GENDER ROLE INCONGRUENCE AND THE ADJUDICATION OF CRIMINAL RESPONSIBILITY

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ABSTRACT

The mental health and criminal justice systems are two of the major control mechanisms in American society that often function together through related and interdependent structures to identify and control deviant behavior. Both systems employ coercive control. In addition, regardless of the specific form of the deviance, these control institutions also use informal social control to reinforce role behaviors appropriate to the individual's age, sex, race/ethnicity, and other social statuses.

This paper investigates the effects of gender and gender role incongruence on the determination of criminal responsibility. Data for this study came from the Insanity Defense Reform Project, a National Institute of Mental Health-funded study of eight states. The sample for this study consists of 4842 cases in which insanity was raised as a defense.

Consistent with earlier studies, women are more likely to be found not guilty by reason of insanity (NGRI) than men, but the odds of being found NGRI are moderated by the defendant's sex and relationship to the victim. Consistent with hypotheses of the effects of gender role incongruence, women whose victims are their own children or other family members (not including spouse victims) have the greatest odds of being found NGRI of any group. However, women whose victims are spouses have similar odds of being found NGRI as those of men whose spouses are the victims. Thus, the theory was only partially supported, suggesting that how and the degree to which courtroom personnel rely on common stereotypes and gender expectations in decision making is complicated and may reflect a weighing of factors related to blameworthiness and dangerousness—both physical and symbolic.

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I. INTRODUCTION

The insanity defense has a long history in English and American jurisprudence reflecting a longstanding belief that those who have little ability to understand the consequences of an act, or know that their behavior is wrong, should not be held criminally responsible for their actions.[1] Yet the American public is often incensed when persons who commit particularly heinous crimes are found Not Guilty by Reason of Insanity (NGRI).[2] In high profile cases there appears to be a public discourse weighing the defendant's blameworthiness against his or her threat to society, which is fueled by the media's misrepresentation of the connection between mental illness and violence.[3]

The insanity defense has drawn enormous attention over the years, disproportionate to the frequency of its use.[4] In reality, the insanity defense is invoked in less than one percent of all felony trials and only twenty-six percent of those pleas result in an NGRI verdict.[5] Even though the actual numbers are quite small, the American public and attorneys alike believe that the defense is invoked frequently and principally in cases involving murder.[6] Despite these perceptions, most cases that involve an insanity plea are not for murder charges[7] and are cases in which the evidence of mental illness is so overwhelming that the prosecution does not contest the insanity plea.[8]

At the heart of the defense is the question of mens rea, that is, criminal intent.[9] Most commonly, insanity is substantiated by

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[1] *See* RALPH REISNER, LAW AND THE MENTAL HEALTH SYSTEM: CIVIL AND CRIMINAL ASPECTS 561, 563 (1985).

[2] HENRY J. STEADMAN ET AL., BEFORE AND AFTER HINCKLEY: EVALUATING INSANITY DEFENSE REFORM 2 (1993). John Hinckley Jr., who attempted to assassinate President Ronald Reagan, was found not guilty by reason of insanity in 1982. *Id.* The Hinckley case alone spurred substantial statutory changes across the United States. *Id.*

[3] *See* Otto F. Wahl, *News Media Portrayal of Mental Illness: Implications for Public Policy*, 46 AM. BEHAV. SCIENTIST 1594, 1595–96 (2003).

[4] RITA J. SIMON & DAVID E. AARONSON, THE INSANITY DEFENSE: A CRITICAL ASSESSMENT OF LAW AND POLICY IN THE POST-HINCKLEY ERA 7 (1988); Eric Silver et al., *Demythologizing Inaccurate Perceptions of the Insanity Defense*, 18 LAW & HUM. BEHAV. 63, 68–69 (1994).

[5] Lisa A. Callahan et al., *The Volume and Characteristics of Insanity Defense Pleas: An Eight-State Study*, 19 BULL. AM. ACAD. PSYCHIATRY & L. 331, 334–35 (1991).

[6] *See* Silver et al., *supra* note 4, at 65, 68.

[7] Callahan et al., *supra* note 5, at 336 tbl.2, 337.

[8] SIMON & AARONSON, *supra* note 4, at 9; Caryl E. Boehnert, *Characteristics of Successful and Unsuccessful Insanity Pleas*, 13 LAW & HUM. BEHAV. 31, 32 (1989); Jeffrey S. Janofsky et al., *Defendants Pleading Insanity: An Analysis of Outcome*, 17 BULL. AM. ACAD. PSYCHIATRY & L. 203, 207, 209 (1989).

[9] Randy Borum & Solomon M. Fulero, *Empirical Research on the Insanity Defense and*

medical evidence of mental illness.[10] However, the mere presence of a mental illness is insufficient unless it can be demonstrated that the illness was directly related to the state of mind at the time of the offense and of sufficient strength to qualify the defendant as criminally insane.[11] On the other hand, a finding of insanity does not necessarily require evidence of a diagnosable mental disorder. Bizarre behavior, thoughts, emotional states, manner, or speech may also provide evidence for an insanity determination.[12] Evidence of the state of mind at the time of the offense may be presented by expert testimony or lay opinion testimony.[13] Expert testimony is commonly given by a mental health professional based upon hypotheticals or direct observations, including interviews and assessments.[14] Opinion testimony may be offered by a layperson who had observed the defendant and may contain descriptions such as unusual or bizarre speech, manner, or behavior.[15] Physical evidence from the crime itself also may provide evidence of insanity.[16] Thus, aberrations from the norm, both common sense notions and clinical evidence, may be introduced to support a plea.

