Insanity Defense Attitudes: The Impact of Biological Sex, Mental Illness, and Jury Instruction

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Abstract

Approximately 20% of incarcerated individuals in jails and 15% of those in state prisons have been diagnosed with a serious mental illness, meaning that there are approximately 356,000 incarcerated persons with serious mental illness in jails and prisons alone (Torrey et al., 2014). Today, mental health stigma is widely prevalent amongst society and particularly there is a strong stigma associated with mental illness and criminality (Mossière & Maeder, 2015). Society typically perceives verdicts associated with insanity/mental illness as an alternative for not wanting to take responsibility for one's actions and as a "loop-hole" to get out of serving time (Hans & Slater, 1983). These misconceptions can generate biases and stereotypes in regard to the insanity defense and accused individuals diagnosed with mental illness. The present study aimed to address these biases and stereotypes by examining what factors may impact mock-jurors' attitudes toward the insanity defense. The findings from this study imply that participant demographics and personal experience with mental health does impact perceptions towards the insanity defense as well as mental health in general. Future directions, implications, and limitations are discussed.

Keywords: insanity defense, stigma, legal system, jury instruction, defendant mental health

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A defendant is “innocent until proven guilty,” and typically, it is a jury of their peers who is responsible for determining, beyond a reasonable doubt, their imminent fate. Prior to deliberation, jury members are given specific instructions by the judge to remain impartial and to apply the law to the facts as he/she gives to them. Jurors are not to substitute their judgment as to whether a different law should be applied and are required to always keep their biases at bay (USLegal, 2019). However, it is unrealistic to assume that jurors can put to rest their own previous life experiences, heuristics, biases, and stereotypes to reach an impartial verdict, since research has demonstrated that jury decision-making is much more complex.

Jury decision making has been a perpetual focus of research for several decades, and there certainly is no lack of research when examining factors that influence a jurors decision making process (Finkel & Sales, 1997; ForsterLee et al., 2006; Kutys, 2012). Many studies have narrowed in on the impact of defendant characteristics impacting jury decision making including gender (Davidson & Rosky, 2014), race (Hunt, 2015), and socioeconomic status (Mazzella & Feingold, 1994). Additionally, other researchers have shifted the focus and discovered a significant relationship between verdict outcome choice and mock-juror demographics like gender (Pozzulo et al., 2010), age (Higgins et al., 2010), and race (Sommers & Ellsworth, 2009). However, outside of the generic demographic profile of both jurors and defendants, one of the most profound as well as controversial factors influencing decision making in the judicial system is mental illness, and more specifically, the insanity defense (Louden & Skeem, 2007; Maeder et al., 2020; Poulson et al., 1998).

The Insanity Defense

The insanity defense is commonly defined as “...a legal construct that, under some circumstances, excuses defendants with mental illness from legal responsibility for criminal behavior” (Giorgi-Guarnieri et al., 2014, p3). The first legal test for insanity came in 1843, in the trial of M'Naghten (Giorgi-Guarnieri et al., 2014). Due to this historic case and the ruling of Not Guilty by Reason of Insanity (NGRI) that followed, two components were identified as necessary to justify the insanity defense. First, a defendant is deemed insane if they were incapable of knowing what they were doing at the time of the offense due to psychological infirmity. The second component being the defendant knew what he or she was doing, but they were incapable of recognizing the wrongfulness of the action committed (M’Naghten Rule, 2020). The test is now commonly known as the M'Naghten test or M'Naghten rule and some variation of the test has since been adopted by several states. However, as of 2019, four states (Kansas, Montana, Idaho, and Utah) have abolished the insanity defense entirely, while all other states have at least made one revision to the insanity defense since Hinckley v. United States in 1982 (USLegal, 2019).

The insanity defense has been a topic of research for those in the field of psychology and law for decades, thus, the literature is rich and provides significant insight into how the defense has been perceived through time. Several misconceptions of the defense have manifested, including those who believe the defense is used as a “loophole” for one to be excused of criminal responsibility (Hans & Slater, 1983), as well as the prevalence rate of the defense which has been found to be astonishingly inaccurate when examining the public’s perception (Cirincione et al., 1995). Research shows less than one percent of criminal jury trials involve the insanity defense with only 26 percent of those cases ending in a Not Guilty by Reason of Insanity (NGRI; Silver, Cirincione, & Steadman, 1994). Furthermore, in approximately 70% of cases in which the insanity defense has been successful, the prosecution and defense have agreed on the appropriateness of the insanity defense before the case even goes to trial (Costanzo & Krauss, 2010). Though these misconceptions can likely be attributed to the lack of support towards the insanity defense noted in the literature, it is imperative to consider the central focus of the defense as a further contributor – mental illness.

