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# Relations Between Experience with Mental Illness and the Not Guilty by Reason of Insanity Plea

Madelyn Gero

# RELATIONS BETWEEN EXPERIENCE WITH MENTAL ILLNESS AND THE *NOT GUILTY BY REASON OF INSANITY* PLEA

by

Madelyn Gero

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**Abstract**

The Not Guilty by Reason of Insanity (NGRI) plea is one of the most controversial defense strategies used in the modern legal system. The aim of this study was to determine whether previous experience with mental illness was a factor in participants' likelihood of assigning a NGRI verdict. Participants ($N$ = 268) read a vignette and assigned a verdict. Items dealing with previous experience with mental illness and other related variables were included. Reliability and validity analyses and an exploratory factor analysis were performed on the previous experience with mental illness measure. Further, logistic regression analyses were performed using measures of previous experience with mental illness and other related variables predicting verdict choice. Results showed that no measures predicted verdict choice although the previous experience with mental illness measure performed well. Research regarding factors related to verdict choice is still very limited and needs to be continued.

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When prosecuting an individual for a criminal act, the prosecution must provide sufficient evidence that there was not only *actus reus*, or the act (i.e., crime) itself, but also *mens rea*, the intent to commit the act (Spring, 1998). In the modern criminal justice system, the insanity defense is one of the most controversial defense strategies that can be used by a defendant's attorney. This defense aims to prove that a defendant is not guilty because of a lack of *mens rea*. For the members of a jury to find a defendant Not Guilty by Reason of Insanity (NGRI), they must be shown beyond a reasonable doubt that 1) the defendant has a mental disease or defect and 2) as a result of this mental disease or defect, the defendant did not understand the nature or wrongfulness of their actions at the time of the crime.

Currently there are multiple rules that can be used to determine criminal insanity. The first and most widely used is the M'Naughten Rule. To have a plausible insanity defense using this definition, a defendant must prove that either they did not know what they were doing, or they did not understand that their actions were wrong (Hayler, 1986). The M'Naughten Rule uses four questions as the criteria for determining criminal insanity: 1) Did a mental disease exist at the moment of the crime? 2) Was the defendant able to appreciate the nature of his actions (i.e., what he did) at the moment of the crime? 3) Was the defendant able to appreciate the quality of his actions (i.e., why he did it) at the moment of the crime? 4) If the defendant knew the nature and/or quality of his actions, did he otherwise not know the act was wrong? (Shapiro, 1984). The M'Naughten Rule is more rigid than other standards of criminal insanity because it focuses only on defendants' cognitive understanding of the crimes and does not take into account their ability to physically control their actions (Slobogin, Hafemeister, Mossman, & Reisner, 2014).

A second approach to determining insanity is the Irresistible Impulse Test. This alternative approach stipulates that a defendant who could not control his or her impulses at the time of the crime because of a mental disease or defect would not be held criminally responsible for his or her actions (Hayler, 1986). By adding the element of whether the defendant could control their behavior, this definition broadened the M'Naughten definition of insanity by including more than just the cognitive aspect of understanding right from wrong. Because of criticism that the impulsivity required for this test could easily be feigned, most states currently use a combination of this rule and the M'Naughten rule so that their criminal insanity definitions have a cognitive as well as a physical element (Slobogin, Hafemeister, Mossman, & Reisner, 2014).

A third insanity standard is the Durham Rule, also known as the "product test." In response to criticisms of the stricter M'Naughten Rule and Irresistible Impulse Test, this rule is very broad and only requires that the defendant's criminal actions be the product of a mental disorder (Perlin, 1994). The intention of this rule was to allow all aspects of a defendant's personality and mental history to be used in their defense so that a more robust picture of his or her mental state could be shown to the jury. The lack of guidance and structure in this rule has caused it to be the least used insanity standard; only the state of New Hampshire continues to use the Durham Rule (Slobogin, Hafemeister, Mossman, & Reisner, 2014).

A fourth approach is the American Law Institute Model Penal Code test of insanity. This test states that a defendant is not to be held criminally responsible if s/he "lack[ed] substantial capacity either to appreciate the criminality of his conduct or to conform his conduct to the requirements of the law" (Model Penal Code § 4.01, 1955). The Model Penal Code test changed the language of M'Naughten by using the term "appreciate" as a means to address the

defendant's judgment as opposed to his or her cognitive ability. Like the Irresistible Impulse Test, this test also addresses a defendant's inability to control their actions regardless of their understanding of their wrongfulness (Brooks, 1974).

Each state judiciary can choose how to determine criminal insanity. Currently, four states have abolished the plea altogether, and nine have introduced an alternative Guilty but Mentally Ill (GBMI) plea (Perlin, 1994). The rest of the states still have the plea option of NGRI; however, 23 states as well as the District of Columbia have shifted the burden of proof from the prosecution to the defense. In other words, the defense must now prove that the defendant was criminally insane instead of the prosecution having to prove that the defendant was not insane (Hayler, 1986).

It is important to note here the shift in terminology between the legal system and the mental health system. The term 'insanity' is a legal term that is rarely used by mental health professionals. The terms 'mental illness' or 'mental health disorder' are more commonly used by psychologists and psychiatrists to describe behaviors referred to as 'insanity' in the legal system. This terminological divide can be confusing to those who are less familiar with the legal or the mental health systems. For the purpose of this study, the terms 'mental illness' or 'mental health disorder' will be used to describe the concept of 'insanity,' although the terms can be used interchangeably.

The public's understanding of the NGRI plea is important to appreciate because any misinformation could affect potential jurors' verdict decisions in criminal insanity cases. Currently, the NGRI plea is only raised in around 2% of trials, and then with only a 10% success rate; however, studies have found that the public believes the insanity defense is used far more often than it truly is (Spring, 1998). For example, in a study of University of Wyoming students,

Pasewark and Seidenzahl (1979) found that 88% of 209 anonymously polled participants believed the insanity plea is used too much and that too many defendants escape responsibilities for their crimes by using the insanity defense. Another study by Hans (1986) found that 330 randomly selected U.S. adults believed that 38.16% of defendants plead NGRI and that 36.33% use the NGRI plea successfully. Furthermore, research has shown that in certain states, the public's estimate of a 37% usage rate of the NGRI plea was 41 times higher than the actual usage rate of the plea (Silver, Cirincione, & Steadman, 1994). Other research has suggested that potential jurors do not understand the basic definition and requirements for the insanity plea. For example, using subjects from a qualified circuit court jury pool, Sloat and Frierson (2005) found that only 4.2% of them could accurately define or explain an NGRI plea.

