons' control – the public tends to view the condition more favorably. An example of this type of attribution is a condition which is understood to have a biological cause, thus, clearly out of the persons' control (Boysen & Vogel, 2008;Jorm & Griffiths, 2008; Corrigan, 2000). The final two commonly held stereotypes are that people with mental illness are suffering from a chronic illness that is not treatable and as a result not likely to ever recover from their condition.

Combating Stereotypes. The behaviors that are associated with mental illness are assumed to violate implicit societal norms (Hayward & Bright, 1997). Therefore, the general public, specifically people without mental illness, wants to avoid people with any form of mental illness because violations of social norms would make social contact with the individual or group uncomfortable. Research that assesses ways to decrease stigma, or the negative reactions, suggest that in order to challenge these stereotypes and change the beliefs that are commonly held by the public, there needs to be increased contact with mentally ill people (Corrigan & Penn, 1999; Phelan & Basow, 2007). Additionally, increased contact between the public and people with mental illness, which serves to defy typical stereotypes, leads to greater tolerance of individuals and lower reported desire for social distance (Angermeyer & Matschinger, 2005; Link & Cullen, 1986). Beliefs surrounding mental illness tend to be defined by the often false impressions conveyed in the media. Therefore, increased familiarity with people with mental

illness is achieved by increasing direct contact, which can lead to challenging stereotypes about mental illness as well as decreased stigmatization (Angermeyer & Matschinger, 2005; Corrigan et al., 2001; Link & Cullen, 1986).

Stigmatization Process

Defining Stigma. There are specific characteristics or behaviors that people with mental illness display that receive the negative reaction (Angermeyer & Matschinger, 2005; Hayward & Bright, 1997; Griffiths, Christensen, & Jorm, 2008; Jorm & Griffiths; 2008; Link & Phelan, 2001). Stigma is caused by believing that a particular behavior or characteristic of a person is linked to a specific stereotype. Behaviors that are stigmatized are judged to be bizarre and deviate from socially accepted norms, and therefore elicit stereotypes that are negative and undesirable (Angermeyer & Matschinger, 2005; Link & Phelan, 2001). The more bizarre the behaviors the more likely the behaviors will be labeled and thus stereotyped as abnormal. This results in more negative feedback, to the individuals displaying these behaviors, from the public in comparison to individuals displaying the very same bizarre behavior who are not linked to a mental illness stereotype. Moreover, when a mentally ill person confirms a stereotyped behavior, the level of stigmatization increases, and his or her behavior is believed to be caused by something that is less accepted, like a character flaw, instead of attributing the behavior to the organic, psychological disease (Corrigan, 2005; Wirth & Bodenhausen, 2009). In addition, interactions with mentally ill people who fulfill specific stereotypes strengthen the stigma associated with their mental illness. Interactions with mentally ill people who defy their stereotypes, on the other hand, serve to lessen the stigma associated with their mental illness (Corrigan, 2005).

There are two different types of stigma that exist: general or public stigma and self-stigma. General stigma, as discussed above, involves the public's perceptions of certain characteristics or behaviors and their negative reactions that results (Corrigan, Kuwabara, & O'Shaughnessy; 2009; Fortney et al., 2004). An example of a stereotype that creates this type of stigma is that mentally ill people are violent and dangerous and should be avoided. The second type of stigma that mentally ill people experience is self-stigma. Self-stigma is the conscious incorporation of the stereotypes associated with a person's mental illness. Essentially, the mentally ill person, who is aware of the stereotypes and negative beliefs associated with their condition, begin to internalize the beliefs. In time, the mental illness sufferer begins to internalize or believe what is said about them is true, and may as a result, start to fulfill those beliefs (Corrigan et al., 2009; Griffiths et al., 2008; Fortney et al., 2004).

Stigma. A mental illness, as described by many anti-stigma campaigns, is a disease like any form of cancer or tumor. Mental illness, however, is also a psychological disease that manifests itself in a number of different behavioral symptoms. As a result, the public response to mental illness is qualitatively different than it would be to any other disease like cancer or a tumor (Dingfelder, 2009). Malicious social responses occur because the symptoms of mental illness deviate from what is accepted as normal behavior and produce negative public reactions; this is referred to as stigmatization of the mentally ill person. Stigmatization of the mentally ill and of their abnormal symptomology occurs, in part, as the result of the public's misinterpretation and lack of understanding of their disease and associated behaviors (Angermeyer & Matschinger, 2005; Corrigan & Penn, 1999; Hayward & Bright, 1997; Link & Phelan, 2001). As a result of the experience of stigmatization, the mentally ill person typically has lower self-esteem and is subjected to social isolation and rejection (Corrigan, 2004; Jorm &

Griffiths, 2008; Link &Cullen, 1986). The impact of these different responses that patients with a mental illness experience are harmful and lasting (Corrigan, 2004).

Stigmatization. Stigmatization occurs as a process, which involves both social and cognitive factors. There are four components of the stigmatization process: identifying the behavior, labeling the behavior, associating the behavior with a preconceived idea, and discriminating against the person because of the behavior (Corrigan, 2004; Link & Phelan, 2001; Phelan & Basow, 2007). The first component of the stigmatization process is that the person or group of people has some distinguishing characteristic that makes them stand out from other people. This distinguishing characteristic is some identifiable trait, such as skin color, gender, or sexual orientation. This characteristic places a label on the person or group of people that socially isolates them from "normal people" (Link et al., 1987; Link & Cullen, 1986; Link & Phelan, 2001; Phelan & Basow, 2007). In terms of mental illness, the identifying characteristic could be an abnormal display of behavior, a change in physical appearance, or being seen by other people when attending a psychological doctor's visit (Corrigan, 2004).

The second component of the stigmatization process is that the defining characteristic or behavior is linked to a preconceived belief. Essentially, the socially defining label conveys negative information about the person or group through the stereotype that is assigned to them. These stereotypes enable the public to quickly classify the person or group as well as inform the public about how this person or group functions within the world (Corrigan, 2004; Link & Phelan, 2001; Phelan & Basow, 2008). In terms of mental illness, the association of a label and a stereotype informs that public what to expect when dealing with this ill person, such as that they are lazy and that people should distance themselves from the person (Phelan & Basow, 2008).

The third component of the stigmatization process is the social separation of the labeled or stigmatized group from the rest of the population. Separation of the two groups creates an "in group," which are the "normal," fully functioning members of the population, and an "out group," which includes the people that have the notable human difference (Link & Phelan, 2001; Phelan & Basow, 2008). The members of the "in group" essentially create the "out group" by accepting the stereotypes associated with the defining characteristics of this group. Moreover, the "in group" supports the stereotypes by displaying negative emotional reactions to the defining characteristics or behaviors (Corrigan, 2004). In terms of mental illness, the normal members of society do not want to interact socially with members of society who have a mental illness because they feel uncomfortable socializing with people who display abnormal behaviors.

The fourth component of the stigmatization process is the social repercussions of being labeled with abnormal differences and assigned to the "out group." Most notably, the person or members of a particular group will be socially excluded from the "in group" and possibly rejected from friends or family members who associated with them prior to their assignment into the "out group." A second consequence is loss of status, not only socially, but also in the work world. Finally, the person or people of the "out group" can experience discrimination against and unfair treatment because of their defining characteristics (Corrigan, 2004; Link & Cullen, 1986; Link & Phelan, 2001; Phelan & Basow, 2008). In terms of mental illness, a person may have difficulty finding a good job because of their group associations or have difficulty finding a place to reside (Corrigan, 2004).

The fourth component of the stigma process is the consequences of stigmatization. There are a number of life-altering consequences that result from being stigmatized for having a mental illness (Link & Phelan, 2001). The consequences of being labeled with a mental illness and

stereotyped because of the label can result in difficulties in all areas of a person's life, including: family, employment, friendships, and living situations. Moreover, the experience of these consequences can result in personal problems and can lead an individual to limit him or herself. Many mentally ill people will avoid situations or give up opportunities because they fear the consequences of being labeled as mentally ill (Link, 1982).

There are three negative consequences of being labeled as mentally ill: discrimination, devaluation, and demoralization (Link, 1987; Link & Phelan, 2001; Phelan & Basow, 2007). Discrimination refers to being treated differently from someone who is not mentally ill, simply because of the individual's group membership. Being discriminated against because of an individual's group membership eventually leads to devaluation or the loss of status and social acceptance. Mentally ill people may experience friends or family members who will no longer want to associate themselves with the mentally ill person. Social isolation and rejection can result in demoralization or the loss of self-esteem and social confidence (Link, 1987; Phelan & Basow, 2007).

Isolation and status loss not only occur in the social realm of functioning, but can also occur in the work realm. Mentally ill people are often discriminated against by employers, being excluded from job opportunities or being treated differently because of their group membership (Link, 1982; Link & Phelan, 2001). Additionally, mentally ill people often have difficulties renting apartments and being included in community activities (Link & Phelan, 2001). Research on the consequences of mental illness supports the fact that mentally ill people are rejected, socially isolated, and discriminated against.

Other Factors that Influence Mental Illness Stigma

Gender. Gender is a socially derived term that describes an individual's social role in society in relation to their biologically determined sex. While sex and gender are terms that are often used interchangeably, the gender of an individual provides information about the societal expectations of that individual, that is, the social roles they are expected to maintain and fulfill. Men and women both have different gender role expectations, which dictate how men and women are expected to act. Deviations from these gender role expectations, which are highly stereotyped, result in negative reactions and consequences (Hinkleman & Granello, 2003). Socially contrived gender roles significantly influence the public's impressions and beliefs about mental illness and labeling of abnormal behavior. Deviance from socially accepted, gender-associated behavior is often viewed as abnormal and believed to be caused by a mental illness (Hinkleman & Granello, 2003; Phelan & Basow, 2007). Moreover, the public's acceptance and tolerance of people who display or are labeled with a mental illness is dependent on the target individual's gender (Phelan & Basow, 2007).