Mental Illness

There is an abundance of literature that explores society’s perceptions and attitudes towards the insanity defense, but a gap exists in addressing jurors’ attitudes towards those diagnosed with a mental illness in general. Research has shown that labels and diagnostic classifications intensify “stigma” and create this “differentness” between society and individuals diagnosed with mental illness (Corrigan, 2007). Stigma is defined as stereotypes and/or negative views bestowed on a person or group of people when their characteristics or behaviors are viewed as abnormal from societal norms (Dudley, 2000). These abnormal behaviors and inconsistent societal norm

characteristics influence society's perception of these individuals collectively, thus creating a stereotype toward all individuals diagnosed with a mental illness (Ben-Zeev et al., 2010).

When examining mental illness in the context of the judicial system, individuals with severe mental illness are commonly charged with more serious crimes than individuals without a mental illness who commit similar offenses (Tellier & Felizardo, 2011). Additionally, there has been a strong stigma associated with individuals that are not only labeled as suffering from a mental illness, but also labeled as an offender (Lamb & Weinberger, 1998). Furthermore, research has shown there is a strong stigma toward individuals diagnosed with schizophrenia, specifically. Silton and colleagues (2011) found that individuals presenting behaviors indicative of schizophrenia were more likely to be labeled as having a mental illness, and participants expressed a greater desire to distance themselves from those diagnosed with schizophrenia as well as alcoholism. Angermeyer and Dietrich (2006) found that, in general, individuals experiencing behavior(s) associated with schizophrenia were labeled as having a mental illness (69-88%) more often than individuals displaying symptoms of depression (26-69%) or substance (alcohol) abuse disorder (16-49%).

The perceived link between dangerousness and mental illness is often most present with schizophrenia, but there is also a strong association with labeling individuals diagnosed with substance abuse disorder as dangerous and violent. A trend that appears steady in this field of research is that individuals diagnosed with a substance abuse disorder are typically not recognized as having a mental illness; therefore, the defendant is held fully accountable for their actions. Fenwick (2011) found that participants consistently viewed defendants with substance use disorder more negatively in comparison to defendants with schizophrenia, bipolar disorder, and depression. Jurors in this study also accredited a high degree of blame to defendants with substance use disorder. Furthermore, defendants with substance use disorder were less likely to be found Not Criminally Responsible due to Mental Disorder (NCRMD) in comparison to defendants with schizophrenia, bipolar, and depression (Fenwick, 2011).

Other Influential Factors

Gender

Psychology and law research has found consistent results when it comes to gender influencing jury decision-making (McCoy & Gray, 2007; Pozzulo, et al., 2010; Maeder & Dempsey, 2013). Research shows that men are typically perceived as strong and aggressive, whereas women are considered warm, nurturing, and kind (Prentice & Carraanza, 2002; Gupta et al., 2009). These perceptions of gender differences can often result in male defendants typically receiving harsher verdicts/sentencing when compared to women who commit similar crimes (Davidson & Rosky, 2014). However, when mental illness is also brought into the equation, specifically gender-stereotypical mental illnesses, there appears to be a fluctuation of trends when it comes to the impact it has on jury decision making.

Wirth and Bodenhausen (2009) examined the role played by gender in moderating mental health stigma while specifically targeting gender-stereotypical mental disorders. The case vignettes used in the study were manipulated to reflect either a male defendant diagnosed with substance abuse disorder (alcoholism), or a female defendant diagnosed with depression. Additionally, the case included the defendant's using insanity as a defense. Results were not as researchers expected; interestingly, they found that when the characters were gender stereotype consistent (e.g., male-alcoholism, female-depression) participants felt more negative, less sympathy, and less inclination to help when compared to non-gender-conforming diagnosis (e.g., male-depression, female-alcoholism). Researchers hypothesized that this inconsistent pattern could be due to the normality of these gender-stereotypical diagnoses, thus they are not perceived as a "true" mental disturbance and are considered a more "typical" behavior (Wirth & Bodenhausen, 2009). Wirth and Bodenhausen's (2009) results also displayed other contradictory beliefs - female defendants were found guilty more often than men and were considered to be more "responsible" for their actions, to have consciously known what they were doing at the time of the crime, and to have engaged in pre-mediation more so than men.

Lack of Education

Lack of education in the court room could be a significant predictor as to why the public fabricates this idea that the insanity defense is used much too often and for an "easy way out." Hans and Slater (1983) conducted several phone interviews the week preceding the announcement of the NGRI verdict in the Hinckley v. United States case. Researchers asked participants if they could describe, in a few words, the legal definition of insanity.