It is important to explore the potential reasons for these misunderstandings of the insanity plea. Research has suggested that fundamental misconceptions about mental illness itself may play a role in misunderstandings of the NGRI plea. A study by Lauber, Nordt, Falcato, and Rossler (2003) gave participants vignettes about subjects with depression and schizophrenia. Participants were asked to read each vignette and determine whether or not the subject had a mental disorder and if so, to identify which disorder it was. They found that only 73.6% of participants could correctly identify schizophrenia and only 39.8% could correctly identify depression. In addition, research using a U.S.-based nationwide survey found that respondents fundamentally failed to understand the complex causes of mental illnesses; for example, participants believed stressful life circumstances were the main cause of schizophrenia, major depressive disorder, and alcohol dependence (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). Further, Crisp, Gelder, Rix, Meltzer, and Rowlands (2000) found that 22.9% of respondents believed those with severe depression were a danger to others and 71.3% believed

those with schizophrenia were a danger to others. Altogether, these findings suggest that the public has difficulty recognizing the symptoms of mental illness, the causes of such disorders, and the extent to which individuals with mental illness pose a threat to others.

Furthermore, there is evidence that mentally ill people involved in the criminal justice system are viewed even more negatively than mentally ill people who have not committed a crime. Steadman and Cocozza (1977) had participants from a large randomly selected sample rate *most people*, *mental patients*, and *criminally insane patients* on 7-point scales of dangerousness, harmfulness, and violence. A score of 1 represented the most severe rating whereas a score of 7 was the least severe. Scores of dangerousness, harmfulness, and violence were averaged between *most people, mental patients,* and *criminally insane patients*. On these three items, significant differences were found between the mean scores for *most people* (mean of 5), *mental patients* (mean of 3.5), and *criminally insane patients* (mean of 2).

Considerable research has explored the personal characteristics of individuals who believe that those with mental illness are also violence-prone (Schomerus, Schwahn, Holzinger, et al., 2012). In an analysis of a representative sample of the U.S. adult population, those with more conservative political views and a stronger belief in free will were less likely to assign an NGRI verdict even when given expert testimony that the defendant was impaired at the time of the crime (Applebaum, Scurich, & Raad, 2015). Further, Kivisto and Swan (2001) found that a tendency toward more fundamentalist Christian religious beliefs were associated with bias against the insanity defense in a sample of college undergraduates.

Other researchers have taken a different approach, exploring the characteristics of people with more sympathetic attitudes toward mental illness. Research has found a positive relationship between previous experience with mental illness and the sympathy participants felt

towards individuals with psychological disorders who also had a history of criminal behavior (Nee & Witt, 2013). A widespread national telephone survey by Phelan and Link (2004) found that those with psychological disorders were perceived as less dangerous by participants who reported both personal experience with mental illness (e.g., through friends and family) and impersonal experience with mental illness (e.g., through a person unknown to the participant) than did participants with no previous experience with mental illness. Using path analysis, Corrigan, Green, Lundin, Kubiak, and Penn (2001) discovered that participants with more familiarity with mental illness rated the perceived dangerousness of those with mental illness lower and endorsed less social distance from those with mental disorders.

Although there is evidence to suggest that previous experience with mental illness is related to reduced bias again those with mental disorders, there has only been one study on this topic in the context of the insanity plea. Shiva (2001) explored whether there is a relationship between previous exposure to mental illness and verdict choice when given a NGRI option. The study did not yield significant results; however, the nonsignificant findings may have been partly due to methodological flaws. The measure used was not validated, and dichotomous and continuous variable were combined in their measure.

The current study aimed to address the flaws in previous research by assessing the reliability and validity of the constructed measure of experience with mental illness. Toward this end, we used previously validated measures of related constructs such as stigma toward mental illness, religious fundamentalism, and attitudes toward the criminal legal system to explore the convergent and discriminant validity of the created measure. Further, internal consistency analyses were used to determine the newly constructed measure's reliability. The main hypothesis of this study was that participants with higher levels of experience with mental illness

would be more likely to assign a NGRI verdict when given a specific case study. A secondary hypothesis was that measures of stigma toward mental illness, religious fundamentalism, and attitudes toward the criminal legal system would also predict verdict choice when included in analyses with the measure of previous experience with mental illness. To assess this hypothesis, participants' scores from measures of multiple different factors were included in a model as predictors along with scores from the measure of experience with mental illness. The measures that were used in this model included the Attitudes Toward the Criminal Legal System scale, the Devaluation Discrimination stigma toward mental illness scale, and the Religious Fundamentalism Scale. This model was then used to predict verdict choice.

## Methods

### Participants

The participants for this study were University of Memphis undergraduate students (*N*=268). The mean age of participants was 20.8 years, with an age range of 18 to 62 years. The sample was 73.1% female and 25.7% male with 1.1% of participants identifying as 'other.' The racial breakdown of the sample was 49.8% Caucasian, 36.3% African-American, 4.9% Asian, 3.4% Bi-Racial, and 0.7% Native American. Participants who identified as 'other' consisted of 4.9% of the sample. Non-Hispanic/Latino participants made up 92.9% of the sample. All participants were enrolled in a psychology course at the time of their participation, although their major did not have to be psychology. There were no inclusion or exclusion criteria for the participants.

### Procedure

An online program was used to administer the survey to students. This program acted as a platform that provided participants with access to a list of many different studies from which

they could choose. Students typically received course credit for completing online studies.

The survey itself was created using Qualtrics, an online survey system. Following a short section of demographic questions, students were presented with a vignette with case information. Survey questions were then administered after they finished reading the material. At the end of the survey, participants were given contact information for the investigator and the IRB. They were instructed to contact the investigator if they experienced any negative effects of the study, and they were told that they could contact the investigator when the study was complete for information about the results. The study was approved by the University of Memphis IRB before data collection began.

**Measures**

Before reading their assigned material, participants answered general questions about their age, ethnicity, race, gender, year in school, and current GPA. Following the demographic items, participants were given a vignette to read. This vignette described a criminal case in which the defendant was on trial for the attempted murder of his roommate. The vignette itself did not directly state that the defendant was mentally ill; however, certain statements from the defendant were described that suggested the presence of a mental illness. Participants then answered a series of questions.

**Attitudes toward defendant.** The first set of items included four questions specifically about the case and the defendant. For example, participants were asked *Do you think this person was aware that what he was doing at the time of the crime was wrong?* Response options included *Not at all* (3); *Yes, a little* (2); *Yes, a moderate amount* (1); and *Yes, completely* (0). Thus, higher scores indicated that the defendant did not appreciate that his actions were wrong. Second, participants were asked *Which do you believe is the best verdict for this case?* with

response options *Guilty of Attempted Murder* (1)*, Not Guilty of Attempted Murder* (2)*,* and *Not Guilty by Reason of Insanity* (3). The question following the plea assignment was *How sure are you of your decision?* The response options were *Not at all sure* (0); *A little sure* (1); *Moderately sure* (2); and *Completely sure* (3).