In studying gender and mental illness, it is evident that men and women have gender-associated psychological disorders. For example, men are typically associated with the mental illness of substance abuse and women are associated with the mental illness of depression (Schnittker, 2000; Wirth & Bodenhausen, 2009). For mentally ill people who display symptoms of a disorder that is not associated with their gender, the public impression of these people is that they are socially deviant. Moreover, even at the level of mental illness these individuals violate their gender role expectations. In general, women who are mentally ill tend to be better tolerated socially than men who are mentally ill. Women with mental illness tend to be more tolerated because the psychological disturbance does not interfere with their expected social role, whereas, for men, psychological disturbances prevent them from carrying out such roles as the providing

for their family. This assumption is referred to as the gender-role hypothesis (Schnittker, 2000). Additionally, research supports the greater tolerance towards mentally ill women, with findings that show women are less stigmatized, on average, than men will the same mental illness (With & Bodenhausen, 2009).

Schnittker (2000) used the General Social Survey to assess how manipulating the gender of a described target individual affected participants' responses toward the target individual. In this study the researchers were interested in whether male and female participants responded differently, on average, to exposure to mental illness. Participants were asked to read a vignette about a person with one of the five psychological disorders. After the participants completed reading the assigned vignette, participants were asked about their beliefs regarding social tolerance and perceived dangerousness. The influence of gender on each of these areas was assessed.

Schnittker (2000) found that gender had a statistically significant effect on participants' willingness to help the target individual. Participants of both genders reported that, on average, they would be more willing to help female targets than male targets. Similarly, participants reported that, on average, the female target individual was less dangerous than the comparable male target. In addition, female participants reported being more willing, on average, to interact with the female target with gender-typical disorder, depression, than the gender-atypical disorder, substance abuse. And in general, female participants tended to be more willing to interact with same-gender targets than opposite-gender targets, whereas for male participants, gender was not a significant factor for interaction (Schnittker, 2000). Consequently, these findings further support the important influence that gender has on perceptions of mental illness as well as the gender-role hypothesis.

In a similar study, Wirth and Bodenhausen (2009) assessed the role of gender in mental illness stigma. In this study, the researchers also examined the perceptions of either a male or female character with depression or alcohol abuse. In this study, the researchers chose to study these specific mental illnesses because, in a pilot study, they were found to be linked with specific genders. In addition to assessing the gender-role hypothesis, Wirth and Bodenhausen (2009) were interested in the influence of causal attributions for the characters behavior. As discussed above, internal attributions are typically associated with mental illness because people with mental illness are believed to be personally responsible for their conditions (Corrigan et al., 2001; Hayward & Bright, 1997).While the gender-role hypothesis suggests that gender deviance will receive the greatest negative response, as was supported by Schnittker (2000), Wirth and Bodehausen (2009) suggested that when a person violates their gender-associated behavior, which in this case is displaying a gender-atypical disorder, they will experience less stigma because of causal attributions. Essentially, gender-atypical disorders will receive external attributions and gender-typical disorders will receive internal attributions; therefore, behavior that is stereotypical receives greater stigmatization than behavior that is counter-stereotypical.

Wirth and Bodenhausen (2009) examined the effects of gender on mental illness stigma with a vignette study design. Participants read a vignette or paragraph describing a person with a mental illness, and then completed a stigmatization survey. The vignettes varied by gender and gender-associated disorders, whereby participants read about a woman or man who was matched with either a female-typical disorder, depression, or a male-typical disorder, alcohol abuse.

Wirth and Bodenhausen (2009) found that participants reported, on average, greater negative reactions towards the target person when the genders of the target person matched the gender-associated disorder. More specifically, male targets with alcoholism were stigmatized, on

average, more than male targets with depression. The same result was true for female targets. Similarly, male participants reported, on average, that they were more likely to help the target individual if he or she displayed the gender-atypical disorder. Female participants on the other hand, were willing to help both male and female targets, regardless of disorder. Interestingly, Wirth and Bodenhausen (2009) found that a gender-associated disorder that is matched with the non-associated gender was considered to be a more genuine mental illness than a gender-typical disorder. In addition, participants reported that gender-atypical disorders had an innate, biological cause, whereas gender-typical disorders are associated with nonorganic causes (Wirth and Bodenhausen, 2009). Consequently, it is evident that the results of this study support the causal attribution theory, which states that gender-atypical disorders are more tolerated and less stigmatized than gender-typical disorders because they will be externally attributed.

In summary, gender of the participant has a significant influence on the perceptions of mental illness. Moreover, research supports that men and women respond differently to mental illness and hold different attitudes about mentally ill people. Thus, it is suggested that women, because of their gender-associated quality of being nurturing, are more tolerant and accepting of mentally ill people, than are men (Hinkleman & Granello, 2003). The current research, however, provides conflicting evidence for the role of gender in mental illness.

Social Dominance Orientation. Social dominance orientation is a measure of a persons' group identity. Essentially, it measures a person's beliefs about in-group and out-group membership. Social dominance orientation was based on the idea that prejudice exists against people or groups that possess certain characteristics that are deemed undesirable by the majority group. This group, which possesses the undesired characteristics, are then oppressed or treated in an unjust manner by the members of the majority group. The degree to which a person of a

certain group engages in oppression or prejudice depends on their attitudes towards intergroup relations (Pratto et al., 1994). On one end of the spectrum are people that believe that there should be clearly defined in-groups and out-groups, whereas at the other end of the spectrum is equality for all people. Thus, strong beliefs in the need for separation of groups, such as people with mental illness as an out-group, could influence reported impressions (Phelan & Basow, 2007).

Labeling. Examples of labels or terms that are used to identify or describe a person that suffers from a mental disease include "mentally ill", "abnormal", "insane", and "crazy" (Stuart, 2006; Wahl, 1992). More than 30 terms can be found in the thesaurus as a synonym to "insane"; almost all of these labels carry a distinctly negative connotation (Hayward & Bright, 1997). As such, labels are an important part of stigmatization, contributing to all four components of the stigmatization process (Link & Phelan, 2001; Phelan & Basow, 2007). Labeling more clearly links a person or group to a specific stereotype than to a characteristic or observation of an unusual behavior. Moreover, stigma and labeling provide information about the social identity and desirability of a particular person (Link et al., 1987; Link & Cullen, 1986; Corrigan, 2005). The label serves as the connection between the undesirable characteristics and the stereotypes, and clearly applies such assumptions to the individual.

This connection is supported by research with mental illness and labeling. Link (1982) assessed the outcomes of labeling a person with a psychiatric condition on earned income and social functioning. Participants in a community sample included "treated cases," who had engaged in psychiatric treatment and were labeled as psychiatric patients, and "untreated cases," who qualified for a psychiatric diagnosis but had not received treatment and did not have a formal psychiatric label. All participants were interviewed by a psychiatrist who was blind to

their psychiatric label. Information on the family's earned income for the participant and the participant's work status were collected.

Link (1982) found that being labeled as a psychiatric patient had a significant effect on the assessed areas of functioning. The psychiatric label had a significant, negative effect on earned income, such that people with a formal label had reportedly lower income, on average, than people without a formal label, matched on current psychiatric status. The presence of a formal psychiatric label was also reported to negatively impact work-related functioning. In comparison to the group that could be diagnosed with a psychiatric condition but was not given a formal label, the impact of behavior on employment status and work-related functioning was worse for the group with a formal psychiatric label. Thus, the presence of a psychiatric label negatively affected the person's ability to find and maintain employment. Consequently, it is evident that labeling significantly affected the participants' daily functioning. Moreover, it is predicted that these negative effects could influence other areas of life such as in social functioning.

In another study, Link (1987) researched the effect that labeling a person with a mental illness has on these other areas of social functioning. There were three specific areas of functioning that were assessed – internalization of label, earned income, and work status. A community sample of participants were split up into five groups: untreated community respondents with no evidence of psychopathology; non-clinical people who had a psychiatric disorder, but were neither diagnosed nor treated; recently labeled, first-treatment patients; repeat-treatment patients; past-treatment patients. All participants were given the perceived devaluation-demoralization measure, and asked about their earned income, employment history, and current employment status.

Link (1987) found that labeling a person as a mental patient not only transforms the beliefs of the public about that person, but also affects the individual's beliefs about himself or herself. The researchers reported that demoralization was significantly more likely for the group of participants who were labeled with a mental illness and were hospitalized for treatment, as compared to the three other groups of participants who were not associated with a mental illness label. The untreated group, the group with no label, and the group that were former patients were not significantly different, on average, in their reports of devaluation and discrimination of themselves.

Moreover, the reports of devaluation and discrimination, specifically in the mental ill labeled group of patients that were currently receiving treatment, affected other aspects of their life. This group had, on average, lower earned income as well as higher reports of unemployment as compared to the other three groups of participants that were not associated with a mental illness. Consequently, it is evident that labeling has a significant effect on a person's opinion of himself or herself, which has an effect on other areas of social functioning. Moreover, with time and removal of the label, personal feelings improve and other areas of life are positively affected (Link, 1987).

Phelan and Basow (2007) conducted a study with college students to assess the effects of labeling and stereotypes on social distance. Using methods similar to Wirth and Bodenhausen (2008), Phelan and Basow (2007) presented college students with three vignettes of a hypothetical college student suffering from a mental illness. The vignettes contained descriptions of behavior associated with a specific mental illness, but did not contain an explicit mental illness label. In addition, each participant responded to all three vignettes, giving them the opportunity to compare between vignettes. Participants were surveyed about their impressions of

the described target characters in the vignette with respect to social distance and perceived dangerousness, asked to label the described mental illness, and asked about their empathetic concern. These measures provided insight into how these mentally ill people would be stigmatized and the consequences they would endure if they were real people.