Over 70 percent of the sampled population gave an incorrect definition or did not know the legal definition of insanity. A minute percentage of those who participated could give a complete definition (.2%) and 29 percent were able to give a partial definition (Hans & Slater, 1983).

It appears that lack of knowledge surrounding various insanity defenses could be a potential factor as to why the public may hold these misconceptions about the insanity defense, but not all blame can be protruded to the lack of purposeful research. Partial fault could be imparted to the lack of information that is shared with jurors in the courtroom in reference to the insanity defense. In Brown v. United States (2012), Korrigan Brown appealed his convictions arguing that the court did not allow him to share with the jury the consequences of an NGRI verdict. The court determined that the jury should not be instructed on the consequences of the verdict, as that it is only allowed in certain circumstances. An example of “certain circumstances" could be if during a trial there was a false misrepresentation of sentencing, and in result, the jurors would then need to be informed of the error in which the judge would then clarify the proper sentencing (Gandhi & Prabhu, 2017). The appeals court determined that there was no significant error or statement that would have suggested that Brown would be released back into the public as a free man if found NGRI (Brown v. United States, 2012). Thus, there was no need to instruct the jury of the potential outcomes of the verdict. There were also several other previous cases the courts referred to, like that of Brown v. United States to justify their ruling (Shannon v. United States, 1994; Thigpen v. United States, 1993).

Although no errors were made that required the jurors to be instructed of the consequences to an NGRI plea in the Brown v. United States (2012), it is likely, based on previous research, that the jurors did not understand the potential outcomes of the verdict due to underlying stigmatic perceptions of the insanity defense. Educating jurors could be of the utmost importance when a state has both the guilty but mentally ill (GBMI) and the NGRI verdict as potential defenses. Both verdicts include the diagnosis of mental illness, but the GBMI defendant is not acquitted of their crimes and is held with the same accountability as one who is considered sane. Additionally, their access to mental health services is minimal when compared to that of an NGRI defendant (Gandhi & Prabhu, 2017). A defendant who pleads NGRI is usually institutionalized and receives treatment until a team of professionals finds them to no longer be of severe mental illness or harm to themselves or others. Instructing the jurors of these dissimilar outcomes may be reasonable in these circumstances to avoid jury biases, and is why researchers chose to use both defenses as a part of this study.

Attribution Theory

As previously mentioned, stigma is defined as stereotypes and/or negative views attributed to a person or group of people when their behaviors are viewed as abnormal from societal norms (Dudley, 2000). Corrigan and colleagues (2003) purposed that mental health stigma is influenced by attribution theory, in which individuals make assumptions about the cause or controllability of an individual’s mental illness. Given this theoretical framework, attribution theory has been heavily utilized to explain the relationship between stigmatic attitudes and discriminatory behavior. Specifically, an individual will make attributions about the cause/controllability of an individual’s illness (the event), resulting in inferences about responsibilities (Corrigan et al., 2003). The more directly controllable the illness is perceived to be, there is a stronger association of responsibility, resulting in negative emotional reactions from society (i.e., stigma). If the illness is seen as arising for reasons outside the individual’s control, the emotional response from others is sympathy and concern (Martinez & Hinshaw, 2016).

When individuals are diagnosed with substance abuse, they are perceived as more controllable and responsible of their illness (Fenwick, 2011; Mossière & Maeder, 2016), likely resulting in an increase in stigmatic attitudes from outside persons when viewed through the lens of attribution theory. This increase in stigmatic attitudes has shown to further influence perceptions in legal cases when the defendant has been labeled as a drug abuser. Mossière & Maeder (2016) found participants were much harsher towards a defendant diagnosed with substance abuse disorder and overall were more likely to give a verdict of guilty rather than Not Criminally Responsible on Account of Mental Disorder (NCRMD) when compared to other mental illness types, including schizophrenia. Moreover, research has shown individuals experiencing behavior(s) associated with schizophrenia were labeled as having a mental illness (69-88%) more often than individuals displaying symptoms of substance (alcohol) abuse disorder (16-49%), thus, less controllability and blame was associated with defendants diagnosed with schizophrenia (Angermeyer & Dietrich, 2006).