Kittrie observed that "[i]ndividuals described as mentally disordered are often at variance with the conventions and mores of society. The very symptoms of what we commonly define as mental illness, being primarily behavioral rather than physiological, mark those afflicted by it as socially deviant."[17] Kittrie's insight that what we call mental illness must be inferred from behavioral deviations from the norm is critical in the context of the insanity defense. This insight suggests that the same behavioral information that helps mental health professionals diagnose mental illnesses may be used to provide evidence of insanity. The problem here is that clinicians do not always interpret behaviors in the same manner. Mental health professionals, like others, bring to their

Attempted Reforms: Evidence Toward Informed Policy, 23 LAW & HUM. BEHAV. 375, 376–77 (1999).

[10] *See* Boehnert, *supra* note 8, at 37; *see also* Janofsky et al., *supra* note 8, at 207–09 (discussing the efforts of several psychiatrists to determine whether a group of defendants that were asserting the insanity defense were "criminally responsible").

[11] *See* REISNER, *supra* note 1, at 561.

[12] *Id.* at 584; *see also* Boehnert, *supra* note 8, at 37 (noting that bizarre behavior at the time of arrest is an important factor in a finding of insanity).

[13] REISNER, *supra* note 1, at 584.

[14] *Id.*

[15] *Id.*

[16] *Id.*

[17] NICHOLAS N. KITTRIE, THE RIGHT TO BE DIFFERENT: DEVIANCE AND ENFORCED THERAPY 51 (1971).

work their personal experiences and biases and may draw different conclusions based upon unique attitudes and beliefs.[18] In the absence of meaningful, clear, and reliable diagnostics and clear, measureable standards of evidence, this vagueness allows court participants to interpret behavior in multiple ways, sometimes allowing decision making to be based on common sense notions of appropriateness or predictability, leading one observer to note: "If your psychiatric labels aren't clear and the legal standards that you use to feed them into decisions are foggy, fog times fog equals fog squared."[19]

The amount of interpretation required by mental health professionals and laypersons to make decisions allows great opportunity for information that is irrelevant to the adjudication process to influence decision making. The determination of insanity may be particularly susceptible to implicit attempts to control role incongruent behavior, particularly as it relates to gender roles.

The purpose of this study is to determine the extent to which extralegal factors, particularly gender and gender role inconsistency, are related to a finding of NGRI. Data from an eight-state study of cases involving insanity pleas are used to evaluate these effects.

II. GENDER AND THE INSANITY DEFENSE

While little information exists on the profiles of NGRI defendants in general, there is even less available on the characteristics of female NGRI defendants.[20] However, when data do exist, the characteristics of women who are found NGRI tend to be similar across jurisdictions. One of the recurring findings is that women consistently are overrepresented among those found NGRI in comparison to the general prison population.[21] A set of studies with

[18] *See* Jenny Yourstone et al., *Evidence of Gender Bias in Legal Insanity Evaluations: A Case Vignette Study of Clinicians, Judges and Students*, 62 NORDIC J. PSYCHIATRY 273, 273–74 (2008); *see also* Jennifer L. Skeem et al., *Venirepersons's Attitudes Toward the Insanity Defense: Developing, Refining, and Validating a Scale*, 28 LAW & HUM. BEHAV. 623, 645 (2004) ("[J]urors are not blank slates, but complex individuals who come to jury duty with their own set of personal experiences, knowledge, and biases that affect their legal decision-making.").

[19] *Fog Times Fog*, TIME, Oct. 20, 1975, at 57, 57.

[20] *See* Ann Seig et al., *A Comparison of Female Versus Male Insanity Acquittees in Colorado*, 23 BULL. AM. ACAD. PSYCHIATRY & L. 523, 523–24 (1995).

[21] *See, e.g.*, Donald M. Linhorst et al., *An Examination of Gender and Racial Differences Among Missouri Insanity Acquittees*, 26 J. AM. ACAD. PSYCHIATRY & L. 411, 415 (1998); Richard A. Pasewark et al., *Characteristics and Disposition of Persons Found Not Guilty by Reason of Insanity in New York State, 1971–1976*, 136 AM. J. PSYCHIATRY 655, 656 (1979).

samples from Canada,[22] Colorado,[23] Connecticut,[24] Missouri,[25] and Oregon[26] that focus specifically on females who were found NGRI reveals a consistent profile. Among the key findings from these studies are that, in comparison to male counterparts, women: (1) are older,[27] (2) are more likely to be married,[28] (3) are less likely to have current or past substance abuse,[29] (4) have fewer arrests for violence[30] and less extensive criminal histories,[31] and (5) are more likely to be charged with murder.[32] Their diagnoses also differ from those of men,[33] particularly in the rates of affective disorders and borderline personality disorder.[34] They are more likely to be found NGRI than men[35] and spend less time in secure hospitals than men.[36]

Several researchers speculate that some subgroups of individuals, including women, are found NGRI based not on mental illness but on status and inadequate role performance.[37] For example, Pasewark and colleagues note that approximately half of their female NGRI sample (fourteen of twenty-nine) had killed their children and state that "[a]lthough some in this group had obvious psychotic symptoms, from psychiatric reports there would seem to be many more whose basic condition was one of inadequacy as

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[22] *See generally* Sheilagh Hodgins et al., *Women Declared Insane: A Follow-up Study*, 8 INT'L J.L. & PSYCHIATRY 203 (1986).

[23] *See generally* Seig et al., *supra* note 20.

[24] *See generally* Howard V. Zonana et al., *Part II: Sex Differences in Persons Found Not Guilty by Reason of Insanity: Analysis of Data from the Connecticut NGRI Registry*, 18 BULL. AM. ACAD. PSYCHIATRY & L. 129 (1990).