Phelan and Basow (2007) found that participants stigmatized a character more when they labeled the character in the vignette as having a mental illness than when they did not label the character in the vignette as mentally ill. That is, the participants reported more negative impressions for the vignette character whom they labeled as mentally ill. Moreover, for the vignette characters labeled as mentally ill, participants reported being less tolerant and wanting to be more distanced socially from the target person. In addition, characters labeled as having a mental illness were perceived to be more dangerous than the vignette characters that were not labeled as mentally ill. Social distance was predicted by the perceived dangerousness of characters. Participants were more tolerant socially, on average, of the character in the vignette describing social stress than of the characters in the vignettes that described the two mental illnesses, alcohol abuse and depression. Consequently, the hypothetical consequences experienced by the vignette character were negative and undesirable. Moreover, the consequences experienced by the hypothetical character, which include social distance and discrimination, would have resulted in social isolation and demoralization if the hypothetical character were real (Phelan & Basow, 2007).

The Present Study. The purpose of this current study was to expand the Phelan and Basow (2007) study by exploring the impact of mental illness stigma in undergraduate students. Phelan and Basow (2007) addressed the impressions that college students had about three hypothetical students suffering from depression, alcohol abuse, or common stress. This study

used the hypothetical college student vignette, focusing specifically on the two mental illnesses that Phelan and Basow (2007) addressed, depression and alcohol abuse. We examined the impressions that students reported of a hypothetical college classmate presenting such mental illnesses. Examination of the social impressions of the character described in the vignette was assessed through a number of dependent variables, including degree of stigmatization, social distance, perceived dangerousness, social role functioning, and labeling. Each of these dependent variables was assessed through questions that directly related to the many aspects of daily functioning that were potentially affected by the presence of a mental illness. Thus, in examining the perceptions that participants had about the vignette character in a number of social areas of functioning, the source of stigma associated with mental illnesses of interest was revealed.

Phelan and Basow (2007) assessed two independent variables, gender and diagnosis, using a within-subjects design. There were a total of six vignettes describing a college student; participants either read about a male student or a female student, who was diagnosed with depression, alcohol abuse, or social stress. In the current study, the same independent variable of diagnosis was used; the participant in the vignette either had depression or alcohol abuse. Social stress was not examined in this study; the focus was specifically on mental illness. In Phelan and Basow (2007), each participant received all three vignettes, exposing them to the three different conditions used, and potentially leading to order effects.

In this study, participants received a single vignette describing a college student with either depression or alcohol abuse. This methodological change ensured that participants were not able to base their impressions of the given vignette character from the other vignette characters used in the study; participants only provided impressions of one vignette character. Similar to the independent variable assessed in Phelan and Basow (2007), the gender of the

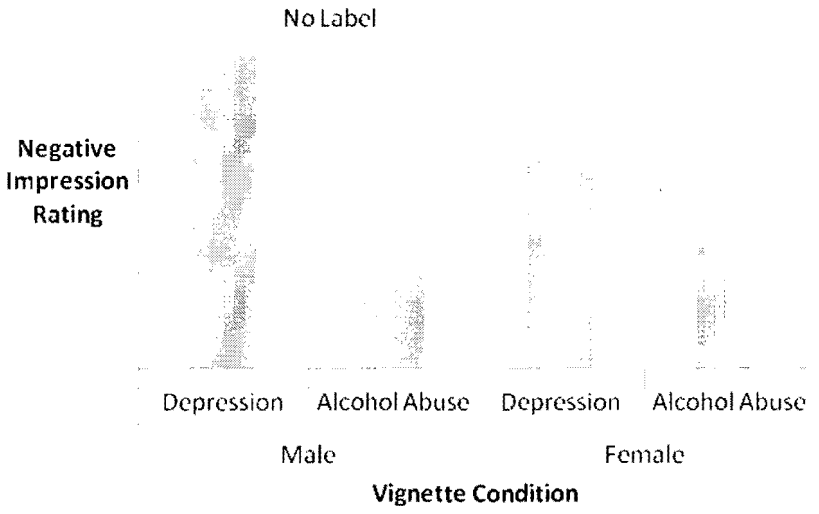
character described in the vignette was also be manipulated. The purpose of repeating this manipulation was to study how gender as a stimulus variable influences participants' perceptions (Wirth & Bodenhausen, 2009). Additionally, the current study assessed the effect that gender may have in combination with the other independent variables used in the study. In accordance with previous research, the effect of participant gender on reported impressions was not assessed (Phelan & Basow, 2007)

Moreover, Phelan and Basow (2007) assessed the influence of a label on perceptions by the use of an inferred or implied mental illness label. Thus, the vignettes did not contain labels such as "depressed" or "substance abuser"; the participants only received a description of a specific a student with either depression or alcohol abuse. The descriptions contained clinically accepted symptoms and life-related consequences that typically occur with each mental illness. The independent variable in the current study was an explicit label; the participants in the vignette either had no label with just the description of the designated mental illness or the vignette will had a label of "this student is mentally ill". This addressed the role that an explicit label plays with impressions of mental illness. Consequently, there were a total of three independent variables: gender, diagnoses, and label. In summary, participants received one of eight vignettes that described a student who was either a male or female, diagnosed with depression or alcohol abuse, and was given no label or a label of "mentally ill".

Hypotheses. There are two hypotheses that were addressed in this study. The first hypothesis was that, for measures of negative perception there was a three-way interaction among the independent variables: label, gender of target and mental illness type. Thus, the interaction between gender and mental illness type, for all dependent variables, depended on whether or not there was an explicit mental illness label present. Specifically, for those rating the

target without the mental illness label, I expected that male targets would elicit more negative reactions in the depressed condition, on average, than the female target in the depressed condition. In addition, I expected that the male and female targets would not differ, on average, in terms of negative impression rating for the alcohol abuse condition. It was predicted that the male and female targets with alcohol abuse would receive fewer negative reactions than the male and female targets with depression because alcohol consumption is generally more accepted in the college environment (Phelan & Basow, 2007). Figure 1 shows the predicted two-way interaction between gender and mental illness type for the vignette character without an explicit mental illness label for all dependent variables.

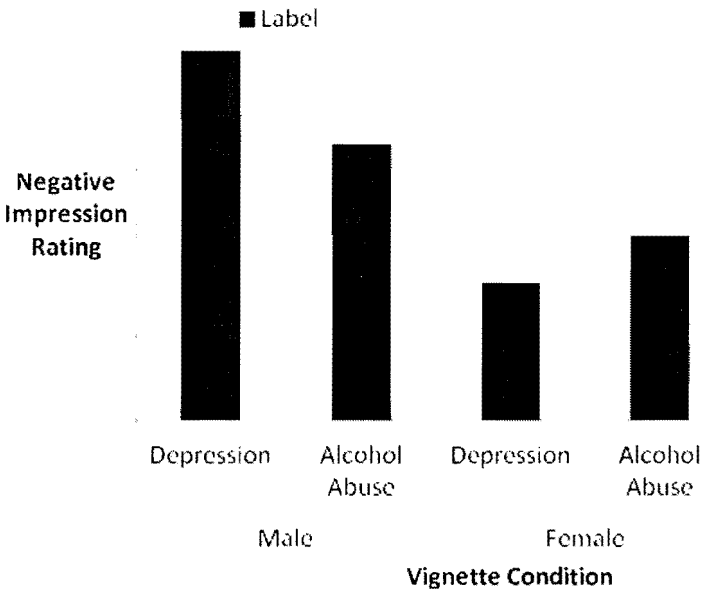
Figure 1. Predicted three-way interaction for the effect of not having an explicit mental illness label on the interaction between gender and mental illness type.



Whereas, for the target with the explicit mental illness label I expected that the male target would elicit more negative reactions in the depressed and alcohol abuse conditions, on average, as compared with female target. The male target with depression and explicit mental illness label would be viewed more negatively, on average, than the male target with alcohol

abuse. Moreover, the female target with alcohol abuse and an explicit mental illness label would be viewed more negatively, on average, than the female target with depression. It is predicted that the male target with a label would be viewed more negatively than the female target because the presence of a mental illness label would make gender role norms more evident. If males display a mental illness, they violate gender role expectations; thus, results in negative impressions (Hinkleman & Granello, 2003). Figure 2 shows the predicted two-way interaction between gender and mental illness type for the vignette character with an explicit mental illness label for all dependent variables.

Figure 2. Predicted three-way interaction for the effect of no explicit mental illness label on the interaction between gender and mental illness type.



The dependent variables were stigmatization, helping inclinations, belief measures, social distance, perceived dangerousness, and social role functioning.

The second hypothesis that was addressed in this study was that the above interaction would be true even when controlling for social dominance orientation. I predicted that participant

differences in social dominance orientation would negatively affect the relationship between the dependent and independent variables. Consequently, in accordance with Phelan and Basow (2007) social dominance would serve as a covariate.

Methods

Participants

A power analysis was conducted using G*Power in order to calculate the size of the participant pool. For a small to medium effect ($f = .2$), where alpha is .05 and power is .80, G*Power recommends 199 participants. The participants consisted of Seton Hall University undergraduate students that were recruited from the undergraduate participant pool to participate in this experiment.

Participants consisted of 176 (female=130) undergraduate students from Seton Hall University, almost the number recommended in the power analysis. Participants were able to sign up to participate in this study using the SONA online recruitment software. If the students met the age requirement for the study, were enrolled in the introductory psychology course at the university, and were interested in participating, they were able sign up to participate in an available time slot. Two participants were excluded because they did not meet the age requirement to participate. The students were offered credit towards their psychology course as compensation for their participation. Participation in this study was completely voluntary; students were able to opt to complete an equivalent non-research assignment to earn this credit. The ethnic makeup for this sample was 61% White/not of Hispanic Origin, 17% Hispanic, 15% African American, 10% Asian, 1% American Indian, and 5% mixed ethnic background. The participants ages range from 18 to 54; the average age was 20 ($SD = 3.10$). The modal participant was a sophomore in college.

Materials

The participants completed six questionnaires that assessed perceptions of a target person described in a short vignette as having a mental illness. The vignettes presented a college student that was suffering from either depression or alcohol abuse, and described behaviors that are typical of their identified disorder (Appendix A). The first four questionnaires addressed participants' direct impression of the student in the vignette. The final two questionnaires dealt with participants' general opinion about a variety of situations and beliefs. Additionally, participants completed several short questions on demographic information at the end of the study (Appendix G). These questions included gender, age, ethnicity, and year in school. The questionnaires took no more than 30 minutes to complete.