Current Study

When compared to the abundance of research that is published about stigmatic attitudes towards the insanity defense, there is a minimal amount of research that examines what could potentially reduce insanity stigma. Furthermore, little is known about what other factors, besides that of defendant demographics, could impact a juror's attitudes towards various pleas associated with the insanity defense. The purpose of this study was to examine mental health stigma in the case of an insanity defense while also exploring other factors (i.e., juror demographics and educational consequence instruction) that could induce negative perceptions and biases towards defendants displaying behaviors indicative of mental illness. Moreover, current literature involving attribution theory has yet to be utilized extensively in the field of psychology and law, thus, this investigation intends to expand on the existing understanding of attribution theory by incorporating both legal factors, and heavily stigmatized mental illness.

Hypotheses

Hypothesis One

There will be a main effect of plea education (not guilty/guilty, NGRI, and GBMI) on insanity defense attitudes. Specifically, mock jurors who receive educational consequence instruction in reference to the guilty, NGRI, and GBMI plea will report more positive attitudes towards the insanity defense when compared to the group that receives no educational consequence instruction.

There will be a main effect of mock-juror biological sex on insanity defense attitudes. Research has shown that males more often than females place blame on the victim and are more favorable towards the defendant, whereas females commonly place the blame on the defendant and find the victim more credible and accurate (Pozzulo et al., 2010). Therefore, it is expected male participants will be more favorable of the defendant and in result, comply with the defendant's insanity defense. Therefore, their attitudes towards the insanity defense will be more positive when compared to female participants.

There will be a main effect of the defendants' symptomatic mental health behaviors on insanity defense attitudes. Individuals with schizophrenia and substance abuse disorder are often perceived as dangerous, unpredictable, and violent when compared to individuals diagnosed with depression (Angermeyer & Dietrich, 2006). Furthermore, individuals experiencing symptoms associated with schizophrenia are labeled with having a mental illness more often than individuals displaying behaviors associated with substance abuse (Angermeyer & Dietrich, 2006). Therefore, it is expected that defendants displaying symptoms associated with schizophrenia will generate more negative attitudes towards the insanity defense in comparison to substance abuse disorder.

These previous main effects will qualify for a significant interaction between educational consequence instruction, mock-jurors biological sex, and defendant mental illness on insanity defense attitudes. It is expected that mock-jurors who identify as female, receive no educational consequence instruction, and are randomly assigned to trial transcript B in which the defendant is displaying symptoms of substance abuse disorder, will perceive the insanity defense in a more negative light. These findings are suspected due to the empirical research indicating female jurors tend to place more blame onto the defendant when compared to men who typically associate blame with the victim (Pozzulo, et al., 2010). Furthermore, individuals displaying symptoms of substance abuse disorder are generally perceived as being dangerous and in control of their behaviors, therefore, they are held more accountable for their actions (Mossière & Maeder, 2016; Silton et al., 2011).

Hypothesis Two

Given the central focus of an insanity defense is in fact mental illness, and previous literature indicates those diagnosed with a mental illness are less stigmatic towards mental health in general (Ho & Jaconelli, 2019), researchers anticipate *those who report that they themselves have been diagnosed with a mental illness will indicate more positive attitudes towards the insanity defense when compared to individuals who have not been diagnosed with a mental illness.*

Hypothesis Three

Ho and Jaconelli (2019) found that participants in their study who had the most associations with mental illness (e.g., diagnosed with a mental illness and/or had a family member/friend who was diagnosed) held the fewest stigmatic cognitions towards mental health when compared to the other groups. Therefore, researchers expect that *participants who report that they themselves have been diagnosed with a mental illness will indicate more positive attitudes towards mental illness in general when compared to individuals who have not been diagnosed with a mental illness.*

Hypothesis Four

There is an abundance of evidence-based literature that indicates individuals diagnosed with a mental illness are perceived as more dangerous and violent (Mossière & Maeder, 2016; Angermeyer & Dietrich, 2006; Stuart and Arboleda-Flórez (2001). However, that is not the case, as the annual incidences of violent crime on those diagnosed with severe mental illness (168.2 incidents per 1000 persons) is more than four times higher when compared to the general population rates (Teplin et al., 2005). Therefore, it is expected that *participants who report that they themselves have been diagnosed with a mental illness will associate less dangerousness and fear towards others with mental illness when compared to individuals who have not been diagnosed with a mental illness.*

Methods

Participants

Participants in this study included 323 individuals, all of whom were recruited via Amazon Mechanical Turk (Mturk) and resided in the United States of America. Participants received a small monetary compensation of $0.35 for their participation in this study. Of those who participated, 119 were females, 201 were males, and three preferred not to say. To avoid sampling from protected populations, individuals under the age of 18 and above the age of 65 were excluded from the study. Participants' reported ages ranged from 22 to 65 with the mean age of the sample being 33.20 years. The sample was primarily Caucasian (41.5%), and included 8% African American, 29.1% Asian/Pacific Islanders, 13.9% Hispanic, and 5.3% Native American/Alaskan Natives. Finally, 40.6% of participants indicated they had been diagnosed with a mental illness, while over half (51.7%) reported knowing someone close to them who had been diagnosed with a mental illness.