**Factual knowledge about use of the NGRI plea.** The next set of questions had to do with factual knowledge about the use of the NGRI plea. This section included four questions. An example of a general knowledge question was *Where do you think a defendant goes if they are found Not Guilty by Reason of Insanity*? The response options were *Prison* (1); *Mental Hospital* (2); and *Home* (3); the correct response for this item was *Mental Hospital.* See items 11 through 14 in Appendix A for all knowledge items (*** indicate correct responses). For each of the knowledge questions, a new variable was created following data collection that coded correct answers as 1 and incorrect answers as 0.

**Measure of attitudes toward the criminal legal system.** The next section was the Attitudes Toward the Criminal Legal System Scale (Attitudes Scale) created by Martin and Cohn (2004). This scale consisted of 24 items rated on 5-point Likert scales. Each item was posed as a statement and participants were instructed to indicate their level of agreement or disagreement with each item. An example of one of the items in this scale is *Juries make accurate decisions most of the time.* The response options were *Strongly Disagree* (1), *Disagree* (2), *Neither Agree or Disagree* (3), *Agree* (4), and *Strongly Agree* (5). Because higher scores indicated a more positive view of the criminal legal system, certain items were reverse coded. Scores for all item were added together to create a summary score for each participant. These summary scores created a scale from 24 to 120. The Attitudes Scale measured attitudes towards 7 different aspects of the U.S. criminal legal system: judges, police officers, defense attorneys, prosecuting

attorneys, juries, punishment, and laws (Martin & Cohn, 2004). The scale also consisted of three conceptual subscales of integrity, fairness, and competence as they relate to each of these criminal legal categories. The items in each subscale can be added to create subscale summary scores. The Attitudes Scale has been previously shown to have strong internal consistency in both student and non-student samples with an alpha of 0.82, as well as significant test-retest reliability with scores on both administrations of the measure correlating highly at $r(115) = 0.74$, $p < 0.001$. Further, the Attitudes Scale has been significantly correlated with measures of right wing authoritarianism and belief in a just world (Martin & Cohn, 2004).

**Measure of stigma toward mental illness.** The next set of items made up the Devaluation Discrimination Scale, a measure of stigma toward those with mental illness (Link, Cullen, Struening, Shrout, & Dohrenwend, 1987). This scale consisted of 12 items rated on 5-point Likert scales. Each item was presented as a statement and participants were asked to note their level of agreement or disagreement with each item. Response options for this scale were *Not at All* (1), *A Little* (2), *Some* (3), *A Lot* (4), and *A Great Deal* (5). Because higher scores indicated higher levels of stigma, certain items were reverse coded. Raw scores for each item were added together to create summary scores for participants. The summary scores ranged from 12 to 60. Although the originally created scale posed the items in terms of participants' perception of the way others viewed those with a mental illness (e.g., *Most people would willingly accept a former mental patient as a close friend*), the current study reworded each item so that it denoted how each participant viewed those with a mental illness (e.g., *I would willingly accept a former mental patient as a close friend*). In a 2011 study using an undergraduate sample, Hackler reworded the items in this way and still found high internal consistency, with an alpha of 0.87 as well as significant correlations with other validated measures of stigma.

**Previous experience with mental illness.** The next set of questions measured previous experience with mental illness. This section consisted of 18 total items scored on 6-point Likert scales. Each item included was posed as a statement and participants were instructed to indicate their level of agreement or disagreement with each item. These items were created for this survey and were grouped into three different categories with six items each. The first was exposure to mental illness through friends (e.g., *I have often been around a friend who suffered from a mental health disorder*). The second was exposure to mental illness through family (e.g., *I have often been around a family member who suffered from a mental health disorder*). The third was exposure to mental illness through personal experience (e.g., *I have felt that I may have a mental health disorder*). The response options were *Completely Disagree* (0), *Strongly Disagree* (1), *Somewhat Disagree* (2), *Somewhat Agree* (3), *Strongly Agree* (4), and *Completely Agree* (5). Higher scores on these items indicated higher levels of experience.

**Seriousness of experience with mental illness.** Three additional items were included in this section from the measure used in the previous study of experience with mental illness and the insanity plea (Shiva, 2001). These three items, one in each of the three categories of exposure, dealt with the level of seriousness of the mental illness experienced by participants in either friends, family, or themselves. Each item followed a question about whether or not participants had spent time around someone with a mental illness or whether they felt they have had a mental illness. For example, the item regarding personal experience with mental health disorders read *If you have experienced a mental health disorder, how serious is/was your problem? (On a scale of 1-10, 1 is not very serious and 10 is extremely serious). If you have not, continue to the next question.* These three items had response options from 1 to 10. All three items were added together to create summary scores and were then correlated with the summary

scores for the other eighteen items included in this section to explore the construct validity of both measures.

**Measure of religious fundamentalism.** The final section was the Religious Fundamentalism Scale (Fundamentalism Scale) created by Altemeyer and Hunsberger (2004). This scale consisted of 12 items worded as statements and participants were asked to indicate their level of agreement or disagreement with each item. An example of an item from this scale was *God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.* Responses were scored on an 8-point Likert scale with the response options *Very Strongly Disagree* (1), *Strongly Disagree* (2), *Moderately Disagree* (3), *Slightly Disagree* (4), *Slightly Agree* (5), *Moderately Agree* (6), *Strongly Agree* (7), and *Very Strongly Agree* (8). Higher scores for each item indicated stronger fundamentalist beliefs, and certain items were reverse coded to reflect that. Raw scores for each item were added together to create summary scores for each participant. The summary scores ranged from 12 to 96.

The Fundamentalism Scale has been shown to have high internal consistency with an alpha of 0.92. Further, the scale has been significantly correlated at the 0.05 level with measures of dogmatism, right wing authoritarianism, and belief in a traditional God. The Fundamentalism Scale has also been found to measure religious fundamentalism not only in Christians but also in Muslims, Hindus, and Jews. These reliability and validity analyses have been conducted in both student and non-student adult samples with similar results (Altemeyer & Hunsberger, 2004).

**Preliminary measure development**

Before the study began, three undergraduate students completed the entire survey while giving verbal feedback to check for clarity of the questions and readability of the vignette section. All survey items were reported to be clear and easily understandable, although students

reported that the subject in the vignette was too overtly mentally ill, making this section of reading seem biased toward the verdict of NGRI. Therefore, the vignette was edited to reflect more ambiguity of the symptoms of the subject at the recommendation of all three students.

Following the verbal feedback sessions, a group of 14 different undergraduate students competed the survey in Qualtrics. The data were downloaded into SPSS and were analyzed to determine if there was significant skew in any of the variables. All survey items, including the verdict choice item, showed normal distributions with no significant skew or kurtosis values. The edits to the vignette were then submitted as a modification to the IRB and the final measure was approved before data collection began. The data from the focus group were not used in the final analyses and were deleted after use.