Stigmatization. The first scale that participants completed was a stigmatization measure (Appendix B) created by Wirth and Bodenhausen (2009). This measure assessed the degree of stigmatization of the student described in the vignette, along three subscales.

The first part of the measure, which uses a 6-point scale, assessed the participants' affective reactions, or emotions, with respect to the student described in the vignette. The emotions include anger, concern, irritation, disgust, sympathy, annoyance, pity, and dislike. Participants responded on a scale that ranged from 1, "strongly disagree", to 6, "strongly agree". The coefficient alphas for this section of the measure regarding a negative affect component and a sympathetic affect component are $\alpha = .93$ and $\alpha = .65$, respectively. The calculated alpha for the current study for the negative affect component and sympathetic affect component was .87 and .67, respectively.

The second part of the measure, which also uses a 6-point scale, assessed the likelihood that the participant would report helping the student described in the vignette. This section

consists of four items: providing emotional support, advice, small favors, and general help. Participants respond on a scale that ranges from 1, "very unlikely," to 6, "very likely". The coefficient alpha for this part of the measure was reported to be .84. The calculated alpha for the current study for helping inclinations was .78.

The last part of this measure, which uses a 7-point scale, assessed the beliefs a participant has about the student described in the vignette. The beliefs measure included whether or not the student experiences a mental illness, if there is a biological cause, if it is a character defect, and if their behavior is abnormal. Participants responded on a scale that ranged from 1, "strongly disagree", to 7, "strongly agree". The coefficient alpha was not reported for these beliefs because they were all single-item scales.

Social Distance. Participants completed a questionnaire about their impressions of the student described in the vignette (Appendix C). The Social Distance measure was used in research by Phelan and Basow (2007) and was adapted from two measures originally developed by Martin, Pescosolido, and Tuch (2000) and Schnittker (2000). Martin and colleagues' (2000) Social Distance scale demonstrated a coefficient alpha of .87. Schnittker's (2000) Social Tolerance scale demonstrated a coefficient alpha of .85. This Social Distance measure includes six items, assessed on a 6-point scale that ranges from 1, "very unwilling," to 6, "very willing". It evaluates social tolerance of the described student. The questions address the participant's willingness to engage in a variety of situations: have the student move next door, spend an evening socializing, start working closely with them on a job, have a group home for people like [name], and marry in to their family. Coefficient alphas for this scale, as reported by Phelan and Basow (2007), ranged from .82 to .88, depending on the vignette. The coefficient alpha for the current study was calculated as .82.

Perceived Dangerousness. The Perceived Dangerousness measure (Appendix D) was also used in research by Phelan and Basow (2007) and was adapted from two measures originally developed by Martin and colleagues (2000) and Schnittker (2000). Neither Martin and colleagues (2000) nor Schnittkner (2000) reported coefficient alphas for their perceived dangerousness measures. The Perceived Dangerousness measure asked participants to rate how dangerous the described student is. This measure includes three items, which use a 6-point rating scale. The first two questions dealt with the participant's beliefs about how violent the target-student is "toward other people" and "toward himself/herself"; participants respond on a range of 1, "very unlikely," to 6, "very likely". In the third question, the participants rate how dangerous they believe the student in the vignette to be; the rating was from 1, "extremely dangerous," to 6, "not at all dangerous". The coefficient alphas for this scale, as reported by Phelan and Basow (2007), ranged from .61 to .79. The coefficient alpha for the current study was calculated as .74.

Social Role Functioning. Participants completed a questionnaire that assessed the participants' beliefs about the target student's role impairment (Appendix E). This questionnaire was adapted by Nolan (1998) and had a reported alpha of .90. The Role Impairment questionnaire was originally created by Hammen and Peters' (1978) acceptance-rejection measure in which interviewers assessed role-players on their impressions of the person in a number of situations. No alpha was reported for the acceptance-rejection measure. The questionnaire consists of six items and used a 7-point rating scale. The first question addresses how "well adjusted" the described student is; the rating scale ranges from "adjusted" to "maladjusted". The remaining five questionnaires address how well the described student functions in the following scenarios: as a student, as an employee, on a date, in a romantic

relationship, and as a friend. Participants respond on a scale that ranged from 1, "poorly," to 7, "very well. The coefficient alpha for the current study was .86.

Social Dominance. The Social Dominance Orientation measure is a questionnaire that assesses participants' beliefs about their own group's identity (Appendix F). More specifically, this 16-item questionnaire measures whether participants believe that a particular social group is dominant to other social groups. The participants responded on a 7-point scale which ranges from 1, "strongly agree," to 7, "strongly disagree." This questionnaire consists of statements about a variety of social justice issues including equality and social dominance. Statements are structured similar to this one: "No one group should dominate in society." The Social Dominance Orientation measure was used in research by Phelan and Basow (2007). The reported alpha for this scale was .91. This questionnaire was originally created by Pratto, Sidanius, Stallworth, and Malle (1994). The reported alpha for the original questionnaire was .90. The original study used a 6-point rating scale of 1, "very negative," to 6, "very positive". After conducting a pilot study during which six people completed the questionnaires and provided feedback, the researchers decided that rating terms were confusing. The current questionnaire has been adjusted to a new range from "strongly agree" to "strongly disagree." The coefficient alpha for the current study was calculated as .79.

Procedures

When participants arrived at the Human Research lab they were given an informed consent form which they were asked to read and sign. The informed consent form was kept separate from all other material to ensure confidentiality of the participants. Participants were told they would read a paragraph describing a college student and asked to complete a number of surveys about the paragraph they read. The participant were seated in front of a computer and

randomly assigned to read one of eight vignettes. The random assignment of the vignettes was determined by a random numbers generator, which provided the order of vignettes according the numbers listed below. The vignettes vary on three independent variables: gender [male, female], label [label of "mental illness," no label], and type of mental illness [depression, alcohol abuse]. The eight vignettes are:

1) Female student with depression, no label

2) Female student with depression, label of "mental illness"

3) Male student with depression, no label

4) Male student with depression, label of "mental illness"

5) Female student with alcohol abuse, no label

6) Female student with alcohol abuse, label of "mental illness"

7) Male student with alcohol abuse, no label

8) Male student with alcohol abuse, label of "mental illness"

After reading the description of one college student, each participant completed a series of questionnaires, as described previously. The description of the student remained in front of the student while the questionnaires were completed. The questionnaires were in the same order for all participants. After the completion of the questionnaires, the participants were debriefed, asked if they had any questions about the study, and thanked for their participation.

Data Analysis

The data was analyzed using SPSS version 17.0 software. An analysis of covariance (ANCOVA) was conducted for all dependent variables; social dominance served as a covariate in order to control for participant differences. When the covariate did not significantly influence the dependent variable an ANOVA for those dependent variables was reported instead of the

ANCOVA. Social dominance orientation served as a covariate in Phelan and Basow (2007) as well. The dependent variables are affective reactions, helping inclinations, belief measures, social distance, perceived dangerousness, and social role functioning. The three independent variables, for each of the ANOVAs and ANCOVAs conducted, are label (presence, absence), diagnosis (depression, alcohol abuse), and gender (male, female). The internal consistency of each of the dependent variables was calculated using coefficient alpha. In accordance with previous research, we anticipated that the reliability will be .80 or higher in most cases.

Results

A 2 X 2 X 2 (label X gender X mental illness type) analysis of covariance (ANCOVA) was conducted for all dependent measures. The controlling variable used was social dominance orientation score. ANCOVA revealed that social dominance orientation score did not significantly influence the dependent variables of negative affective reactions, belief measures, causal attributions, perceived dangerousness, estimation of maladjustment, nor social functioning. In addition, the results of the study did not change when controlling for the covariate; therefore, for the dependent variables listed above, 2 X 2 X 2 (label X gender X mental illness type) analysis of variance (ANOVA) was conducted. For the dependent measures of sympathetic affective reactions, helping inclinations, and social distance, the controlling variable had a significant effect. Therefore, for these three dependent measures, the results of the ANCOVA were reported. The results of these analyses will be discussed in the section labeled *hypothesis two.*

Hypothesis One

I examined the effect of the three independent variables, gender, label and mental illness type, together, on the dependent variables. It was predicted that there would be a three-way

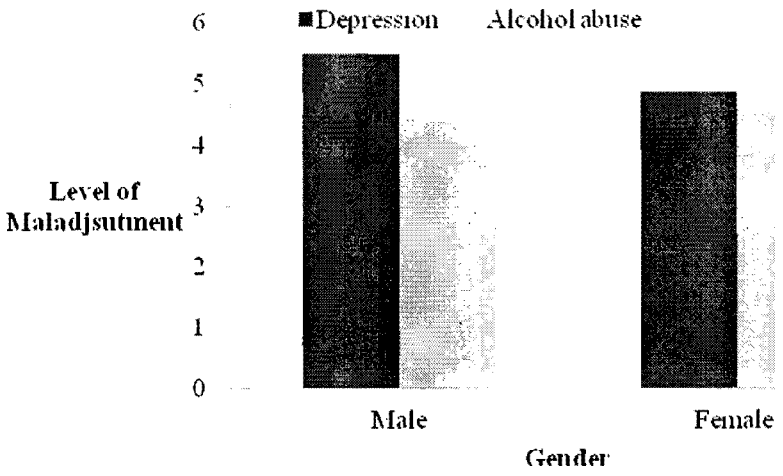
interaction between gender, label, and mental illness type for all impression measures. Hence, the interaction between gender and mental illness type would depend on whether or not an explicit mental illness label was present. A 2 X 2 X 2 (label X gender X mental illness type) ANOVA was conducted. ANOVA revealed that there were no significant three-way interactions between gender, label, and mental illness for any of the impression measures (Table 1).

Table 12. Analysis of Variance Results and Means for the Three-way Interaction of Gender, Label, and Mental Illness Type for all Six Impression Measures.