Measures

Mental Illness Stigma Scale

A variety of scales assessing mental health stigma were utilized and adapted from, including the Mental Illness Stigma Scale (MISS; Day et al., 2007) which measured participants' attitudes towards mental health, in general. The scale is compiled of 28 specific mental illness statements measured on a 7-point Likert scale where one indicates the highest level of disagreement (completely disagree) and seven indicates the highest level of agreement (completely agree). Furthermore, the scale includes seven subscales measuring attitudes and beliefs about mental illness, including anxiety, relationship disruption, hygiene, visibility, treatability, professional efficacy, and recovery. High scores on anxiety, relationship distribution, hygiene, and visibility indicate more stigmatized attitudes, whereas high scores on the other three subscales indicate positive attitudes towards mental illness. Finally, reliability for the MISS scales was assessed using Cronbach's alpha. It was determined that the items used to assess participants' attitudes towards mental health using the MISS were deemed as possessing strong reliability ($\alpha = .86$).

Attribution Questionnaire (AQ-27)

Corrigan's Attribution Questionnaire, 27-item version (AQ-27; Corrigan et al., 2003) was also utilized in this study. The AQ-27 provides a short vignette about an individual named "Harry," a 30-year-old man diagnosed with schizophrenia. Participants are then asked to indicate their agreement to a series of questions specific to Harry's

behaviors. Items are measured on a 9-point Likert type scale with one indicating "not at all" and nine indicating "very much." The AQ-27 was developed based on attribution theory (Weiner, 1995) and assesses the nine stereotypes associated with individuals diagnosed with a mental illness: blame, anger, pity, help, dangerousness, fear, avoidance, segregation, and coercion. However, for the purpose of this study, only the scale items measuring dangerousness and fear were utilized. It was determined that the items used to assess perceived dangerousness and fear for this study possess strong reliability ($\alpha = .94$).

Insanity Defense Attitudes

An Insanity Defense Attitudes - Revised (IDA-R) scale was used to assesses participants' beliefs about mental illness and criminal responsibility, in addition to perceptions of misuse in the case of insanity defense (Skeem et al., 2004). The revised version of the IDA consists of 19 core items and three general opinion items, all of which are measured on a 7-point Likert scale with one indicating the highest level of disagreement (strongly disagree) and seven indicating the highest level of agreement (strongly agree). The IDA-R is compiled of two key dimensions - Strict Liability and Perceived Injustice and Danger. The strict liability element relates to participants' perceptions of mental illness and the impact it may have on criminal responsibility. The second dimension of Perceived Injustice and Danger examines the participant's perceptions of the use or misuse of the insanity defense and the potentiality of injustice occurring. Reliability for the IDA-R was assessed using Cronbach's alpha. It was determined that the items used to assess insanity defense attitudes in this study possess acceptable reliability ($\alpha = .71$)

Stimuli

Trial Transcript

Participants were randomly assigned to one of two manipulated trial transcripts in which they were asked to examine it carefully. This vignette was chosen from a study conducted by Schlumper (2011) examining juror's pre-existing biases in cases utilizing the insanity defense. The trial transcript describes the case of a 28-year-old male, Jim Green, who is charged with the second-degree murder of Robert Wilson, a 30-year-old town local. Green and his lawyers entered a plea of NGRI. The defendant and victim demographics, details of the crime, setting, and a proposed plea remained consistent through both trial transcript A and B. However, the abnormal behaviors displayed by the defendant were manipulated. In trial transcript A, the defendant was experiencing symptoms of schizophrenia, whereas in trial transcript B, the defendant was presenting symptoms of substance abuse disorder. Behaviors indicative of each diagnosis were derived from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) which is considered the "gold-standard" of diagnostic manuals in respect to mental disorders. Specific diagnoses were not identified in the trial transcript to avoid labeling bias.

Educational Consequence Instruction

Participants were randomly assigned to one of three educational consequence instruction groups - guilty/not guilty, NGRI, or GBMI. Participants in the educated condition read an explanation of the consequences associated with NGRI or GBMI verdicts. Participants randomly assigned to the third group (i.e., not guilty/guilty) received no instruction besides that of what a judge in a regular court case would deliver prior to deliberation.