## Results

### Preliminary Analyses

Descriptive statistics were conducted on all variables. There were two items measuring stigma toward mental illness that showed significant skew and kurtosis; however, these two items were part of a standardized scale. Thus, we made no changes to the items. The remaining items showed no significant skew or kurtosis. Five scales were then created by summing relevant items together. These scales measured attitudes toward the criminal legal system (Attitudes Scale), stigma toward mental illness (created from the Devaluation Discrimination Scale; referred to as the Discrimination Scale hereafter), previous experience with mental illness (Previous Experience Scale), seriousness of experience with mental illness (Seriousness Scale), and religious fundamentalism (Fundamentalism Scale). Descriptive analyses as well as reliability analyses using Cronbach's alpha were conducted for each scale and are shown in Table 1. The alpha values of the Attitudes Scale, Discrimination Scale, Previous Experience Scale, and

Fundamentalism scale were all above .80; however, the alpha value of the Seriousness Scale was subpar at .72. This leaves the internal consistency of the Seriousness Scale somewhat below standards.

The Previous Experience Scale was divided into three sections of six questions each regarding previous experience with mental illness through friends, previous experience with mental illness through family, or previous personal experience with mental illness. Each set of six items was analyzed for reliability using Cronbach's alpha and yielded values of $\alpha = .89$ for items regarding experience with friends, $\alpha = .90$ for items regarding experience with family, and $\alpha = .94$ for personal experience items. These analyses provided evidence for the internal consistency of each of the Previous Experience subscales.

**Validity analyses**

Validity is determined by exploring the relationship between criterion constructs that are related to the construct in question. To be considered valid, a measure must not only measure the specific construct it is meant to, but it should also not measure divergent constructs. This study required a new measure to be created. Thus, the validity of this new measure of previous experience with mental illness needed to be explored. To explore these relationships, correlations were used. Correlational analyses determine the amount of change in one variable that can be explained by another variable. Stronger intercorrelations indicate stronger relationships between variables. In terms of validity, a strong positive correlation between a measure and a theoretically related construct provides evidence of convergent validity for the measure in question. Alternatively, a strong negative correlation between a measure and an unrelated construct provides evidence of divergent validity (McNemar, 1969).

Convergent validity of the Previous Experience Scale was explored using the measure of seriousness of experience with mental illness as the criterion measure. These constructs should theoretically correlate because if a respondent reported higher levels of previous experience with mental illness (i.e. being concerned for someone because of a mental illness, having to take care of someone because of their mental illness, etc.), they should have also reported more serious experience with mental illness. Alternatively, a respondent who reported little or no previous experience with mental illness would be expected to have reported less serious experience with mental illness. The measure of seriousness of experience with mental illness (Seriousness Scale) consisted of three items used in previous research that asked about the severity of mental illness that participants had experienced either personally or through friends or family (Shiva, 2001). The measure of previous experience with mental illness (Previous Experience Scale) was newly constructed for this study and asked participants about their levels of previous experience with mental illness through friends, through family, and through personal experience. As expected, the Seriousness Scale and the Previous Experience Scale were significantly positively correlated at $r = .823$ ($p < .01$), two tailed. This strong positive correlation provides evidence of the convergent validity of the Previous Experience Scale.

Divergent validity of the Previous Experience Scale was also explored using correlational analysis. Prior research has shown that respondents who report having more previous experience with mental illness tend to show less stigma toward those with mental illness (Phelan & Link, 2004). Thus, the criterion measure used to explore the divergent validity of the Previous Experience Scale was the Discrimination Scale, a previously validated measure of stigma toward those with mental illness (Link et al., 1987). This scale is a standardized measure that has been found to correlate with other validated measures of stigma including the Stigma-Withdrawal

Scale ($r$ = .36, $p$ < .001) and the Social Distance Scale ($r$ =.73, $p$ < .01) (Link & Phelan, 2001; Pen et al., 1994; Vauth et al., 2007; Hackler, 2011). Further, prior research has found the Discrimination Scale to have a Cronbach's alpha of .87, providing evidence for internal consistency. The Discrimination Scale and the Previous Experience Scale were significantly negatively correlated at $r$ = -.419, ($p$ < .01), two tailed. This finding supports the divergent validity of the Previous Experience Scale.

These analyses provided evidence for the validity of the Previous Experience Scale. We theorized that those with more experience with mental illness would report more serious experience mental illness. Results showed that the measure of previous experience was strongly correlated with seriousness. In another analysis, we explored the divergent validity of the previous experience measure. Earlier research has shown that those who have more experience with mental illness are less likely to show stigma toward those with a mental illness. Consistent with prior research, we found that previous experience with mental illness was inversely associated with stigma toward mental illness. The findings of these analyses support the validity of the Previous Experience Scale in this study. Further, convergent and divergent validity was explored for each Previous Experience subscale using correlational analyses. The Seriousness Scale was used as the convergent validity criterion measure and the Stigma Scale was used as the divergent validity criterion measure. Results can be found in Table 2. These analyses supported the validity of each of the Previous Experience Subscales.

**Exploratory Factor Analysis**

Before the exploratory factor analysis (EFA) was performed, a correlation matrix of all 18 items from the Previous Experience Scale was produced. This matrix showed that all items were significantly correlated ($p$ < .01), and no correlation values exceeded 0.9. Thus, all 18 items

were included in the EFA. It was expected that three theoretical groups would fit best: experience with mental illness through friends, experience with mental illness through family, and personal experience with mental illness. A maximum likelihood approach was used for parameter estimates, as well as an oblimin rotation due to the expected intercorrelation of the produced factors. Several indicators were used to determine whether an EFA was suitable for the data. First, Bartlett's test of sphericity was found to be significant ($p < .001$). Second, the Kaiser-Meyer Olkin measure of sampling adequacy had a value of .907. These two values show that the data had sufficient levels of multicollinearity to be used for an EFA and that the factors produced would be reliable and distinct.

To determine the number of factors to retain, both the eigenvalues and the scree plot were examined. Four potential factors appeared above the elbow of the scree plot; however, only three factors were extracted using the maximum likelihood method. Further, only the three extracted factors had eigenvalues above 1.0. This led to the retaining of only the three extracted factors. Further, item loadings on the pattern matrix showed three strong factors with items relating to previous experience with mental illness through family, through friends, and through personal experience falling together. See Table 3 for all items and their factor loadings.

Following the EFA, three new scales were created using the extracted factors. Each new scale consisted of six items each, and raw scores for the items were summed to create the three scales. These scales reflected previous experience with mental illness through family, through friends, and through personal experience, respectively. Each scale had a potential minimum value of 0 and a potential maximum value of 30.