[25] *See generally* P. Ann Dirks-Linhorst, *Missouri's Not Guilty by Reason of Insanity Acquittees, 1980–2009: Is Gender Important When Comparing Female and Male Insanity Acquittees and Convicted Offenders?*, 24 WOMEN & CRIM. JUST. 252 (2014); Linhorst et al., *supra* note 21.

[26] *See generally* Jeffrey L. Rogers et al., *Women in Oregon's Insanity Defense System*, 11 J. PSYCHIATRY & L. 515 (1983).

[27] Linhorst et al., *supra* note 21, at 412; Seig et al., *supra* note 20, at 526; Zonana et al., *supra* note 24, at 133.

[28] Linhorst et al., *supra* note 21, at 412; Zonana et al., *supra* note 24, at 133.

[29] Linhorst et al., *supra* note 21, at 412; Seig et al., *supra* note 20, at 526; Zonana et al., *supra* note 24, at 133.

[30] Seig et al., *supra* note 20, at 526.

[31] Hodgins et al., *supra* note 22, at 205; Linhorst et al., *supra* note 21, at 412.

[32] Hodgins et al., *supra* note 22, at 205; Rogers et al., *supra* note 26, at 522.

[33] Hodgins et al., *supra* note 22, at 205; Linhorst et al., *supra* note 21, at 422; Seig et al., *supra* note 20, at 529.

[34] Hodgins et al., *supra* note 22, at 205; Linhorst et al., *supra* note 21, at 423.

[35] Callahan et al., *supra* note 5, at 335.

[36] Rogers et al., *supra* note 26, at 517; Zonana et al., *supra* note 24, at 138.

[37] *See* Christian Breheney et al., *Gender Matters in the Insanity Defense*, 31 LAW & PSYCHOL. REV. 93, 112–13 (2007); Pasewark et al., *supra* note 21, at 659.

mothers and homemakers."[38] They conclude:

> Essentially, we should suspect that because of the mores of society concerning motherhood, there is a tendency for citizens, including psychiatrists and judges, to label hostility against children as a reflection of aberrant thought processes or behavior. Rather than accepting the fact that the child is that person with whom the mother probably has the most interpersonal contact and is therefore the most likely target for the mother's hostility, we instead view infanticide as abnormal and thus preserve our illusions of motherhood and the mother-child relationship.[39]

This observation is borne out in experimental studies involving insanity-related decision making. Gender (and racial) stereotypes have been shown to play a role in outcome judgments in mock cases of filicide[40] and clinicians' assessments of insanity,[41] leading Dunn and colleagues to conclude that there are more severe consequences for "unexpected" behavior.[42]

III. METHODS

A. The Insanity Defense Reform Project

The Insanity Defense Reform Project was an eight-state study of insanity defense reforms before and after the Hinckley decision; those states were California, Georgia, Montana, New Jersey, New York, Ohio, Washington, and Wisconsin.[43] A sample of counties from each state was selected.[44] Since no centralized information was available on NGRI pleas, counties were selected based on the number of NGRI verdicts.[45] Counties with the largest number of NGRI verdicts were chosen, which accounted for approximately sixty-six percent of all NGRI verdicts in each state.[46] Nearly one million indictments from the sample states were reviewed to identify the 11,616 insanity pleas in the study, making it a truly

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[38] Pasewark et al., *supra* note 21, at 659.

[39] *Id.*

[40] Kerri F. Dunn et al., *Effects of Sex and Race of Perpetrator and Method of Killing on Outcome Judgments in a Mock Filicide Case*, 36 J. APPLIED SOC. PSYCHOL. 2395, 2411 (2006).

[41] Yourstone et al., *supra* note 18, at 277.

[42] Dunn et al., *supra* note 40, at 2398.

[43] STEADMAN ET AL., *supra* note 2, at 168, 174.

[44] Callahan et al., *supra* note 5, at 332.

[45] *Id.*

[46] *Id.*

unique source of investigation of U.S.-wide practices. While it is fairly old, it is the only dataset of its kind.[47] Arguably the extralegal processes that operated to affirm gender role congruence in the 1980s continue to operate today.

After all relevant cases were identified, a standard data collection instrument was used to extract information from each record.[48] The dataset includes case-specific demographics, arrest and charge information, mental health history, criminal history, and disposition.[49] A three-year follow-up was completed on all defendants found NGRI in the mental health system and those found guilty in the corrections system.[50] Follow-up data include movements and length of stay information of the sample.[51]

B. The Sample

The full NGRI dataset includes information on 11,616 pleas. Within the data are two governmental levels and two sources of information. Data were collected at the county and state level.[52] At the county level, information was available on both pleas and NGRI findings.[53] At the state level, only information on NGRI findings was available.[54] Thus, while state-level information can be used to illustrate the characteristics of NGRI verdicts, it cannot be used to predict the verdict or other outcome, as there is no information on those who were not found NGRI.[55] Excluding the state cases reduces the sample to 9237. In this reduced sample, 10.0% were female. Defendants faced a variety of charges, including: crimes against persons (murder 13.0%, assault 28.2%, robbery 11.3%, other violent 7.2%); contact and noncontact sex crimes (5.2%); property crimes (26.2%); and other crimes (8.8%). Of all defendants, 61.1% were found guilty, 24.5% were found NGRI, 1.2% were found not guilty, and the remaining 13.2% fell into other categories, including

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[47] Ellen Hochstedler Steury & Francis J. Rotter, *Raising the Insanity Defense: A Comparison of Rates in Jurisdictions with Differing Insanity Commitment Release Laws*, 5 CRIM. JUST. POL'Y REV. 307, 308 n.2, 311 n.5 (1991) (noting that the existing literature on insanity plea rates has exclusively relied on data from the Insanity Defense Reform Project).