Procedures

This study was approved and monitored by the IRB and conducted in accordance with the Declaration of Helsinki. Following the approval of the IRB, participants who were considered "workers" on MTurk were given the opportunity to access this survey. First, participants completed the informed consent process in which they had the chance to review risks/benefits and receive information on whom to contact with any concerns or issues. To ensure participants' anonymity was upheld, no names or identifying information were included in the survey.

Following the informed consent process, participants began the survey by responding to a demographic questionnaire that included biological sex, age, race, ethnicity, and their personal exposure to mental illness. Next,

participants completed a variety of scales measuring their attitudes towards mental illness collectively (i.e., MISS & AQ-27). Participants were then instructed on their role as a participant, meaning they were to perceive themselves as a "juror" for the remainder of the current study. This prompt also included a brief judicial instruction from a "judge" that highlighted the defendant's charges. Next, participants were randomly assigned to one of the two previously discussed trial transcripts in which they were asked to examine it carefully. The researchers ensured the trial transcript was set to a time-delay, meaning participants could not proceed to the next portion of the survey until three minutes had passed.

Three manipulation checks were utilized to ensure mock jurors read the transcript thoroughly; all participants were included in analyses due to all persons getting at least one manipulation check correct. Following the manipulation screening, participants were randomly assigned to one of the three educational consequence instruction groups in which they received information pertaining to the GBMI or NGRI verdict, or no specific instruction at all. It is important to note that mock-jurors were then asked to determine a verdict; however, given the focus of the work currently presented, results pertaining to verdict outcome were excluded from this manuscript. Lastly, the IDA-R was utilized to examine participants' perceptions of the insanity defense being highlighted in the study. The IDA-R was utilized as a dependent variable to see whether participants' attitudes towards the insanity defense differed depending on the manipulation of the three other variables (e.g., educational consequence instruction, mock-juror biological sex, and defendant mental health behaviors). Survey participation took approximately 25 minutes to complete.

Results

Standard data cleaning procedures were utilized. For several variables in the Insanity Defense Attitudes - Revised (IDA-R) and Mental Illness Stigma Scale (MISS), the skewness and kurtosis were slightly out of the acceptable range of -1 to 1. To further examine this distribution, researchers multiplied the standard error for kurtosis/skewness by three and compared this standard error value to the original kurtosis/skewness score. The standard error score when multiplying by three was larger than the original kurtosis/skewness score, thus it was concluded that the scores for all variables were normally distributed.

Mock-juror Demographics, Educational Consequence Instruction, and Defendant Mental Illness

A between subjects 2x2x3 factorial ANOVA was conducted to test the influence of mock-juror demographics, educational consequence instruction, and defendant mental illness on insanity defense attitudes. Three independent variables (A, mock-juror biological sex; B, defendants' symptomatic mental health behaviors; C, educational consequence instruction) with two levels for variables A (male and female) and B (schizophrenia and substance abuse), and three levels for variable C (not guilty/guilty, GBMI, and NGRI) were tested to assess for differences in insanity defense attitudes. Results indicate a significant main effect of mock-juror biological sex [$F(1, 320) = 4.18$, $p = .04$, partial $\eta 2 = .01$]. Participants who reported that their biological sex was female (n=119) scored higher on the insanity defense attitudes measure ($M = 4.55$) than males (n=201; $M = 4.42$), indicating females endorsed more stigmatizing attitudes towards the insanity defense than males. Moreover, there was no significant main effect found for educational consequence instruction [$F(2, 320) = 1.87$, $p = .16$, partial $\eta 2 = .01$] and defendants' symptomatic mental health behaviors [$F(1, 320) = .12$, $p = .73$, partial $\eta 2 = .00$]. These main effects were not qualified by a significant interaction effect [$F(2, 320) = 2.19$, $p = .11$, partial $\eta 2 = .01$].

Juror Mental Illness

An independent samples t-test was performed to assess whether participants' insanity defense attitudes differed significantly between those diagnosed with a mental illness (group 1) and those who are not diagnosed with a mental illness (group 2). The assumption of homogeneity of variance was assessed by Levene's test, $F = 1.58$, $p = .21$. This indicated no significant violation of the equal variance assumption; therefore, the equal variances assumed version of the t-test was used. Participants' insanity defense attitudes differed significantly between the groups, $t(305) = 2.47$, $p = .01$. Mean for insanity defense attitudes for the diagnosed group ($M = 4.57$, $SD = .44$) was higher than mean insanity defense attitudes for those who were not diagnosed with a mental illness ($M = 4.42$, $SD = .59$),

indicating those diagnosed with a mental illness endorsed more stigmatizing attitudes towards the insanity defense than those not diagnosed with a mental illness.