Impression Measures	*F*	*p*	R^2	Male								Female							
				Alcohol Abuse				Depression				Alcohol Abuse				Depression			
				No		Label		No		Label		No		Label		No		Label	
				M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Negative Reactions	1.28	.26	.01	2.69	.21	2.74	.19	1.96	.21	1.68	.22	3.03	.22	2.73	.22	1.74	.21	1.78	.22
Biological Cause	2.17	.14	.01	2.77	.27	3.33	.25	3.59	.27	3.30	.29	2.91	.28	2.86	.28	3.05	.27	3.29	.28
Genuine Mental illness	1.56	.21	.01	3.77	.29	3.89	.26	4.41	.29	4.60	.31	4.24	.30	3.57	.30	4.23	.29	4.67	.30
Character Defect	.28	.60	.001	3.00	.24	3.02	.21	2.66	.23	2.93	.25	3.56	.24	3.21	.24	2.66	.24	2.93	.24
Dangerousness	.001	.99	.001	4.12	.19	2.94	.18	3.86	.19	3.43	.20	3.68	.20	3.87	.20	3.26	.19	3.19	.20
Maladjustment	.14	.72	.001	4.59	.26	4.26	.24	5.68	.26	5.30	.27	4.62	.27	4.57	.27	4.77	.26	4.95	.27
Social Functioning	.37	.55	.002	2.65	.21	2.86	.19	2.22	.21	2.24	.22	3.19	.21	2.81	.21	2.55	.21	2.33	.21

Because there were no significant three-way interactions, I examined the two-way interactions among the three independent variables. Thus, I assessed whether there was an interaction between gender and mental illness type, mental illness type and label, and label and gender. ANOVA revealed a significant interaction between gender and mental illness type for the reported level of maladjustment, $F(1, 7) = 4.67$, $p = .03$, $R^2 = .03$, a small to medium effect. Participants reported that the male vignette character described as having depression was more maladjusted ($M = 5.50$, $SD = .19$), on average, than the male vignette character described as having alcohol abuse ($M = 4.42$, $SD = .18$; see Figure 1). There was no such significant difference for the female vignette characters.

Figure 3. Interaction of Gender and Mental Illness Type for Level of Maladjustment.



ANOVA revealed no other significant interactions between gender and mental illness type for the remaining impression measures. Results can be seen in Table 2. ANOVA did not reveal any significant interactions between mental illness type and label (Table 3). ANOVA also did not reveal any significant interactions between gender and label (Table 4).

Table 13. Analysis of Variance Results and Means for the Interaction of Gender and Mental Illness Type for all Six Impression Measures.

Impression Measures	*F*	*p*	R^2	Male				Female			
				Alcohol Abuse		Depression		Alcohol Abuse		Depression	
				M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Negative Reactions	.59	.44	.003	2.72	.14	1.82	.15	2.88	.15	1.76	.15
Biological Cause	.08	.78	.001	3.05	.18	3.45	.20	2.88	.20	3.17	.20
Genuine Mental illness	.10	.75	.001	3.83	.20	4.51	.21	3.91	.21	4.45	.21
Character Defect	1.23	.27	.01	3.01	.16	2.79	.17	3.38	.17	2.79	.17
Dangerousness	.39	.53	.002	4.03	.13	3.65	.14	3.78	.14	3.22	.14
Maladjustment	4.67	.03	.03	4.43	.18	5.50	.19	4.60	.19	4.86	.19
Social Functioning	.02	.89	.001	2.75	.14	2.22	.15	3.00	.15	2.49	.15

Table 14. Analysis of Variance Results and Means for the Interaction of Mental Illness Type and Label for all Six Impression Measures.

Impression Measures	*F*	*p*	R^2	Alcohol Abuse				Depression			
				No Label		Label		No Label		Label	
				M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Negative Reactions	.001	.99	.001	2.86	.15	2.74	.14	1.85	.15	1.73	.15
Biological Cause	.53	.47	.01	2.84	.20	3.10	.19	3.32	.19	3.29	.20
Genuine Mental illness	2.05	.15	.01	4.01	.21	3.73	.20	4.32	.21	4.63	.21
Character Defect	1.62	.20	.01	3.27	.17	3.12	.16	2.66	.17	2.93	.17
Dangerousness	.84	.36	.01	3.90	.14	3.91	.13	3.56	.14	3.31	.14
Maladjustment	.06	.81	.001	4.61	.19	4.42	.18	5.23	.18	5.13	.19
Social Functioning	.001	.98	.001	2.92	.15	2.83	.14	2.38	.15	2.29	.15

Table 415. Analysis of Variance Results and Means for the Interaction of Gender and Label for all Six Impression Measures.

Impression Measures	*F*	*p*	R^2	Male				Female			
				No Label		Label		No Label		Label	
				M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Negative Reactions	.001	.98	.001	2.33	.15	2.21	.15	2.38	.15	2.26	.15
Biological Cause	.01	.92	.001	3.18	.19	3.32	.19	2.98	.20	3.07	.20
Genuine Mental illness	.42	.52	.002	4.09	.21	4.24	.20	4.23	.21	4.12	.21
Character Defect	.27	.60	.002	2.83	.17	2.97	.16	3.10	.17	3.07	.17
Dangerousness	1.80	.18	.01	3.99	.14	3.69	.13	3.47	.14	3.53	.14
Maladjustment	1.31	.25	.01	5.14	.18	4.78	.18	4.70	.19	4.76	.19
Social Functioning	1.99	.16	.01	2.43	.15	2.55	.14	2.87	.15	2.57	.15

Because there was only one significant two-way interaction between gender and mental illness type, for the measures of maladjustment, the main effects of each independent variable was assessed for the remaining dependent measures. ANOVA revealed no significant main effects of label on any of the six impression measures. Results can be seen in Table 5.

Table 16. Analysis of Variance Results and Means for Main Effect of Label for all Seven Impression Measures. (ML-mean for Label, MN-mean for no label).

Impression Measures	***F***	***p***	***R²***	***ML***	***MN***
Negative Reactions	.66	.42	.004	2.23	2.36
Biological Cause	.36	.55	.002	3.20	3.08
Genuine Mental Illness	.01	.92	.001	4.18	4.16
Character Defect	.11	.74	.001	3.02	2.97
Dangerousness	.79	.37	.01	3.61	3.73
Maladjustment	.62	.43	.004	4.77	4.92
Social Functioning	.39	.53	.002	2.56	2.65

It appears that the vignette characters with a mental illness label, on average, are perceived no differently than vignette characters without a mental illness label.

The main effect of the independent variable gender on the six impression measures was also assessed. ANOVA revealed a significant main effect of gender for perceived dangerous, $F(1, 7) = 6.06$, $p = .02$, $R^2 = .04$, a small to medium effect . The male vignette character was perceived to be more dangerous ($M = 3.84$, $SD = .10$), on average, than the female vignette character ($M = 3.50$, $SD = .10$). There were no other significant main effects of gender for the remaining six impression measures. Results can be seen in Table 6.

Table 17. Analysis of Variance Results and Means for Main Effect of Gender for all Six Impression Measures. (MM-mean for male character, MF-mean for female character).

Impression Measures	***F***	***p***	***R²***	***MF***	***MM***
Negative Reactions	.12	.73	.001	2.32	2.27
Biological Cause	1.36	.25	.01	3.02	3.25
Genuine Mental Illness	.002	.97	.001	4.18	4.17
Character Defect	1.25	.26	.01	3.10	2.90
Dangerousness	6.06	.02	.04	3.50	3.84
Social Functioning	2.52	.12	.02	2.72	2.49

In general, the male vignette character, on average, was perceived no differently than the female vignette character, except for the reported perceptions of dangerousness.

The main effect of the independent variable mental illness type on the six impression measures was also examined. ANOVA revealed a significant main effect of mental illness type for negative affective reactions, $F(1, 7) = 45.92, p = .001, R^2 = .22$, a large effect . Vignette characters that were described as suffering from depression received less negative affective reactions ($M = 1.80, SD = .10$), on average, than the vignette characters described as suffering from alcohol abuse ($M = 2.80, SD = .11$). There was a significant main effect of mental illness type for the belief measure, $F(1, 7) = 8.69, p = .004, R^2 = .05$, a medium effect. Participants, on average, reported that the vignette character described as having depression ($M = 64.48, SD = .14$) has a more genuine mental disturbance than the vignette character described as having alcohol abuse ($M = 3.87, SD = .15$). Main effect of mental illness type for belief about whether or not the mental illness had a biological cause was not significant; results can be seen in Table 7.

Table 18. Analysis of Variance Results and Means for Main Effect of Mental Illness Type for all Six Impression Measures. (MA-mean for alcohol abuse, MD-mean for depression).

Impression Measures	***F***	***p***	***R²***	***MA***	***MD***
Negative Reactions	45.92	.001	.22	2.80	1.80
Biological Cause	3.60	.08	.02	2.97	3.30
Genuine Mental illness	8.69	.004	.05	3.87	4.48
Character Defect	5.82	.02	.03	3.20	2.79
Dangerousness	11.57	.001	.06	3.84	3.50
Social Functioning	13.78	.001	.08	2.87	2.33

Accordingly, in assessing whether or not the mental illness was caused by a character defect, there was a significant main effect of mental illness type, $F(1, 7) = 5.82$, $p = .02$, $R^2 = .03$, a small to medium effect. Participants reported that the vignette character described as having alcohol abuse, had a mental illness that was more likely caused by a character defect ($M = 3.20$, $SD = .12$), on average, than the vignette character described as having depression ($M = 2.79$, $SD = .12$).

Analysis of variance revealed a significant main effect of mental illness type for perceived dangerousness, $F(1, 7) = 11.57$, $p = .001$, $R^2 = .06$, a medium to large effect. The vignette character described as having alcohol abuse was perceived as more dangerous ($M = 3.84$, $SD = .10$), on average, than the vignette character described as having depression ($M = 3.50$, $SD = .10$). There was also a significant main effect of mental illness type for social functioning, $F(1, 7) = 13.78$, $p = .001$, $R^2 = .08$, a large effect. The vignette character described as suffering from alcohol abuse was believed to function better socially ($M = 2.87$, $SD = .10$), on average, than the vignette character described as having depression ($M = 2.33$, $SD = .10$). These

results do not support the first hypothesis; there were no significant three-way interactions between the independent variables for measures of negative perceptions.