**Logistic regression analyses**

Before performing further analyses, a new dichotomous verdict variable was created to be the outcome variable. The original verdict variable asked *Which do you believe is the best verdict for this case?* Response options were *Guilty of Attempted Murder* (1), *Not Guilty of Attempted Murder* (2), and *Not Guilty by Reason of Insanity* (3). The new dichotomous verdict variable included responses *Guilty of Attempted Murder* (0) and *Not Guilty by Reason of Insanity* (1). Because only a small number of respondents ($n$ = 12) chose the verdict option Not Guilty of Attempted Murder, these cases were excluded from the logistic regression analyses due to lack of adequate power.

To test our main hypothesis that participants with higher levels of previous experience with mental illness would be more likely to assign a NGRI verdict, a set of logistic regressions as performed. Each subscale of the Previous Experience Scale was used in univariate regression as an individual predictor of verdict [ NGRI = 1; Guilty of Attempted Murder = 0]. Following these three analyses, all three subscales were entered simultaneously as predictors with verdict choice as the outcome variable. All four regression analyses yielded nonsignificant odds ratios (See Table 3).

Next, we explored our secondary hypothesis, which held that including the constructs attitudes toward mental illness, stigma, and fundamentalism along with previous experience with mental illness would also predict verdict choice. First, we explored the utility of each variable in univariate analyses predicting verdict. Next, we entered the three subscales of previous experience with mental illness, attitudes, stigma, and fundamentalism in a multivariate logistic regression analysis to predict verdict. All logistic regression analyses yielded nonsignificant results ($p > .05$). See Table 4 for inferential statistics.

## Discussion

The aim of current study was to explore the relationship between previous experience with mental illness and verdict choice when a NGRI verdict option was present. Our primary hypothesis held that participants with higher levels of experience with mental illness would be more likely to assign a NGRI verdict as opposed to a guilty verdict when given a specific case study. In our secondary hypothesis we posited that other measures of related constructs would also predict verdict choice when included in analyses with the measure of previous experience with mental illness. In order to explore our hypotheses, a measure of previous experience with mental illness was required. Prior to the current study, a measure of this construct had not been created. Therefore, another aim of this study was to construct a reliable and valid measure of previous experience with mental illness.

A number of techniques were used to explore the reliability and validity of the Previous Experience Scale. The entire measure as well as the three subscales all showed internal consistency using Cronbach's alpha. Further, convergent and divergent validity of the measure was supported through correlational analyses. An EFA provided evidence that a three factor structure was the appropriate model for the measure. Overall, these findings provide evidence that the newly constructed Previous Experience Scale has some potential to be a psychometrically sound measure. Further, the three sets of questions related to previous experience with mental illness through family, through friends, and through personal experience appear to be performing as distinct factors.

To explore our hypothesis that more previous experience with mental illness would lead to participants being more likely to choose a NGRI verdict, a series of logistic regression analyses were performed. The measure of previous experience with mental illness was used as a

predictor with verdict choice as the outcome variable. Further, measures of attitudes toward the criminal legal system, stigma toward mental illness, and religious fundamentalism were analyzed for their ability to predict verdict choice. The findings of these analyses showed that none of these constructs were significant predictors of verdict choice in this sample. If future research finds that these constructs do not predict verdict choice, it will be important to begin exploring other factors that may play a role in participants' verdict choice.

There are a number of limitations to be addressed in this study. First, as previously described, the measure of previous experience with mental illness was created specifically for this study. Although analyses supported the internal consistency as well as convergent and divergent validity of the measure, further exploration of its psychometric properties is needed. The measure must be shown to be reliable and valid in multiple different and more varied samples. Further, a broader range of previously validated measures of related constructs should be used to establish construct validity. These analyses need to be performed before confidently using the measure in future research.

Another limitation of this study is that the participants were all college undergraduate students. Due to the fact that college students more often come from higher SES backgrounds with stronger emphasis on education than the general population, the sample in this study may not be representative of the larger population (McDonough, 1997). Furthermore, all participants were enrolled in a psychology course. This may have resulted in participants having a better baseline understanding of mental illness than other more representative samples. Results of this study, as well as the reliability and validity of the constructed measure, may look vastly different in a more widely varied sample.

A third limitation is the size of the sample. It is possible that the small sample size may have limited the power of the analyses. This could be another contributor to the nonsignificant findings, and future research in this area may benefit from larger sample sizes. Further, 198 participants chose a verdict of Guilty of Attempted Murder whereas only 58 participants chose NGRI. This imbalance of responses is not ideal and should be noted this if a vignette is to be used to elicit verdict choice in future studies.

Finally, because both previously validated and standardized measures as well as the newly constructed measure did not predict verdict choice, it is possible that there were problems with the collection of the verdict data. Although the vignette used to elicit the verdict choice from participants was reviewed multiple times, a limitation of the material is that it was created solely for this study and has not been used successfully in previous research. Further, it is difficult to simulate trial proceedings accurately through a short section of reading. The verdict choice item in this study may not be an accurate representation of participants' true verdict selections in more realistic trial settings. Future research in this area should explore alternative ways to simulate a trial situation that may be more effective.

Understanding the verdict selections of juries has many positive implications. If attorneys have a deeper understanding of jurors' personal motivations, they can make more informed decisions during the jury selection process. In terms of the NGRI plea, it is vital that jurors understand different facets of the plea itself when asked to make decisions in insanity cases. It is also important to note how personal history can impact jurors' potential verdict selections so as to make sure that defendants are given the fairest trial possible without subconscious biases. Future studies in this area may need to explore different tactics of collecting verdict choice data from participants. One strategy may be to use a more simulation-based trial proceeding as

opposed to having participants read a vignette. Another strategy may be to recruit jurors that have previously served on insanity cases to explore their levels of previous experience with mental illness in conjunction with the verdicts they actually gave. Overall, this area of research is vastly understudied and there is much still to uncover.

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## Appendix A: Tables

Table 1

*Descriptive and Reliability Analyses for All Scales*

| Measure | Mean | SD | α |
|---|---|---|---|
| Attitudes Scale | 68.31 | 11.53 | .86 |
| Discrimination Scale | 25.93 | 7.93 | .85 |
| Previous Experience Scale | 38.18 | 21.91 | .93 |
| Seriousness Scale | 15.57 | 6.92 | .72 |
| Fundamentalism Scale | 56.15 | 23.58 | .94 |

*Note*. *(N = 268)*; SD = Standard Deviation; α = Cronbach's alpha value.