Mental Health Attitudes

An independent samples t-test was performed to assess whether participants' mental health attitudes differed significantly for participants who reported being diagnosed with a mental illness (group 1) compared to those who are not diagnosed with a mental illness (group 2). It was hypothesized that group 1 would report fewer stigmatic attitudes towards mental health when compared to group 2. The assumption of homogeneity of variance was assessed by Levene's test, $F = .94$, $p = .33$. This indicated no significant violation of the equal variance assumption; therefore, the equal variances assumed version of the t-test was used. Participants' mental health attitudes differed significantly between the groups, $t(305) = 2.56$, $p = .01$. Mean mental health attitudes for the diagnosed group ($M = 4.94$, $SD = .66$) were higher than mean mental health attitudes for those who were not diagnosed with a mental illness ($M = 4.75$, $SD = .62$). These results were contrary to that of our hypothesis, indicating those diagnosed with a mental illness endorsed more stigmatizing attitudes than those who were not diagnosed with a mental illness.

An independent samples t-test was performed to assess whether participants' perceptions of those being diagnosed with a mental illness are dangerous, which differed significantly for participants who reported being diagnosed with a mental illness (group 1) compared to those who are not diagnosed with a mental illness (group 2). It was hypothesized that group 1 would associate less dangerousness with those diagnosed with a mental illness when compared to group 2. The assumption of homogeneity of variance was assessed by Levene's test, $F = .58$, $p = .45$. This indicated no significant violation of the equal variance assumption; therefore, the equal variances assumed version of the t-test was used. Participants' mental health attitudes differed significantly between the groups, $t(305) = 3.26$, $p < .001$. Mean dangerousness for the diagnosed group ($M = 6.91$, $SD = 1.58$) was higher than mean dangerousness for those who were not diagnosed with a mental illness ($M = 6.28$, $SD = 1.73$). These results were contrary to that of our hypothesis, indicating those diagnosed with a mental illness associated more dangerousness with those diagnosed with a mental illness than those who were not diagnosed with a mental illness.

An independent samples t-test was also performed to assess whether participants' fearfulness of those diagnosed with a mental illness differed significantly for those who reported being diagnosed with a mental illness (group 1) compared to those who are not diagnosed with a mental illness (group 2). It was hypothesized that group 1 would be less fearful of those diagnosed with a mental illness when compared to group 2. The assumption of homogeneity of variance was assessed by Levene's test, $F = .04$, $p = .85$. This indicated no significant violation of the equal variance assumption; therefore, the equal variances assumed version of the t-test was used. Participants' mental health attitudes differed significantly between the groups, $t(305) = 3.68$, $p < .001$. Mean fearfulness for the diagnosed group ($M = 7.00$, $SD = 1.71$) was higher than mean fearfulness for those who were not diagnosed with a mental illness ($M = 6.28$, $SD = 1.68$). These results were contrary to that of our hypothesis, indicating those diagnosed with a mental illness were more fearful of those also diagnosed with a mental illness than those who were not diagnosed.

Discussion

Mental Health Attitudes

Atypical to that of previous research (Ho & Jaconelli, 2019), researchers in this study found that those who were diagnosed with a mental illness endorsed stigmatizing attitudes towards those with mental illness and stigmatic traits associated with mental health, such as dangerousness and fearfulness, more often than those not diagnosed. In addition, researchers found participants also endorsed more stigmatizing attitudes towards the insanity defense when they were diagnosed with a mental illness, which makes sense based on the findings regarding diagnosed participants and mental health attitudes. Although these findings contradict literature in the field of mental health stigma, researchers hypothesize these findings can be explained best by the self-stigma phenomena. Self-stigma occurs when individuals diagnosed with a mental illness internalize the public's negative attitudes towards mental health, and as a result, suffer numerous negative consequences (Corrigan & Rao, 2012).

It is possible the participants in this study were internalizing those typical negative features like dangerousness and fearfulness, resulting in themselves being stigmatic towards others suffering from mental illness

as well as the insanity defense. However, when examining the means in both groups one and two, the values were in close proximity of one another, and the effect sizes were minute. This suggests the true difference between the two is minimal; thus, these findings should be interpreted with caution due to practicality.