[48] *See* Callahan et al., *supra* note 5, at 332.

[49] *Id.* at 333.

[50] Lisa A. Callahan & Henry J. Steadman, *Insanity Defense Reform in Ohio: Does the Court of Jurisdiction Matter?*, 19 CAP. U. L. REV. 809, 811 (1990).

[51] *Id.* at 821.

[52] Callahan et al., *supra* note 5, at 332.

[53] *Id.*

[54] *Id.* at 331.

[55] *Id.* at 332.

guilty but mentally ill; died during trial; or cases were pending, dismissed, withdrawn, merged, or deferred.

Because the questions posed focus on guilt versus exculpation via NGRI and on gender roles (including diagnosis and interaction terms of sex with crime type and with victim relationship), the final sample includes only: (1) county-level cases, (2) that resulted in a guilty or NGRI verdict,[56] and (3) had complete information on diagnosis, crime type, and victim relationship; this resulted in 4842 cases. Similar to the county sample, 9.8% were female.[57] The distribution of charges was 60.5% crimes against persons (including murder 13.5%, assault 28.2%, robbery 10.5%, other violent 8.3%), 4.5% contact and noncontact sex crimes, 27.7% property crimes, and 7.3% other crimes.[58] Among this subset of defendants, 64.6% were found guilty, while 35.4% were found NGRI.[59]

C. Theoretical and Analytical Operationalization of the Measures

Figure 1 presents a model of the theoretical argument. This model summarizes several gender stereotyping mechanisms that are thought to produce gender differences in NGRI verdict rates. First, the status of female is predicted to be associated with symptoms (and stereotypes) of mental illness.[60] The concept that female criminals are, in fact, mentally ill has a long tradition dating back to the positivists.[61] Thus, being female *alone* is social evidence of mental dysfunction regardless of formal diagnostic evidence. Second, gender role incongruence for both women and men is also nonclinical social information that is evidence of a mental health problem.[62] This kind of evidence is also predicted to be included consciously and unconsciously in the clinical diagnostic process (i.e., medical evidence). Finally, medical evidence is predicted to directly affect the verdict.[63] Social evidence also is predicted to have both a direct as well as an indirect effect on the verdict.[64]

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[56] Cases resulting in a guilty or NGRI verdict represented 85.6% of all county-level cases.

[57] *See infra* Table 1.

[58] *See infra* Table 2.

[59] *See infra* Table 2.

[60] *See, e.g.*, RUSSELL P. DOBASH ET AL., THE IMPRISONMENT OF WOMEN 109 (1986); CAESAR LOMBROSO & WILLIAM FERRERO, THE FEMALE OFFENDER 264 (1895); Yourstone et al., *supra* note 18, at 273; *see infra* Figure 1.

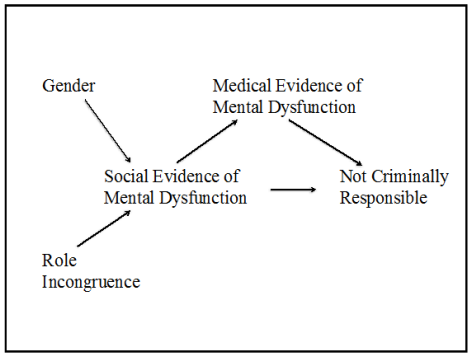
[61] DOBASH ET AL., *supra* note 60, at 112, 123; *see infra* Figure 1.

[62] Dunn et al., *supra* note 40, at 2397–98, 2410; *see infra* Figure 1.

[63] Janofsky et al., *supra* note 8, at 209; *see infra* Figure 1.

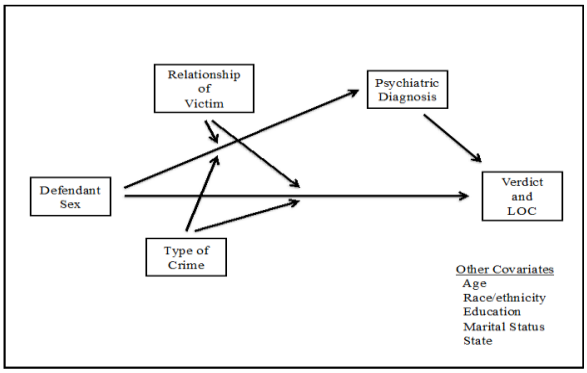
[64] *See* Dunn et al., *supra* note 40, at 2397–98 ("This model suggests that unexpected, out-of-role, and norm-inconsistent behaviors lead to more extreme judgments."); *infra* Figure 1.

Figure 1: Theoretical Model of the Effects of Gender Role Incongruence



This model is then translated into the analytic model presented in Figure 2. There are five latent constructs in the theoretical model: gender, role incongruence, social evidence of mental dysfunction, medical evidence of mental dysfunction, and the finding of not criminally responsible. Four of the five latent constructs have observable measures, and one—social evidence of mental dysfunction—remains unobserved.[65]

Figure 2: Analytic Model of the Effects of Gender Role Incongruence[66]



Several hypotheses may be generated from this diagram including the following:

[65] *See infra* Figure 2.
[66] In Figure 2, "LOC" is short for "length of confinement."