Table 2

*Convergent and Divergent Validity Correlations for Three Subscales of Previous Experience with Mental Illness*

| | Correlations | |
|---|---|---|
| Item | Seriousness Scale | Discrimination Scale |
| Previous Experience Family Subscale | .642 | -.181 |
| Previous Experience Friends Subscale | .641 | -.388 |
| Previous Personal Experience Subscale | .710 | -.435 |

*Note. (N = 268)*; Seriousness Scale = Seriousness of Experience with Mental Illness Scale; Discrimination Scale = Devaluation Discrimination measure of stigma toward mental illness; all correlations significant at $p < .01$ level, two tailed

Table 3

*Summary of Exploratory Factor Analysis Results for Previous Experience with Mental Illness items using Maximum Likelihood Estimation*

| | Factor Loadings | | |
|---|---|---|---|
| Item | Family Experience | Personal Experience | Friend Experience |
| I have seen a family member's life be disrupted by a mental health disorder | **.91** | .08 | .03 |
| I have been around a family member who suffered from a mental health disorder | **.91** | .03 | .04 |
| A member of my family has sought treatment for a mental health disorder | **.84** | .03 | .10 |
| I have felt concern for a family member who suffered from a mental health disorder | **.79** | .12 | .21 |
| I have been responsible for taking care of a family member who suffered from a mental health disorder | **.54** | .03 | .02 |
| I feel I have more family members who suffer from mental health disorders than most people | **.54** | .21 | .04 |
| I have struggled to cope with a mental health disorder | .05 | **.91** | .04 |
| My life has been disrupted by a mental health disorder | .01 | **.90** | .001 |
| I have sought treatment for a mental health disorder | .02 | **.82** | .01 |
| I have felt I may have a mental health disorder | .07 | **.81** | .06 |

Table 3 (Continued)

| | Factor Loadings | | |
|---|---|---|---|
| Item | Family Experience | Personal Experience | Friend Experience |
| I have wanted to talk with a professional about my concerns for my mental health | .03 | **.79** | .05 |
| I have needed someone to take care of me because I was struggling with a mental health disorder | .03 | **.78** | .01 |
| I have been around a friend who suffered from a mental health disorder | .04 | .03 | **.93** |
| I have seen a friend's life be disrupted by a mental health disorder | .06 | .04 | **.86** |
| A friend of mine has sought treatment for a mental health disorder | .02 | .02 | **.83** |
| I have felt concern for a friend who suffered from a mental health disorder | .01 | .04 | **.77** |
| I have been responsible for taking care of a friend who suffered from a mental health disorder | .06 | .09 | **.58** |
| I feel I have more friends who suffer from mental health disorders than most people | .02 | .13 | **.47** |
| Eigenvalues | 8.112 | 2.671 | 1.872 |
| % variance explained | 45.07 | 14.84 | 10.40 |

*Note. (N = 268)*; Factor loadings above .40 are in bold.

Table 4

*Results of Primary Logistic Regression Analyses*

| | Guilty vs. NGRI | | |
|---|---|---|---|
| Predictor | (Exp)β | S.E. | *p* |
| 1. Previous Experience Family subscale | .999 | .016 | .962 |
| 2. Previous Experience Friends subscale | 1.024 | .018 | .118 |
| 3. Previous Personal Experience subscale | 1.026 | .015 | .090 |
| 4. All experience with mental illness subscales | | | |
| Family subscale | .975 | .021 | .230 |
| Friends subscale | 1.025 | .023 | .281 |
| Personal subscale | 1.025 | .018 | .162 |
| 5. Attitudes Scale | .987 | .013 | .313 |
| 6. Discrimination Scale | .997 | .020 | .246 |
| 7. Fundamentalism Scale | .988 | .007 | .061 |
| 8. All measures | | | |
| Attitudes Scale | .986 | .014 | .327 |
| Discrimination Scale | .988 | .024 | .628 |
| Fundamentalism Scale | .990 | .007 | .174 |
| Family subscale | .979 | .022 | .314 |
| Friends subscale | 1.015 | .024 | .546 |
| Personal subscale | 1.012 | .020 | .696 |

*Note. (N = 256)*; All individual analyses numbered and separated by horizontal lines; (Exp)β = Odds Ratio; S.E.= Standard Error; *p* = Significant Level

## Appendix B: Forensic Psychology Attitudes Towards Defendants Study

**We would like to ask you some basic demographic information. Your answers to all questions will be kept confidential.**

1. What is the gender you identify with?
    Male
    Female
    Other

2. What do you consider your ethnicity to be?
    Hispanic
    Non-Hispanic

3. What do you consider your race to be?
    Caucasian
    African-American
    Asian
    Native American
    Pacific Islander
    Bi-racial (add write in box for races)

4. What is your current age?

5. What year of school are you currently in (best estimate if unsure)?
    Freshman
    Sophomore
    Junior
    Senior

6. What is your current GPA?
    0.00 – 1.00
    1.00-1.50
    1.51-2.00
    2.01 – 2.50
    2.51-3.00
    3.01-3.50
    3.51-4.00

**For the purpose of this study, the term 'mental health disorder' includes any severe mental, emotional, or behavioral disorder (for example: clinical depression, schizophrenia, bipolar disorder, postpartum psychosis or severe depression, anxiety and panic disorders, etc.). However, mental health disorders would <u>not</u> include any substance abuse (alcoholism) or developmental disorders (Down syndrome).**

**The following is a summary of a criminal case. The defendant has been charged with the attempted murder of his roommate. Please read it carefully and completely.**

AJ, a 28-year-old male, has been charged with the attempted murder of his roommate. On August 4, 2016, AJ and his roommate began to have a heated verbal argument over AJ's recent erratic behavior and the fact that AJ had not paid bills for the apartment in two months. After the two roommates yelled at each other for several minutes, AJ left suddenly and quickly walked up the stairs to the second floor of the apartment. He testified later during questioning that he left because he felt "trapped," "unsafe," and he "needed to get away." As soon as AJ left, his roommate ran up the stairs after him up, shouting that he was not finished talking. AJ's roommate did not touch AJ, but he stopped very close to him on the stairs. At that time, AJ sprayed his roommate in the face with pepper spray. AJ's roommate screamed after being hit with the pepper spray and began to wave his arms wildly in order to catch the stair railing. AJ then removed a knife from his pocket and stabbed his roommate repeatedly in the abdomen, causing major injuries.

When questioned, AJ said he used the pepper spray because he felt unsafe when the roommate yelled and ran towards him. AJ said that he stabbed his roommate because the pepper spray seemed to make the roommate "yell louder, want to grab me, and kill me even more." AJ said that he had acted in self-defense because he feared his roommate was going to seriously injure him or kill him. AJ reported that he believed his roommate had been planning this "attack" for a long time and that the argument was a sign that "he was ready to destroy me." Neither AJ nor his roommate have histories of violent behavior.

During the trial, AJ sat next to his lawyers at the defense table showing little emotion on his face. AJ did not seem interested in the trial. On the stand, he appeared calm when he was discussing the case. He was able to answer the questions asked by his attorneys as well as by the prosecution, although he mainly kept his eyes down and his arms crossed while sitting at the defense table.