Hypothesis Two

Finally, I investigated the influence of social dominance orientation on the relationship between the independent variables on the dependent variables. A 2 X 2 X 2 X (label X gender X mental illness type) analysis of covariance (ANCOVA) was conducted for the three dependent measures that the covariate was found to have significantly influenced. The three dependent measures were sympathetic affective reactions, helping inclinations, and social distance. It was predicted that participant differences in social dominance orientation would negatively affect the relationship between the independent and dependent variables. ANCOVA results indicate a significant main effect of mental illness type for sympathetic affective reactions, $F(1, 7) = 53.15$, $p = .001$, $R^2 = .24$, a large effect. The covariate significantly influenced the dependent variable $F(1, 7) = 4.26$, $p = .04$, $R^2 = .03$. Table 8 presents the adjusted means for mental illness type. It appears that participants report greater sympathetic reactions for the vignette character described as having depression ($M = 4.88$, $SD = .10$), on average, than the vignette character described as having alcohol abuse ($M = 3.90$, $SD = .09$) when social dominance orientation of the participant is controlled for.

Table 19. Adjusted and Unadjusted Means for Males and Females on Measures of Sympathetic Reaction, Helping Inclinations, and Social Distance.

Impression Measures	**Adjusted *M***		**Unadjusted *M***	
	Depression	*Alcohol Abuse*	*Depression*	*Alcohol Abuse*
Sympathetic Reactions	4.88	3.90	4.90	3.89
Helping Inclinations	5.14	4.91	5.16	4.89
Social Distance	3.93	3.28	3.95	3.26

There were no other significant main effects or interactions for sympathetic affective reactions (Table 9).

Table 209. Analysis of Covariance Results for Sympathetic Affective Reactions Measure.

Source	***F***	***p***	***R²***
Social Dominance Score	4.26	.04	.03
Gender	.08	.77	.001
Mental Illness Type	53.15	.001	.24
Label	.12	.74	.001
Gender X Mental Illness	.98	.32	.01
Gender X Label	.70	.40	.004
Mental Illness X Label	2.44	.12	.01
Gender X Mental Illness X Label	1.68	.20	.01

ANCOVA results also indicate a significant main effect of mental illness type for helping inclinations, $F(1, 7) = 4.01, p = .05, R^2 = .02$, a small effect. The covariate significantly influenced the dependent variable $F(1, 7) = 11.75, p = .001, R^2 = .07$. Table 8 presents the adjusted means for mental illness type. It appears that participants report more willingness to help the vignette character described as having depression (M =5.14, SD = .08), on average, than the vignette character described as having alcohol abuse (M = 4.91, SD = .08) when social dominance orientation of the participant is controlled for. There were no other significant main effects or interactions for helping inclinations (table 10).

Table 21. Analysis of Covariance Results for Helping Inclinations Measure.

Source	***F***	***p***	***R²***
Social Dominance Score	11.75	.001	.07
Gender	.01	.92	.001
Mental Illness Type	4.01	.05	.02
Label	.05	.82	.001
Gender X Mental Illness	.07	.80	.001
Gender X Label	1.06	.30	.01
Mental Illness X Label	.001	.99	.001
Gender X Mental Illness X Label	.001	.99	.001

In addition, ANCOVA results indicate a significant main effect of mental illness type for social distance reactions, $F(1, 7) = 23.346, p = .001, R^2 = .12$, a large effect. The covariate significantly influenced the dependent variable $F(1, 7) = 7.42, p = .01, R^2 = .04$. Table 8 presents the adjusted means for mental illness type. It appears that participants report desire for greater social distance from the vignette character described as having depression ($M = 3.93$, $SD = .10$), on average, than the vignette character described as having alcohol abuse ($M = 3.28$, $SD = .09$) when social dominance orientation of the participant is controlled for. There were no other significant main effects or interactions for social distance (table 11).

Table 22. Analysis of Covariance Results for Social Distance Measure.

Source	***F***	***p***	***R²***
Social Dominance Score	7.42	.01	.04

Gender	.01	.94	.001
Mental Illness Type	23.35	.001	.12
Label	2.30	.13	.01
Gender X Mental Illness	.12	.73	.001
Gender X Label	.95	.33	.01
Mental Illness X Label	.50	.48	.003
Gender X Mental Illness X Label	.24	.24	.001

Mental illness type has a significant influence on the sympathetic affect reactions, helping inclinations, and social distance even when controlling for social dominance orientation. Therefore, hypothesis two was not supported because the relation between the independent and dependent variables was not affected by the covariate.

Discussion

The purpose of the current study was to assess the influence of a number of factors on perceptions of people with mental illness. The factors that were assessed were the presence of an explicit mental illness label, the gender of the character described as having a mental illness, and the type of mental illness. With the use of impression measures, such as social distance and social tolerance, the degree of social acceptance of the hypothetical vignette character was obtained. Consequently, the level of social rejection experienced by the hypothetical vignette character was also obtained because social acceptance is determined by whether or not a person is socially excluded or rejected. The results from this sample failed to support hypothesis one. The presence of an explicit mental illness label did not influence the relationship between the

gender of the vignette character and the type of mental illness. In addition, the results of this sample failed to support hypothesis two. A persons' social dominance orientation influenced their sympathetic affective reactions, helping inclinations, and desire for social distance; however, a persons' social dominance orientation did not affect the reported social distance as determined by the impression measures.

Label. It appears that the presence of the type of explicit mental illness label, used in this study, was not a factor that statistically significantly influenced perceptions of people with mental illness for this sample. In the current study, the vignette characters with a label of "this student has a mental illness" were not perceived significantly differently, on average, than the vignette characters that had no label. It is evident that for this sample, the description of deviant behavior is sufficient for eliciting the stigmatization process. Hence, the presence of an explicit mental illness label is not necessary for the stigmatization process to occur. Results from Phelan and Basow (2007) support this finding; these researchers suggest that presenting an explicit mental illness label is not required to modify a person's opinion. Rather, the description of the abnormal behaviors is the only necessary requirement for social impression formation. Moreover, this notion more closely imitates how a real-life interaction might influence perceptions because in reality the behavior not the label would be the information available to the perceiver (Phelan & Basow, 2007).

Although, a number of studies have found a significant correlation between the presence of a mental illness label and formation of negative perceptions, a number of studies suggest the opposite, that label has no effect on perceptions (Hayward & Bright, 1997; Jorm & Griffiths, 2008). Despite the fact that an argument exists for the importance of having an explicit label, the findings from the current study support that label is not an important factor in perceptions. In the

current study, the explicit label used was the label "This student has a mental illness". Jorm and Griffths (2008) suggest that the use of the term "mental illness" is too vague and encompasses too many possible disorders; therefore, the use of a more specific name or category may have been a more effective label . Additionally, in the current study, the label was placed directly above the vignette paragraph. Therefore, it is possible that the location of the explicit label was not apparent; as a result did not have an effect on impressions. A number of studies that have found a significant effect of label embedded the mental illness label within the vignette paragraph in the form of a sentence. In addition, these studies utilize more specific labels such as the name of the disorder (Corrigan et al., 2009; Link et al., 1987).

Gender. An interaction between gender and mental illness type was found for the perceived level of maladjustment, which is part of the measure for social functioning. It appears that the male vignette character with depression was rated to have a higher level of maladjustment, on average, than the male vignette character with alcohol abuse; this same difference was not found for the female character. In fact, the ratings for perceived level of maladjustment for the female characters was similar to the ratings of the male vignette character with alcohol abuse in that the ratings were lower than that of the male character with depression. These findings are consistent with the gender-role hypothesis (Hinkelman & Granello, 2003), which suggests that because of the social roles associated with men and women in this society, it is more acceptable for a woman to display symptoms of a mental illness than a man. Hence, women are seen as better adjusted than men when they display symptoms of depression or alcohol abuse because this problem is more tolerated in women and it will not interfere with their social expectations (Hinkleman & Granello, 2003; Schnittcker, 2000).

In addition, gender role expectations stipulate that similar to the general social roles men and women are expected to fulfill, there are also gender expectations for specific mental illnesses. For example, symptoms of depression are more accepted in women because of the internal nature of symptoms experienced, such as depression. Whereas, disorders that exhibit more external symptoms, such as alcohol dependence, are more associated and tolerated with men (Hinkleman & Granello, 2003; Phelan & Basow, 2007; Schnittker, 2000; Wirth & Bodenhausen, 2009). Thus, in the current study the male vignette character with depression was viewed as more maladjusted because symptoms of depression are less tolerated in men than displaying symptoms of alcohol abuse.

Gender significantly influenced reported perceptions of perceived dangerousness for this sample. More specifically, participants indicated that the male vignette character, regardless of mental illness type, was considered to be more dangerous, on average, than the female vignette character. Hence, the male vignette character is believed to be more capable of harming either themselves or another person. These findings are consistent with previous research on gender and perceptions of dangerousness (Phelan & Basow, 2007; Schnittker, 2000). These findings are also consistent with the gender stereotypes about the behaviors that men and women most commonly display. In general, for psychological problems that women display, it is believed that their actions are less threatening and they are less likely to be dangerous than men (Schnittcker, 2000). However, because gender was not an influential factor for any other impressions measures, it is difficult to assess whether or not this factor plays a mediating role in social distance. Previous research supports that perceived dangerous predicts social distance, such that the more dangerous a target character is perceived to be the greater social distance desired from that character (Phelan & Basow, 2007; Schnittker, 2000).

Mental Illness Type. Mental illness type was also an influential factor for stigmatization of the vignette character described. More specifically, the measures of stigmatization that were influenced by mental illness type were affective reactions, helping inclinations, and belief measures. In general participants reported more positive reactions and fewer negative reactions about the vignette character with depression, on average, than the vignette character with alcohol abuse. In addition, it was believed that the vignette character with depression had a more genuine mental illness, on average, than the vignette character with alcohol abuse. Hence, participants attributed the causes of alcohol abuse more to a character defect. In accordance, with these reports participants were more willing to help the vignette character described as having depression than the vignette character described as having alcohol abuse. These results are consistent with previous research comparing perceptions of depression and alcohol abuse (Wirth & Bodenhausen, 2009).