Attribution theory could have also influenced the results in this study based on the inference that those who reported being diagnosed with a mental illness were internalizing the negative perceptions and attitudes held by the public. According to the framework of attribution theory, the more directly controllable the illness is perceived to be, the stronger the stigma (Martinez & Hinshaw, 2016). If participants in this study were struggling with a diagnosis that is typically perceived as “controllable,” such as substance use or depression, and as a result have experienced those negative, discriminatory behaviors directed at them by society, it is likely they may have developed a sense of self-stigma. This internalized self-stigma, in conjunction with attribution theory, could further explain the significance between persons mental health diagnosis and increased stigmatic attitudes towards the insanity defense. However, it is important to note that these are only inferences, and further research including a self-stigma inventory and specific indication of mental health diagnoses would need to be implemented to support this research question.

Insanity Defense Attitudes

Findings from this study indicate females endorsed more stigmatizing attitudes towards the insanity defense when compared to males, supporting the researcher’s hypothesis. Based on previous research, males are more likely to be favorable towards the defendant, hence why researchers hypothesized females would be more stigmatic towards the insanity defense due to this verdict option benefiting the defendant. However, much of the literature examining juror sex differences is situated in the context of sex crimes (FosterLee et al., 2006; Villemur & Hyde, 1983). Participants in this study were exposed to a random, male-on-male crime that included a fatal stabbing and a defendant suffering from mental illness. By utilizing a trial transcript in which the crime was not sexually motivated, and mental illness was incorporated, researchers were able to fill a gap in the literature by illuminating how the act of the crime may not be as a significant predictor when examining juror sex differences.

Limitations

Several elements relative to the methodology of this study could be considered as limitations while also providing insight into areas of improvement for further research. The trial transcript utilized in this study was derived from a previous study (Schlumper, 2011); however, researchers adapted the transcript to suit the objectives of this study, thus the validity and reliability of both transcript A and B are unknown. However, researchers were able to fill a gap in the literature by utilizing a male-on-male crime that included a close contact murder, whereas work in this area typically narrows in on sexually based crimes involving a male defendant and female victim. The crime in the trial transcript was also random; thus, if the crime was more targeted or discriminatory based, results could vary and provide important implications in the field of jury decision making.

In terms of recruitment, researchers utilized MTurk, an internet-based recruitment method, which could raise concerns regarding the validity of reported data. Participants were screened for participation based on age, but there were no other exclusions included. Researchers did ask participants demographic questions that could be considered “juror screening” questions such as “Have you ever been convicted of a felony?” and “Have you ever been diagnosed with a mental illness?” Researchers chose not to exclude any participants based on responses to these questions due to the variability in states regarding juror screening. Moreover, it would be more beneficial to implement the survey face-to-face and provide oral readings of the transcripts and plea education to ensure participants absorbed the information, rather than via the internet. Due to the 2020/21 pandemic, this survey procedure was not feasible. By conducting the survey face-to-face with participants, researchers would be able to control for the participants potentially skipping over reading material as they easily could in an internet setting.

This study was also limited in terms of the insanity defense pleas used for the educational consequence instruction - Guilty but Mentally Ill (GBMI) and Not Guilty by Reason of Insanity (NGRI). Other appendages to the insanity defense include Not Criminally Responsible by Reason of Mental Disorder, diminished capacity, and *mens rea,* which is typically utilized in states where the insanity defense has been abolished. Researchers chose to utilize GBMI and NGRI due to the stigma typically associated with these pleas, their prevalence, as well as how different they are in terms of dispositional outcome. It can be argued that future research may benefit from including these other pleas in conjunction with educational consequence instruction of such appendages.

Conclusions and Future Directions

Despite these limitations, these results still provide important implications for the judicial system as well as mental health stigma. When jurors are selected, the judge as well as the prosecution and defense go about a process known as voir dire, where potential jurors are questioned to determine their suitability to serve on the jury. Typically, questions are targeted towards ensuring the juror will remain objective throughout the trial. Based on the results from this study, we can see factors like biological sex, mental health diagnosis, and perceptions of stigmatic behaviors associated with mental illness impact individuals' attitudes towards the insanity defense and should not be ignored by judges and attorneys in such cases. Although these findings do not directly provide strategies to combat insanity defense stigma, this work highlights what demographic factors may be of importance when selecting jurors, which in turn can be utilized to mitigate any future negative perceptions of juror towards a defendant with mental illness.

Results from this study also shed insight on the possible connection between the role of self-stigma and the impact it may have on someone's perception of mental health, as well as their judgment when they themselves are diagnosed with a mental illness. Currently, there is a significant gap in the literature regarding this potential link; therefore, future research should strive to build a more defined connection between self-stigma and the impact it may have on the judicial court system. Finally, it is important to note that the results presented here are a piece of a bigger project looking at the impact of jury instruction, biological sex of mock-juror, and defendant mental illness on insanity defense attitudes and verdict outcomes.

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