**In this case, jurors have three options. The first is to find the defendant Guilty of Attempted Murder. The second is to find the defendant Not Guilty of Attempted Murder. The third is to find the defendant Not Guilty by Reason of Insanity.**

**The defendant contends he was insane at the time of the crime. Insanity is a defense to the charge of Attempted Murder. The sanity of the defendant at the time of the crime is therefore a question you must decide.**

**A defendant is insane only if at the time of the crime:**

**1. The defendant had a severe mental disease or defect; and**

**2. As a result, the defendant was unable to appreciate the nature and quality and/or the wrongfulness of his acts.**

**The following questions are about the case summary you have just read. We would like your opinion of this case.**

7. Do you think AJ was mentally ill at the time of the crime?
   (3) Not at all
   (2) Yes, a little
   (1) Yes, a moderate amount
   (0) Yes, completely

8. Do you think AJ was aware that what he was doing was wrong at the time of the crime?
   (3) Not at all
   (2) Yes, a little
   (1) Yes, a moderate amount
   (0) Yes, completely

9. Which do you believe is the best verdict for this case?
   (1) Guilty of Attempted Murder
   (2) Not Guilty of Attempted Murder
   (3) Not Guilty by Reason of Insanity

10. How sure are you of your decision?
   (0) Not at all
   (1) A little bit
   (2) Moderately
   (3) Completely

**The following are general questions about the Not Guilty by Reason of Insanity defense.**

11. Out of every 10 criminal cases, how many defendants will use a Not Guilty by Reason of Insanity argument in trial?

(0) <1***
(1) 1
(2) 2
(3) 3
(4) 4
(5) 5
(6) 6
(7) 7
(8) 8
(9) 9
(10) 10

12. Out of every 10 defendants that claim to be Not Guilty by Reason of Insanity, how many do you believe are actually found Not Guilty by Reason of Insanity?

(0) <1
(1) 1***
(2) 2
(3) 3
(4) 4
(5) 5
(6) 6
(7) 7
(8) 8
(9) 9
(10) 10

13. Where do you think a defendant goes if they are found Not Guilty by Reason of Insanity?

(1) Prison
(2) Mental Hospital***
(3) Home

14. True or False: The insanity defense is used most often in murder trials.

(1) True
(2) False***

**The following items are related to attitudes toward the criminal legal system. Please answer to the extent of your agreement or disagreement with each statement.**

15. Juries make accurate decisions most of the time.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

16. Punishment in this country is basically ineffective.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

17. Most of our laws are fair and just.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

18. Juries often base decisions on their prejudices instead of facts.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

19. Defense attorneys are dishonest if it means they can win a case.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

20. Judges usually make fair decisions.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

21. Police officers unfairly harass certain groups such as minorities and high-school kids.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

22. Most of our laws are effective at protecting people.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

23. Lots of police are corrupt and hypocritical.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

24. Judges are easily ‘‘bought off’’ by corrupt politicians.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

25. Because police officers are trained so well there is less crime than there might be.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

26. Our current system of punishment is effective at preventing crime.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

27. Defense attorneys care more about their clients than about making money.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

28. In general, defense attorneys represent their clients very well.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

29. Most prosecuting attorneys are as fair to the victim and defendant as possible.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

30. Police officers treat everyone equally because they are able to ignore prejudice.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

31. There are too many laws that impose on personal freedom.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

32. Judges tend to let bias and prejudice affect their decisions.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

33. Prosecuting attorneys are dishonest if it means they can win a case.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

34. A lot of judges make poor decisions.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

35. Most defense attorneys don't have the time or resources to do their jobs well.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

36. Juries make fair decisions most of the time.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

37. Defense attorneys aren't fair to victims because they represent criminals.
(5) Strongly Disagree
(4) Disagree
(3) Neither Agree or Disagree
(2) Agree
(1) Strongly Agree

38. The punishment given usually fits the crime.
(1) Strongly Disagree
(2) Disagree
(3) Neither Agree or Disagree
(4) Agree
(5) Strongly Agree

**The following are questions about your attitudes towards mental health disorders. Please answer the following questions based on how you would respond when interacting with individuals with a mental health disorder in various situations.**

39. I would willingly accept a former mental patient as a close friend.
(5) Not at all
(4) A little
(3) Some
(2) A lot
(1) A great deal

40. I believe that a person who has been in a mental hospital is just as intelligent as the average person.
(5) Not at all
(4) A little
(3) Some
(2) A lot
(1) A great deal

41. I believe that a former mental patient is just as trustworthy as the average citizen.
(5) Not at all
(4) A little
(3) Some
(2) A lot
(1) A great deal

42. I would accept a fully recovered former mental patient as a teacher of young children in a public school.
(5) Not at all
(4) A little
(3) Some
(2) A lot
(1) A great deal

43. I believe that entering a mental hospital is a sign of personal failure.
(1) Not at all
(2) A little
(3) Some
(4) A lot
(5) A great deal

44. I would not hire a former mental patient to take care of my children, even if he or she had been well for some time.
(1) Not at all
(2) A little
(3) Some
(4) A lot
(5) A great deal

45. I think less of a person who has been in a mental hospital.
(1) Not at all
(2) A little
(3) Some
(4) A lot
(5) A great deal

46. If I were an employer, I would hire a former mental patient if s/he is qualified for the job.
(5) Not at all
(4) A little
(3) Some
(2) A lot
(1) A great deal

47. If I were an employer, I would pass over the application of a former mental patient in favor of another applicant.
(1) Not at all
(2) A little
(3) Some
(4) A lot
(5) A great deal

48. I would treat a former mental patient just as I would treat anyone.
(5) Not at all
(4) A little
(3) Some
(2) A lot
(1) A great deal

49. I would be reluctant to date a person who has been hospitalized for a serious mental disorder.
(1) Not at all
(2) A little
(3) Some
(4) A lot
(5) A great deal

50. If I knew a person was in a mental hospital, I would take his or her opinions less seriously.
(1) Not at all
(2) A little
(3) Some
(4) A lot
(5) A great deal

**For the purpose of this study, we need to know about your experience with mental health disorders. We know these questions are sensitive, but they are also important to this research. Please remember that your name is not on this survey, so we have no way to match answers with individuals. Your confidentiality is protected to the fullest extent of the law.**

**For each of the following questions, you will read a statement. Please indicate how much you either agree or disagree with each statement.**

51. I have felt concern for a friend who suffered from a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

52. I have been around a friend who suffered from a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

53. I feel I have more friends who suffer from mental health disorders than most people.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

54. A friend of mine has sought treatment for a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

55. I have been responsible for taking care of a friend who suffered from a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

56. I have seen a friend's life be disrupted by a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

57. I have felt concern for a family member who suffered from a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

58. I have been around a family member who suffered from a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

59. I feel I have more family members who suffer from mental health disorders than most people.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

60. A member of my family has sought treatment for a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

61. I have been responsible for taking care of a family member who suffered from a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

62. I have seen a family member's life be disrupted by a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

63. I have felt that I may have a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

64. I have wanted to talk with a professional about my concerns for my mental health.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

65. I have sought treatment for a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

66. I have struggled to cope with a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

67. My life has been disrupted by a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

68. I have needed someone to take care of me because I was struggling with a mental health disorder.
(0) Completely disagree
(1) Strongly disagree
(2) Somewhat disagree
(3) Somewhat agree
(4) Strongly agree
(5) Completely agree

69. If you have had a friend who suffered from a mental health disorder, how serious is/was your friend's problem? (On a scale of 1-10, 1 is not very serious and 10 is extremely serious). If you have never been around a friend who suffered from a mental health disorder, skip this question and continue to the next item.