Mental illness type was also found to influence measures of social distance. The measures of social tolerance that were influenced by mental illness type were social distance, perceived dangerousness, and social role functioning. Participants reported desiring less social distance from the vignette character described as having alcohol abuse, on average, than for the vignette character described as having depression. Similarly, the vignette character with alcohol abuse was believed to function better socially, on average, than the vignette character with depression. These results are surprising, in considering the effect of mental illness on perceived dangerousness. That is, the vignette character with alcohol abuse was perceived to be more dangerous, on average, than the vignette character described as having depression. Hence, participants believed the vignette character with alcohol abuse to be more likely to harm themselves or another person; yet, they were more willing to interact socially with this person.

Belief that the character with alcohol abuse was more dangerous is consistent with previous research (Phelan & Basow, 2007). The findings with regards to social distance are inconsistent with previous research, which has shown that perceptions of dangerousness are positively correlated with desire for social distance. Thus, if a character is perceived as dangerous then participants would desire greater social distance; therefore, it would be predicted that participants would desire less social distance from the character with depression (Corrigan et al., 1999; Martin, 2000; Phelan & Basow, 2007). It is plausible that because the participants were undergraduate students from a university that their interpretation of the behaviors of vignette character with alcohol abuse was different than most adult participant populations. College students are exposed to an environment in which heavy alcohol use is more common; therefore, the described behaviors of the character with alcohol abuse may have been more socially accepted, regardless of their other perceptions (Phelan & Basow, 2007).

Social Dominance Orientation. In the current study, social dominance orientation only had a significant effect on three dependent variables: social distance, helping inclinations, and sympathetic affective reactions. In controlling for the effects of social dominance orientation on these variables, the results were not statistically significantly affected. Although, it is apparent that social dominance orientation can affect impressions of an out-group, individual orientation was not enough to significantly negatively affect the results.

Limitations and Future Directions. There are a number of important limitations of this study. The first limitation of this study is the external validity of the findings. This study was conducted with college-age students from a Northeastern university. Although the sample was made up of a diverse ethnic sample, with a range of ages, the participants may not be representative of the general population (Angermeyer & Matschinger, 2005; Corrigan et al.,

2001; Phelan & Basow, 2007). A second limitation of this study is the issue of stigma in general; stigma may be a sensitive topic for people to think about and respond to. Participants may have understood the purpose of the study and changed their answers to convey that they "feel" a certain way that would be considered "favorable" (Jorm & Griffiths, 2008; Phelan & Basow, 2007). The current study used a vignette design in which a hypothetical person and his or her behavior were described. One limitation of this design is that vignettes provide very specific information about the clinical profile of individual, which may not be the same type of information that would be available in a social interaction. Therefore, the vignette design, although it provides accurate and detailed information, may not be indicative of the real-life interaction with a person with mental illness. Hence, impressions provided by participants may have been different in a real-life interaction (Link, 1987; Phelan & Basow, 2007). Another limitation of this design is that I only addressed two types of mental illness, depression and alcohol abuse. There are numerous other diagnosable mental illnesses, many of which are less familiar than depression and alcohol abuse. The impressions provided for these two, more familiar mental illnesses may be different than those provided for less common mental illness (Phelan & Basow, 2007).

The results of this study provide useful directions for future research. Future research should address the influence that the factors under study have on other mental illnesses. There are a number of other more serious and less common mental illnesses that may produce different impressions; thus, it is important to understand how stigma is related to all mental illnesses (Phelan & Basow, 2007). Additionally, although this study attempted to address the effects that stigma has on the behavior directed towards people with mental illness, the measures utilized were generally attitudinal in the nature. Therefore future research should aim to measure actual

behavioral responses in relation to the lives of people with mental illness (Angermeyer & Matschinger, 2005; Corrigan et al., 2009; Jorm & Griffiths, 2008).

Similarly, this study was an experimental examination of the factors that influence stigma, which may not mirror how factors may influence impressions in real-life. Future studies should aim to design studies that better captures real-life interactions, such as with staging of an interaction with confederates. Staging a real-life interaction will enable researchers to provide more realistic accounts of the amount of illness-related information that would be provided in a real interaction as well as potentially observe what behaviors directly affect impressions (Hayward & Bright 1997).

In current study, social dominance orientation was controlled for because it is a factor that could potentially affect impression reactions. Future research should address other factors that may potentially confound the results, such as empathy and familiarity with mental illness (Phelan & Basow, 2007). Moreover, this study assessed the impressions of mental illness based on the factors associated with the target; it did not aim to address the attributions that a participant in the study may have formed about the target character based on the information provided. Four questions in the study were focused on causal attributions, but these questions were limited because they only asked about four possible causal attributions. . For example, some research suggests that giving a biological or genetic cause may decrease stigma, whereas, other studies suggest that it fosters tolerance. There are other possible causal attributions that could have been attributed to the target; moreover, these questions did not provide confirmation as to whether or not the causal attributions mentioned in the questions were true for the character. In addition, the questions did not assess how the causal attribution associated with the

mental illness may or may not influence opinions. Future research in this area should better capture attributional causes and their effects on impressions (Jorm & Griffths, 2008).

Implications. The findings of this study are important for both understanding why stigmatization of people with mental illness occurs as well as how to decrease stigmatization and negative consequences. One conclusion that can implied from the findings of this study is that there is a general lack of understanding about mental illness, the typical symptomology associated with mental illness, as well as the expectations of a social interaction with a person or group that has a mental illness. Moreover, a large amount of information or knowledge that the public has may be based largely on misinformation provided by the media. Thus, these findings can be applied to the anti-stigma efforts to eliminate stigma and reduce discrimination of the people with mental illness. Anti-stigma campaigns have identified three goals: protesting negative images, educating by eliminating myths and emphasizing facts, and increasing contact to people with mental illness (Corrigan et al., 2009; Corrigan & Penn, 1999). A second conclusion that can be drawn from the findings of this study is that the label assigned to a person, such as a mental illness label, is not an accurate depiction of who a person is or how a person will act. It appears that labels misinform the public about the characteristics of a person, their personality, and their social abilities. Hence, these findings suggest that a label, such as a mental illness label, should not influence judgments or impressions made of another person.

Current research on the effectiveness of education suggests that there are only moderate changes in perceptions of mental illnesses. The current educational efforts employ the use of informational handouts or flyers with facts and statistics (Corrigan et al., 2009; Corrigan & Penn, 1999).Of the other anti-stigma efforts used today, education is found to be the most effective way to inform the public about mental illness and provide accurate portrayals about people with

mental illness that should serve to decrease stigmatizing beliefs. It is especially important to emphasize that people with mental illness are people first – well-rounded individuals who can lead normal lives; as opposed to defining a person by the illness they have (Hayward & Bright, 1997). In addition, it is important to change the attributions associated with mental illness. Specifically, anti-stigma campaigns should target the controllability and stability attributions associated with mental illness.

Controllability relates to the view that an individual with mental illness can control their illness and that even if the person has a poor prognosis that they have the ability to change (Corrigan, 2000; Hayward & Bright, 1997). Therefore, educators should emphasize that mental illness is both manageable and treatable by a number of behavioral, medical, and psychological interventions (Hayward & Bright, 1997). Moreover, education about mental illness should not only be available for the general public, but should also be directed towards mental health professionals. Mental health professional have close interactions with people with mental illness, although they are aware of the stereotypes that exist with mental illness, they are just as likely to believe the stereotypes and produce negative responses towards their patients (Spagnolo et al., 2008). Contact with people with mental illness will serve to reinforce these more positive views of mental illness as well as disconfirm existing negative stereotypes (Corrigan et al., 2009).

Efforts to eliminate mental illness stigma should also focus on specific mental illnesses as opposed to mental illness in general. A number of studies, including the results from the current study, support the fact that impressions vary based on the mental illness being examined. Therefore, knowledge and awareness will vary based on the mental illness a person is exposed to. Hence, efforts to educate and mollify negative attitudes should be specific to the type of mental illness or diagnostic group (Corrigan, 2000; Spagnolo et al., 2008).

A promising study by Spagnolo and colleagues (2008) indicates that education can have a larger effect if the educational programs utilize more effective methods such as incorporating contact with people with mental illness as well as utilize more interactive methods of educating. The researchers found that the presentations that focused on accurate information about symptoms, treatments, and recovery were successful in changing attitudes about people with mental illness. Future research should address this type of educational program. In addition, these programs should be mindful that teaching of mental illness should be specific either by diagnostic category or mental illness, in order to bring about the most effective change in public attitude.

General Conclusions. Mental illness stigma is a serious social problem that can have lasting, negative effects for the sufferers of mental illness. The results of the study suggest that a mental illness label does not have an effect on mediating perceptions; rather, abnormal behavior is enough of an indicator. Moreover, target gender also was not an influential factor in negative perceptions, with the exception of perceived dangerous. The most influential variable in mediating impressions is the type of mental illness a person is diagnosed with. In general, depression is viewed more positively, on average, than alcohol abuse, and is believed to be a more genuine mental illness. Alcohol abuse, on the other hand, is more socially accepted, on average, than depression, and is not believed to impact social functioning as much as depression. It is possible that a general lack of knowledge and misunderstanding of mental illness is at the route of this stigma. Thus, future research should identify ways to increase public knowledge and decrease stereotype behaviors.

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Appendix A

Sample Vignettes

Alcohol Dependence

No label
[Daniel/Kelsey] is a college student. During the last school year [Daniel/Kelsey] has started to drink more than his/her usual amount of alcohol. In fact, he/she has noticed that he/she needs to drink twice as much as he/she used to have fun. [Daniel/Kelsey] spends more time drinking and partying then he/she does studying or doing homework. Some of his/her friends have started noticing a difference in his/her behavior; sometimes he/she is unreliable and irresponsible. He/she still attends all his/her classes and has maintained acceptable grades. He/She knows his/her drinking may be problematic at times, but in general feels that he/she is normal. [Daniel/Kelsey] feels that he/she only drinks too much when he/she is stressed or upset. Moreover, he/she is afraid if he/she cuts back he/she will not have as much fun when she goes out or parties.