- H_1: Being female is related to psychiatric diagnosis
  - H_{1a}: Being gender role incongruent is related to psychiatric diagnosis
- H_2: Being female is related to an NGRI verdict
  - H_{2a}: Being gender role incongruent is related to an NGRI verdict
- H_3: Being diagnosed with a psychotic disorder is related to an NGRI verdict

Gender role incongruence is measured by the interaction of gender and type of crime, and gender and relationship of victim. The incongruence by crime type is measured by a typology of sex by type of crime. Crimes may be arrayed along a continuum of violence severity, from murder at the extreme end of violence, followed by assault, robbery, other potentially violent crimes such as arson and kidnapping, and property crimes/other minor crimes. Violent crimes—including murder, attempted murder, assault, and robbery—are roughly equated with masculine behavior, while nonviolent or "nonconfrontative" crimes are equated with feminine behavior. Crime types were reduced to the five categories noted above (i.e., murder/attempted murder, aggravated and simple assault, robbery, other violent, and property/minor crimes). To the degree that gender roles are inconsistent with the type of crime, the defendant's behavior is an enigma to the court and the outcome of the process may be predicted if, in fact, gender stereotypes play an extralegal role in such decisions.

Similarly, gender role incongruence may be measured by a typology of sex by victim relationship. Five categories of victim relationship are used: spouse, other family member, acquaintance, stranger, and no victim. The gender/relationship of victim interaction may be understood as follows. Women's stereotypical roles include the nurturance of family.[67] A crime committed by a woman against a family member would therefore be role incongruent with the possible caveat of women who assault or kill abusive spouses or intimates. Male stereotypes, on the other hand, include violent and aggressive behavior across situations and victims.[68] Stranger and acquaintance victimization is predicted to be the most male gender role consistent relative to male

[67] Dunn et al., *supra* note 40, at 2397; Luis M. Rivera & Bonita M. Veysey, *Criminal Justice System Involvement and Gender Stereotypes: Consequences and Implications for Women's Implicit and Explicit Criminal Identities*, 78 ALB. L. REV. 1109, 1113 (2014/2015).

[68] Yourstone et al., *supra* note 18, at 273.

victimization of family members. However, since men are often perceived as the disciplinarian in a family,[69] those who assault family members are more likely to be perceived as role congruent in comparison to women, insofar as the crime can be explained within male stereotypes. Thus, no substantial differences in NGRI verdict rates by victim relationship are expected for male defendants.

The decision of whether the gender role incongruence is sufficient to denote mental disorder cannot be directly assessed, and therefore, social evidence of mental dysfunction is inferred. The same is true of the assessment of gender as social evidence. Medical evidence is measured by psychiatric diagnosis. Diagnoses of mental illness may be categorized into those characterized by psychosis and those not typically associated with psychosis. Schizophrenia and other psychoses comprise the principal category of interest, as persons with these diagnoses often present with delusional beliefs and hallucinations.[70] Diagnoses were recorded for several different reasons and at several times during the course of adjudication. If any of the diagnoses were recorded as schizophrenia or other psychotic disorder, the variable was coded as psychosis. It must be noted, however, that this is a rough proxy measure and cannot assess the degree of symptomatology presented during the trial nor the state of mind evidenced at the time of the crime.

The dependent variable of verdict is a measure of blameworthiness. As discussed above, the finding of criminal responsibility is strongly related to the perception of the defendant's blameworthiness.[71] The NGRI verdict is the observed indicator of the court's perception of responsibility. Verdict is measured by a dichotomous outcome of guilty or NGRI.

IV. RESULTS

A. Sample Demographics

Sample demographics are presented in Table 1. Ten percent of the sample was female. The vast majority of defendants were either white (52.0%) or black (42.3%); they were approximately thirty

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[69] *See, e.g.*, Kathleen Denny et al., *Admonished, Then Excused: Portrayals of Fathers' Low Levels of Involvement with Children Across the 20th and 21st Centuries*, 12 FATHERING 221, 227 (2014).

[70] RICHARD J. BONNIE ET AL., A CASE STUDY IN THE INSANITY DEFENSE: THE TRIAL OF JOHN W. HINCKLEY, JR. 20 n.r (3d ed. 2008).

[71] *See supra* note 1 and accompanying text; *see also* Dirks-Linhorst, *supra* note 25, at 255 (noting that blameworthiness is an element that may influence judicial decisions).

years old on average; and most had never been married (57.2%) and were poorly educated with 51.6% not having received a high school diploma or equivalent.

Table 1: Sample Demographics (n=4842)

Variable	Percent	Mean (standard deviation)
% Female	9.8	
Race/ethnicity		
% white	52.0	
% black	42.3	
% Hispanic	3.6	
% Asian	0.7	
% other	1.4	
Marital Status		
% never married	57.2	
% once married	23.7	
% married	19.1	
Highest Education Level		
% less than H.S. grad.	51.6	
% H.S. grad.	28.8	
% some college or more	19.6	
Age		30.3 (10.1)

B. Gender Differences

Consistent with other studies of gender differences within insanity defendant samples, women differ substantially from their male counterparts. As can be seen in Table 2, women are more likely to be: (1) nonwhite; (2) older; (3) married, divorced, separated, or widowed; and (4) more educated. Further, while women and men are similar in the percent diagnosed with schizophrenia or other psychotic disorder, women are more likely than men to be diagnosed with an affective disorder, while men are more likely to be diagnosed with a substance abuse or personality disorder. In terms of most severe criminal charges, women have higher rates of murder and other violent, while men have higher rates of property or other minor crimes. Women have higher percentages of male victims and are more likely to have committed crimes against spouses and other family members, while men have higher percentages of female victims and are more likely to have committed crimes against friends, acquaintances, and strangers.

Most important, women are more likely than men to be found NGRI.