1 2 3 4 5 6 7 8 9 10

70. If you have had a family member who suffered from a mental health disorder, how serious is/was your family member's problem? (On a scale of 1-10, 1 is not very serious and 10 is extremely serious). If you have never been around a family member who suffered from a mental health disorder, skip this question and continue to the next item.

1 2 3 4 5 6 7 8 9 10

71. If you have suffered from a mental health disorder, how serious is/was your problem? (On a scale of 1-10, 1 is not very serious and 10 is extremely serious). If you have not experienced a mental disorder, skip this question and continue to the next item.

1 2 3 4 5 6 7 8 9 10

**For each of the following statements please indicate the extent of your agreement or disagreement as it relates to your personal experience.**

72. God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.
(1) Very Strongly Disagree
(2) Strongly Disagree
(3) Moderately Disagree
(4) Slightly Disagree
(5) Slightly Agree
(6) Moderately Agree
(7) Strongly Agree
(8) Very Strongly Agree

73. No single book of religious teachings contains all the intrinsic, fundamental truths about life.
(8) Very Strongly Disagree
(7) Strongly Disagree
(6) Moderately Disagree
(5) Slightly Disagree
(4) Slightly Agree
(3) Moderately Agree
(2) Strongly Agree
(1) Very Strongly Agree

74. The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against God.
(1) Very Strongly Disagree
(2) Strongly Disagree
(3) Moderately Disagree
(4) Slightly Disagree
(5) Slightly Agree
(6) Moderately Agree
(7) Strongly Agree
(8) Very Strongly Agree

75. It is more important to be a good person than to believe in God and the right religion.
(8) Very Strongly Disagree
(7) Strongly Disagree
(6) Moderately Disagree
(5) Slightly Disagree
(4) Slightly Agree
(3) Moderately Agree
(2) Strongly Agree
(1) Very Strongly Agree

76. There is a particular set of religious teachings in this world that are so true, you can't go any "deeper" because they are the basic, bedrock message that God has given humanity.
(1) Very Strongly Disagree
(2) Strongly Disagree
(3) Moderately Disagree
(4) Slightly Disagree
(5) Slightly Agree
(6) Moderately Agree
(7) Strongly Agree
(8) Very Strongly Agree

77. When you get right down to it, there are basically only two kinds of people in the world: the Righteous, who will be rewarded by God; and the rest, who will not.
(1) Very Strongly Disagree
(2) Strongly Disagree
(3) Moderately Disagree
(4) Slightly Disagree
(5) Slightly Agree
(6) Moderately Agree
(7) Strongly Agree
(8) Very Strongly Agree

78. Scriptures may contain general truths, but they should NOT be considered completely, literally true from beginning to end.
(8) Very Strongly Disagree
(7) Strongly Disagree
(6) Moderately Disagree
(5) Slightly Disagree
(4) Slightly Agree
(3) Moderately Agree
(2) Strongly Agree
(1) Very Strongly Agree

79. To lead the best, most meaningful life, one must belong to the one, fundamentally true religion.
(1) Very Strongly Disagree
(2) Strongly Disagree
(3) Moderately Disagree
(4) Slightly Disagree
(5) Slightly Agree
(6) Moderately Agree
(7) Strongly Agree
(8) Very Strongly Agree

80. "Satan" is just the name people give to their own bad impulses. There really is no such thing as a diabolical "Prince of Darkness" who tempts us.
(8) Very Strongly Disagree
(7) Strongly Disagree
(6) Moderately Disagree
(5) Slightly Disagree
(4) Slightly Agree
(3) Moderately Agree
(2) Strongly Agree
(1) Very Strongly Agree

81. Whenever science and sacred scripture conflict, science is probably right.
(8) Very Strongly Disagree
(7) Strongly Disagree
(6) Moderately Disagree
(5) Slightly Disagree
(4) Slightly Agree
(3) Moderately Agree
(2) Strongly Agree
(1) Very Strongly Agree

82. The fundamentals of God's religion should never be tampered with, or compromised with others' beliefs.
(1) Very Strongly Disagree
(2) Strongly Disagree
(3) Moderately Disagree
(4) Slightly Disagree
(5) Slightly Agree
(6) Moderately Agree
(7) Strongly Agree
(8) Very Strongly Agree

83. All of the religions in the world have flaws and wrong teachings. There is no perfectly true, right religion.
(8) Very Strongly Disagree
(7) Strongly Disagree
(6) Moderately Disagree
(5) Slightly Disagree
(4) Slightly Agree
(3) Moderately Agree
(2) Strongly Agree
(1) Very Strongly Agree

**Thank you for your participation in this study. If you have any questions, comments, or concerns, please contact Maddie Gero by email at mgero@memphis.edu or by phone at the number (256) 361-8330. Your responses are an invaluable part of our research and we will treat them with the utmost care and consideration.**

**If you realized that you have been having suicidal thoughts, please don't wait! You can contact the Wilder Tower Counseling Center by phone at (901) 678-2068 or by email at counseling@memphis.edu. If you feel you need immediate assistance, you can contact the Memphis Crisis Center's 24 Hour Suicide Help Line at (901) 274-7477.**

Institutional Review Board
Office of Sponsored Programs
University of Memphis
315 Admin Bldg
Memphis, TN 38152-3370

Nov 29, 2017

PI Name: Madelyn Gero
Co-Investigators:
Advisor and/or Co-PI: Leslie Robinson
Submission Type: Initial
Title: Relations Between Experience with Mental Illness and the Not Guilty by Reason of Insanity Plea
IRB ID **:** #PRO-FY2018-35
Exempt Approval: Nov 26, 2017

Approval of this project is given with the following obligations:

1. When the project is finished or terminated, a completion form must be submitted.

2. No change may be made in the approved protocol without prior board approval.

3. Exempt approval are considered to have no expiration date and no further review is necessary unless the protocol needs modification.

Thank you,
James P. Whelan, Ph.D.
Institutional Review Board Chair
The University of Memphis.