Daniel/Kelsey has a mental illness
[Daniel/Kelsey] is a college student. During the last school year [Daniel/Kelsey] has started to drink more than his/her usual amount of alcohol. In fact, he/she has noticed that he/she needs to drink twice as much as he/she used to have fun. [Daniel/Kelsey] spends more time drinking and partying then he/she does studying or doing homework. Some of his/her friends have started noticing a difference in his/her behavior; sometimes he/she is unreliable and irresponsible. He/she still attends all his/her classes and has maintained acceptable grades. He/She knows his/her drinking may be problematic at times, but in general feels that he/she is normal. [Daniel/Kelsey] feels that he/she only drinks too much when he/she is stressed or upset. Moreover, he/she is afraid if he/she cuts back he/she will not have as much fun when she goes out or parties.

Major Depression

No Label
[Daniel/Kelsey] is college student. During the past school year [Daniel/Kelsey] has been feeling down. He/She wakes up in the morning with a flat, heavy feeling that sticks with him/her all day long. He/She isn't enjoying things the way he/she normally would. In fact nothing gives him/her pleasure. Even when good things happen, they don't seem to make [Daniel/Kelsey] happy. He/She pushes on through his/her days, but it is really hard. He/She finds it hard to concentrate on anything. And even though [Daniel/Kelsey] feels tired, when night comes he/she can't go to sleep. [Daniel/Kelsey] feels pretty worthless, and very discouraged. [Daniel's/Kelsey's] family has noticed that he/she hasn't been himself/herself for about the last year and that he/she has pulled away from them. [Daniel/Kelsey] just doesn't feel like talking.

Daniel/Kelsey has a mental illness
[Daniel/Kelsey] is a college student. During the past school year [Daniel/Kelsey] has been feeling down. He/She wakes up in the morning with a flat, heavy feeling that sticks with him/her

all day long. He/She isn't enjoying things the way he/she normally would. In fact nothing gives him/her pleasure. Even when good things happen, they don't seem to make [Daniel/Kelsey] happy. He/She pushes on through his/her days, but it is really hard. He/She finds it hard to concentrate on anything. And even though [Daniel/Kelsey] feels tired, when night comes he/she can't go to sleep. [Daniel/Kelsey] feels pretty worthless, and very discouraged. [Daniel's/Kelsey's] family has noticed that he/she hasn't been himself/herself for about the last year and that he/she has pulled away from them. [Daniel/Kelsey] just doesn't feel like talking.

Appendix B

Affective Reactions

Please answer the following questions based on impression of the student you read about.

What emotional reactions did you have while thinking about the student described in the passage? Please use the scale provided to rate your emotional reactions to this student?

1 = strongly disagree
2 = disagree
3 = slightly disagree
4 = slightly agree
5 = agree
6 = strongly agree

1. Anger	1	2	3	4	5	6
2. Concern	1	2	3	4	5	6
3. Irritation	1	2	3	4	5	6
4. Disgust	1	2	3	4	5	6
5. Sympathy	1	2	3	4	5	6
6. Annoyance	1	2	3	4	5	6
7. Pity	1	2	3	4	5	6
8. Dislike	1	2	3	4	5	6

Helping Inclinations

Assuming that you actually met the student you read about, please answer the following questions based on the impression you formed of him/her.

1. If [Daniel/Kelsey] looked confused, how likely is it that you would offer to help [him/her]?

1	2	3	4	5	6
very unlikely	somewhat unlikely	somewhat unlikely	likely	very likely	

2. If [Daniel/Kelsey] asked you a small favor that would take 15 minutes of your time, how likely would you be to help?

1	2	3	4	5	6
very unlikely	somewhat unlikely	somewhat unlikely	likely	very likely	

3. How much would you be likely to offer support to [Daniel/Kelsey] if [he/she] were upset?

1	2	3	4	5	6

veryunlikely somewhat somewhat likely very
unlikely unlikely likely likely

4. If [Daniel/Kelsey] asked for your advice in dealing with a problem, how likely would you be to help?

1 2 3 4 5 6
veryunlikely somewhat somewhat likely very
unlikely unlikely likely likely

Belief Measures

Please indicate how much you agree or disagree with the following statements:

1 = strongly disagree
2 = disagree
3 = slightly disagree
4 = neither agree nor disagree
5 = slightly agree
6 = agree
7= strongly agree

1. [Daniel/Kelsey] is experiencing a mental disturbance.	1	2	3	4	5	6	7
2. [Daniel/Kelsey] problems likely have a biological cause.	1	2	3	4	5	6	7
3. [Daniel/Kelsey] problems are probably related to a weakness or defect of character.	1	2	3	4	5	6	7
4. [Daniel/Kelsey] behavior is quite unusual and deviant.	1	2	3	4	5	6	7

Appendix C

Social Distance

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by circling the appropriate response. Read each item carefully before responding. Choose the answer the most nearly reflects how you feel, 1 (very unwilling) and 6 (very willing).

1. How willing would you be to:

a. move next door to [Daniel/Kelsey]?

1	2	3	4	5	6
very unwilling		somewhat unwilling	somewhat willing	willing	very willing

b. make friends with [Daniel/Kelsey]?

1	2	3	4	5	6
very unwilling		somewhat unwilling	somewhat willing	willing	very willing

c. spend an evening socializing with [Daniel/Kelsey]?

1	2	3	4	5	6
very unwilling		somewhat unwilling	somewhat willing	willing	very willing

d. have [Daniel/Kelsey] start working closely with you on a job?

1	2	3	4	5	6
very unwilling		somewhat unwilling	somewhat willing	willing	very willing

e. have a group home for people like [Daniel/Kelsey] opened in your neighborhood?

1	2	3	4	5	6
very unwilling		somewhat unwilling	somewhat willing	willing	very willing

f. have [Daniel/Kelsey] marry into your family?

1	2	3	4	5	6
very unwilling		somewhat unwilling	somewhat willing	willing	very willing

Appendix D

Perceived Dangerousness

The following two questions assesses your opinion on how dangerous the student described in the paragraph above is. Read each item carefully before responding. Choose the answer the most nearly reflects how you feel, 1 (very unlikely) and 6 (very likely).

1) How likely is it that [name] would do something violent toward other people?

1	2	3	4	5	6
very unlikely		somewhat unlikely	somewhat likely	likely	very likely

1) How likely is it that [name] would do something violent toward himself/herself?

1	2	3	4	5	6
very unlikely		somewhat unlikely	somewhat likely	likely	very likely

The following question assesses your opinion on how dangerous the student described in the paragraph above is. For the question below, indicate how well it describes you by circling the appropriate response. Read each item carefully before responding. Choose the answer the most nearly reflects how you feel, 1 (not at all dangerous) and 6 (extremely dangerous).

1) Indicate how dangerous the character in the vignette appears.

1	2	3	4	5	6	
Not at all dangerous		unlikely	somewhat dangerous	somewhat likely	likely dangerous	extremely

Appendix E

Social Functioning

Based on the person in the paragraph you just read, please circle the number that most closely represents your answer to each of the following questions.

How adjusted or maladjusted is this person?

adjusted						maladjusted
1	2	3	4	5	6	7

How well do you think she would function as a student?

poorly						very well
1	2	3	4	5	6	7

How well do you think she would function as an employee?

poorly						very well
1	2	3	4	5	6	7

How well do you think she would function on a date?

poorly						very well
1	2	3	4	5	6	7

How well do you think she would function in a committed romantic relationship?

poorly						very well
1	2	3	4	5	6	7

How well do you think she would function as a friend?

poorly						very well
1	2	3	4	5	6	7

Appendix F

Social Dominance Orientation

Which of the following statements do you have a positive or negative feeling towards? Beside each object of statement, please circle a number from '1' to '7', which represents the degree of your agreement or disagreement with the statement.

1 = Strongly Disagree
2 = Disagree
3 = Somewhat disagree
4 = Neither agree nor disagree
5 = Somewhat agree
6 = Agree
7 = Strongly agree

1. Some groups of people are simply inferior to other groups.	1	2	3	4	5	6	7
2. In getting what you want, it is sometimes necessary to use force.	1	2	3	4	5	6	7
3. No one group should dominate in society.	1	2	3	4	5	6	7
4. It's OK if some groups have more of a chance in life than others.	1	2	3	4	5	6	7
5. We should strive to make incomes as equal as possible.	1	2	3	4	5	6	7
6. We would have fewer problems if we treated people more equally.	1	2	3	4	5	6	7
7. To get ahead in life, it is sometimes necessary to step on other groups.	1	2	3	4	5	6	7
8. There should be increased social equality.	1	2	3	4	5	6	7
9. If certain groups stayed in their place, we would have fewer problems	1	2	3	4	5	6	7
10. It's probably a good thing that certain groups are at the top and other groups are at the bottom.	1	2	3	4	5	6	7
11. We should do what we can to equalize conditions for different groups.	1	2	3	4	5	6	7
12. Inferior groups should stay in their place.	1	2	3	4	5	6	7
13. Sometimes other groups must be kept in place.	1	2	3	4	5	6	7
14. It would be good if groups could be equal.	1	2	3	4	5	6	7
15. Group equality should be our ideal.	1	2	3	4	5	6	7
16. All groups should be given an equal chance in life.	1	2	3	4	5	6	7

Appendix G

Demographic Information

1. Age: _____

2. Gender (please check one): Male: _____ Female: _____

3. Race/Ethnic Background (please check all that apply):

_____ American Indian or Alaskan Native _____ Black, not of Hispanic origin

_____ Asian or Pacific Islander _____ White, not of Hispanic origin

_____ Hispanic _____ Other (please specify)
_____

4. Year in college (please check one):

_____ Freshman _____ Sophomore

_____ Junior _____ Senior

_____ Graduate _____ Other (please specify)
_____