Table 2: Gender Differences on Key Variables (n=4842)

Variable	Female (n=473)	Male (n=4369)	Total (n=4842)	χ^2(df)/ F(ν_1,ν_2)	Sig
% White	47.5	52.5	52.0	4.23(1)	.042
Marital Status				83.3(2)	.000
% never married	36.7	59.5	57.2		
% once married	34.6	22.5	23.7		
% married	28.7	18.0	19.1		
Education				19.9(2)	.000
% less than H.S. grad.	41.4	52.6	51.6		
% H.S. grad.	32.7	28.4	28.8		
% some college or more	25.9	18.9	19.6		
Age	32.8 (11.1)	30.0 (9.97)	30.3 (10.1)	33.0 (1,4638)	.000
Diagnosis				18.6(3)	.000
% schizophrenia	42.7	41.2	41.3		
% other mental ill.	30.7	24.1	24.8		
% sub. ab./pers. d/o	16.7	24.5	23.8		
% not mentally ill	9.9	10.2	10.2		
Arrest Charge				78.1(4)	.000
% murder	20.1	12.7	13.5		
% assault	26.0	28.5	28.2		
% robbery	6.1	11.0	10.5		
% other violent	16.5	7.5	8.3		
% property/minor crime	31.3	40.4	39.5		
Victim Relationship				157.2(4)	.000
% spouse	7.2	2.7	3.1		
% other family	23.9	8.7	10.1		
% friend/acquaintance	15.2	19.3	18.9		
% stranger	15.2	28.5	27.2		
% no victim	38.5	40.8	40.6		
Victim Sex				23.8(2)	.000
% male	60.2	45.1	46.6		
% female	37.3	50.4	49.2		
% multiple victims	2.5	4.5	4.3		
% NGRI	50.1	33.8	35.4	49.4(1)	.000

C. Testing Gender Role Incongruence

One set of hypotheses relates to the prediction of medical evidence of mental dysfunction—in this case, the diagnosis of a psychotic disorder (i.e., schizophrenia or other psychotic disorder). First, while there are gender differences in diagnostic categories, sex is not a significant predictor of psychotic disorder per se. Women and men have roughly the same percent representation (42.7% vs. 41.2%, respectively; χ^2=0.41(1), p=.521).[72] A binary logistic regression was used to estimate the effects of a baseline model that included sex and other demographic variables (n.b., age, race, education level, and marital status are included in the estimates, but are not reported in the table), charge type, and relationship to victim.[73] Categorical variable category estimates are reported as deviations from the average and the omitted category is displayed in italics. For these variables, statistical significance is noted for the variable as a whole. Three models were run, including the baseline main effects model (Model 1), one with the sex by charge interaction (Model 2), and one with the sex by victim relationship interaction (Model 3). As displayed in Table 3, charge and relationship were significant in Model 1, but not sex. Specifically, persons facing more violent charges had greater odds of being diagnosed with a psychotic disorder than those with less violent (i.e., property or other minor crimes) charges. Persons with spouse or friend/acquaintance victims were significantly less likely to be diagnosed with a psychotic disorder in comparison to those with no victim. Neither of the hypothesized interaction effects of sex by charge (Model 2) nor sex by victim relationship (Model 3) were significant.

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[72] *See supra* Table 2.

[73] Binomial logistic regression is used to assess the relationship between dependent and independent variables by measuring how accurately the independent variables predict the outcome of the dichotomous independent variable. *See* Robert J. Norris & Allison D. Redlich, *Seeking Justice, Compromising Truth? Criminal Admissions and the Prisoner's Dilemma*, 77 ALB. L. REV. 1005, 1025 (2013/2014).

Table 3: Main and Interaction Effects of Predicted Role Incongruence Measures on Diagnosis of Schizophrenia or Other Psychotic Disorder (n=4842)

	Model 1		Model 2		Model 3	
Variables[74]	B	Exp (B)	B	Exp (B)	B	Exp (B)
Female	-.108	.897	-.338	.713	-.735	.480
Charge	χ^2=39.7(4) p<.001		χ^2=33.8(4) p<.001		χ^2=40.7(4) p<.001	
Murder	.075	1.08	.104	1.11	.075	1.08
Assault	.268	1.31	.212	1.24	.267	1.31
Robbery	.226	1.25	.260	1.30	.236	1.27
Other violent	-.179	0.84	-.191	.826	-.183	.833
(Property)	*(-.390)*		*(-.385)*		*(-.395)*	
Relationship	χ^2=61.7(4) p<.001		χ^2=61.4(4) p<.001		χ^2=58.9(4)p<.001	
Spouse	-.569	.566	-.586	.557	-.803	.448
Other family	.470	1.60	.463	1.59	.510	1.67
Friend/acquaintance	-.354	.702	-.352	.703	-.292	.747
Stranger	.097	1.10	.111	1.12	.150	1.16
(No victim)	*(.356)*		*(.364)*		*(.435)*	
Sex X Charge			χ^2=8.2(4) n.s.			
Murder			-.003	.997		
Assault			.740	2.10		
Robbery			-.004	.996		
Other violent			.171	1.19		
(Property)			*(-.904)*			
Sex X Relationship					χ^2=7.7(4)n.s.	
Spouse					-.674	.510
Other family					1.09	2.98
Friend/acquaintance					.006	1.01
Stranger					-.141	.868
(No victim)					*(-.281)*	
Constant	-1.07		-1.07		-.443	
Nagelkerke R^2	.103		.106		.106	

The second set of hypotheses relates to the prediction of an NGRI verdict. Table 4 presents the main and interaction effects models. As in the previous analysis, binary logistic regression was used to estimate the effects of a baseline model that included sex and other

[74] The multivariate models include other demographic covariates, including age, race, education level, and marital status, but are not reported in the table.

demographic variables (n.b., age, race, education level, and marital status are included in the estimates, but are not reported in the table), psychotic diagnosis, charge type, and relationship to victim. In the baseline model (Model 1), all displayed variables were significant predictors of an NGRI verdict. In terms of the primary variables of interest, being female was associated with a two-fold increase in the odds of being found NGRI in comparison to men. Model 2 tested for the interaction of sex and charge, and no significant relationship was found. Model 3 demonstrated a significant interaction between sex and victim relationship.

Table 4: Main and Interaction Effects of Predicted Role Incongruence Measures on Verdict (n=4842)

	Model 1		Model 2		Model 3	
Variables[75]	B	Exp (B)	B	Exp (B)	B	Exp (B)
Female	.736 ***	2.09	.499	1.65	1.41	4.09
Schiz./psych. d/o	2.00 ***	7.41	2.01 ***	7.43	2.02 ***	7.54
Charge	χ^2=82.5(4) p<.001		χ^2=65.9(4) p<.001		χ^2=83.5(4) p<.001	
Murder	.093	1.10	.132	1.14	.078	1.08
Assault	.305	1.36	.323	1.38	.307	1.36
Robbery	.660	1.94	.555	1.74	.676	1.97
Other violent	-.767	0.464	-.752	0.471	-.765	0.465
(Property)	*(-.291)*		*(-.218)*		*(.296)*	
Relationship	χ^2=44.7(4) p<.001		χ^2=45.5(4) p<.001		χ^2=28.6(4) p<.001	
Spouse	.196	1.22	.196	1.22	.419	1.52
Other family	.428	1.53	.433	1.54	.226	1.25
Friend/acquaintance	-.496	0.609	-.505	0.604	-.458	0.633
Stranger	-.160	0.852	-.162	0.850	-.198	0.820
(No victim)	*(.032)*		*(.038)*		*(.011)*	
Sex X Charge			χ^2=4.8(4) n.s.			
Murder			-.252	0.777		
Assault			-.142	0.868		
Robbery			-.009	0.991		
Other violent			.656	1.927		
(Property)			*(-.253)*			
Sex X Relationship					χ^2=18.7(4) p=.001	
Spouse					-1.063	.345
Other family					.839	2.314

[75] The multivariate models include other demographic covariates, including age, race, education level, and marital status, but are not reported in the table.

Friend/acquaint Stranger *(No victim)*					-.687 .211 *(.700)*	0.503 1.24
Constant	-2.59		-2.36		-3.32	
Nagelkerke R^2	.337		.339		.342	

Notes: * $p<.05$; ** $p<.01$; *** $p<.001$

To better understand the total effects of gender and victim relationship in the presence of the interaction net of all other variables in the equation, the unstandardized coefficients (logits) were combined to produce the summary coefficients and the odds for each cell in a two-by-five table.[76] In general, men's odds of being found NGRI remained close to 1.0 regardless of the nature of the victim relationship. The odds varied from .63 times reduced odds to 1.5 times increased odds. Women maintained their NGRI verdict "advantage" with all odds greater than the average. The female group closest to the average was women whose victims were friends or acquaintances with a 1.3 times greater odds of being found NGRI—lesser odds only to men whose victims are spouses. The groups with the greatest odds of being found NGRI were women whose victims were their own children or other family members (11.9 times greater than average), cases with no victims (8.3 times), strangers (4.2 times), and spouses (2.2 times).

Comparing across gender categories, women with children or other family victims have approximately 9.5 times the odds of being found NGRI in comparison to men with similar victims. Women also demonstrate large odds of being found NGRI in comparison to men for victim categories of no victim (OR=8.3) and stranger victim (OR=5.1). Women have twice the odds for crimes involving victims who are friends or acquaintances but only a small (OR=1.4) advantage when the victims are spouses.

[76] *See infra* Table 5.

Table 5: Summary Logit Coefficients and Odds of NGRI Verdict for Sex, Victim Relationship, and Interaction Terms

Victim Relationship	Male		Female		Odds Ratio
	Logit	Odds	Logit	Odds	F/M
Spouse	0.42	1.52	0.77	2.15	1.42
Other family	0.23	1.25	2.48	11.88	9.47
Friend/acquaintance	-0.46	0.63	0.27	1.30	2.06
Stranger	-0.20	0.82	1.42	4.15	5.06
No victim	0.01	1.01	2.12	8.34	8.25

V. DISCUSSION

The hypotheses H_1 and H_{1a} predicted that sex and gender role incongruence were significantly related to diagnosis. In a multivariate model predicting psychotic disorder while controlling for demographics, crime type, and victim relationship, no relationship was found between sex and diagnosis or between each of the two interaction terms measuring gender role incongruence and diagnosis. However, as noted in the bivariate analyses, the significant sex differences in diagnostic categories do not lie in the category of psychotic disorders but between "other mental illnesses," including affective disorders, substance use or abuse, and personality disorders. Collapsing these categories may in fact obscure this predicted relationship. In fact, in a multivariate logistic regression, sex is a significant predictor of a dummy-coded "other mental illness." However, even in these latter ad hoc tests, the interaction terms are not significant.

Hypotheses 2 and 3 predicted verdict. In regard to hypothesis 2 (being female is related to an NGRI verdict), gender is significantly related (two times the odds of men) to a verdict of NGRI controlling for other demographic characteristics, crime type, and victim relationship. Only one of the two interaction terms, sex by victim relationship, that operationalize gender role incongruence (H_{2a}: being gender role incongruent is related to an NGRI verdict) was significant. Sex by crime type did not add significantly to the model. Hypothesis 3 (being diagnosed with a psychotic disorder is related to an NGRI verdict) was significant controlling for sex, other demographic characteristics, crime type, and victim relationship.

These findings only partially support the notion that gender and gender role incongruence play a role in the determination of insanity. However, the fact that being female *alone*—controlling for

crime-relevant characteristics and psychopathology—continues to be a significant predictor of an NGRI verdict suggests that either some gender-related mechanism—such as the "chivalry" effect proposed by some feminist theorists[77]—or the unmeasured and more nuanced characteristics of the crime, is operating.

In two recent experimental studies, Yourstone and colleagues and Dunn and colleagues found that gender plays a role in decisions regarding insanity.[78] Yourstone and colleagues found that female perpetrators were more likely to be found to meet the standards of insanity by forensic clinicians and psychology students than men in identical homicide cases.[79] However, Dunn and colleagues' study findings suggest that it is the interaction between gender (and race) and the method of killing that is associated with insanity judgments in a mock filicide case.[80] The Yourstone et al. study suggests that, all things being equal, being female alone is predictive of being found legally insane,[81] while the Dunn et al. study suggests that it is the interaction of gender with behavior that is predictive of outcome.[82] Even so, since the Yourstone et al. study focuses on a homicide case, it is possible that gender incongruence is implied insofar as homicide, as an extreme violent crime, is inconsistent with female stereotypes, and therefore, is being used as a proxy for evidence of mental defect.[83]

Noteworthy is the lack of support for the predicted sex by type of crime interaction. NGRI verdicts are associated with both the type of crime and the sex of the defendant. However, there is no significant interaction. This means that women uniformly are more likely to be found NGRI than men, and the probability of being found NGRI within crime categories is similar for men and women. Perhaps role incongruence as defined by an interaction between gender and type of crime is redundant. It is possible, as Dr. Ira K. Packer notes, that type of crime is gendered.[84]

In the current study, sex, psychosis, the type of crime, and the

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[77] *See, e.g.*, Kathleen Daly, *Rethinking Judicial Paternalism: Gender, Work-Family Relations, and Sentencing*, 3 GENDER & SOC'Y 9, 9–10 (1989).

[78] Dunn et al., *supra* note 40, at 2410–11; Yourstone et al., *supra* note 18, at 277.

[79] Yourstone et al., *supra* note 18, at 277.

[80] Dunn et al., *supra* note 40, at 2410–11.

[81] Yourstone et al., *supra* note 18, at 277.

[82] Dunn et al., *supra* note 40, at 2410–12.

[83] Yourstone et al., *supra* note 18, at 277.

[84] *See* Ira K. Packer, *Homicide and the Insanity Defense: A Comparison of Sane and Insane Murders*, 5 BEHAV. SCI. & L. 25, 34 (1987) ("It may be that sex differences in disposition are attributable to differences in the nature of the homicide.").

victim relationship are all significant predictors of an NGRI verdict. The interaction between sex and victim relationship is also significant and may shed some light on the complicated ways in which various legal factors intersect with extralegal factors in insanity decisions. Consistent with the Dunn and Yourstone studies, there is substantial evidence that the victim-offender relationship is a key factor in the NGRI verdict. Females have much greater odds of an NGRI verdict if their victims are family members (not spouses). It is highly role incongruent for women to victimize their own family members, especially given the fact that the crimes associated with family member victims tend to be assault or murder. Given the male stereotype of aggression, no substantial differences in NGRI verdict rates across victim relationship were anticipated. Yet, in comparison to other men, men whose victims are family members also have greater odds of being found NGRI, but not nearly as great an advantage as women.

In addition, women whose victims are spouses and acquaintances are among the *least* likely to be found NGRI. Adjudication in these cases seems to reflect a double-edged sword. Many categories of women/victim relationship have distinct advantages over their male counterparts. However, when the crimes appear opportunistic or predatory, the advantage is substantially reduced. According to the logic of the hypotheses, predatory crimes committed by women are extremely role incongruent. However, for this subset of categories, the legal system is punitive. Ironically, women whose victims are strangers have much greater odds of being found NGRI than women with spouse or acquaintance victims. In the presence of role incongruence, but given that the crimes are targeted against spouses and other potential intimates, Baskin and colleagues' observation may be correct that women who act outside of gender norms may be perceived as the most threatening to society of all types of deviants.[85] Society at large may believe that women's crimes against children and other family members are inexplicable and unfortunate, but the truly heinous crimes committed by women are the predatory ones against male intimates.

VI. CONCLUSIONS

The mental health and criminal justice systems are two of the

[85] *See* Deborah R. Baskin et al., *Role Incongruence and Gender Variation in the Provision of Prison Mental Health Services*, 30 J. HEALTH & SOC. BEHAV. 305, 305, 310–11 (1989).

major control mechanisms in American society that often function together through related and interdependent structures to identify and control deviant behavior. Both systems employ coercive control. In addition, regardless of the specific form of the deviance, these control institutions also use informal social control to reinforce role behaviors appropriate to the individual's age, sex, race/ethnicity, and other social statuses.[86] This investigation of the effects of gender and gender role incongruence on the determination of criminal responsibility demonstrated that women are more likely to be found NGRI than men controlling for other relevant variables, but that the odds of an NGRI verdict are moderated by the defendant's sex and relationship to the victim.

Consistent with the hypotheses about the effects of gender role incongruence, women whose victims are their own children or other family members (not spouses) have the greatest odds of being found NGRI of any group. However, women whose victims are their spouses have similar odds of an NGRI verdict as those of men with spouse victims. Thus, the theory was only partially supported, suggesting that how and the degree to which courtroom personnel rely on common stereotypes and gender expectations in decision making is complicated and may reflect a weighing of factors related to blameworthiness and dangerousness—both physical and symbolic.

[86] *See, e.g.*, *id.* at 313 (noting that vocational programs available to female prisoners emphasize domestic and secondary labor market employment, further reinforcing gender roles). Additionally, Baskin et al. note that "the very penal arrangements that are designed to rehabilitate female offenders can (and often do) bolster the social roles and identities that were problematic in the first place." *Id.*