

EXPLORING THE IMPACT OF OFFENCE CHARACTERISTICS AND MENTAL  
DISORDER ON VERDICTS OF INSANITY

by

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## Abstract

The present study examines the impact of offence characteristics such as bizarreness and planfulness, and mental disorder on the success of the insanity defence. Given that it is not the offense per se but rather the individual's mental state at the time of the offense that should be relevant to a verdict of not guilty by reason of insanity (NGRI) or not criminally responsible by reason of mental disorder (NCRMD), the bizarreness of the criminal act *in itself* should not significantly differentiate between successful and unsuccessful insanity evaluatees. Conversely, presence of a mental disorder and the planfulness of the index offense are pertinent to the individual's mental state at that time and should contribute to the ultimate verdict. Two methodologies were utilized to examine these questions: (a) Mock Jury Study: 122 students responded to a vignette that varied the bizarreness and planfulness of the crime and the mental history of the offender, (b) Archival Study: File data were coded for 181 individuals remanded for insanity evaluations in the province of BC in 1990 and 1994, two years prior to and following the introduction of Bill C-30. The results of both studies indicate a strong effect for mental disorder, with insanity acquittees more likely to have been diagnosed with or displayed symptoms of a psychotic disorder. The present research additionally indicates that highly planned index offences detract from the likelihood of an insanity verdict. Finally, the low levels of confidence with which participants rendered insanity verdicts in combination with the almost exclusive use of the most restrictive disposition for acquittees imply both a fear of mentally disordered offenders and a desire to punish these persons for their criminal behaviour. The results of the present study are discussed in terms of recent changes to the insanity standard and elucidate current knowledge about how decisions about criminal responsibility are made.

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Exploring the impact of offence characteristics and mental  
disorder on verdicts of insanity

The insanity defence<sup>1</sup>, though historically present in most legal systems, has been subject to more debate and criticism than any other criminal law (Perlin, 1996; Weiner, 1985). The controversy is rooted in the fact that the insanity defence "touches on ultimate social values and beliefs ... it purports to draw a line between those who are morally responsible and those who are not, those who are blameworthy and those who are not, those who have free will and those who do not, those who should be punished and those who should not" (Stone, 1975, p. 218). One of the fundamental presumptions of our criminal justice system is that legal responsibility entails both *actus reus* and *mens rea*; that is, to be held criminally responsible a person must have freely chosen to commit a criminal act, knowing that this act was criminal. As the presence of a mental disorder is seen by some as rendering a person unable to form criminal intent, the insanity defence was instituted, with the effect of offering mentally disordered persons potential exemption from criminal responsibility. However, given poor diagnostic agreement for mental disorder, the lack of any clear relation between the presence of mental disorder and the ability to form intent/control one's actions (Morse, 1978), and moreover, a generally skeptical attitude toward mental disorders as a whole, the defence has met with strong criticism.

As a result of this controversy, jurors who render verdicts of insanity (i.e., declare individuals not criminally responsible) have long been subject to criticism (Finkel & Handel, 1989). Though jurors in all criminal trials have been reproached for ignoring or forgetting valuable evidence, failing to follow instructions, and for allowing themselves to

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<sup>1</sup> "Insanity defence", as used in the present paper, does not refer to any specific insanity standard, but rather, more broadly encompasses all mental disorder defences which exempt defendants from criminal responsibility.

be "swayed by legally irrelevant information" (Visher, 1987, p.1), these issues come to the forefront in insanity defence trials. The pervasive view of the insanity defence as a means through which con-artists "get away" with their criminal actions, inevitably places jurors and judges in a position of intense scrutiny and criticism<sup>2</sup>. The present research broadly addresses how jurors reach verdicts of insanity and, more specifically, attempts to investigate one of the major criticisms leveled toward jurors in insanity defence trials, namely, that jurors' decisions are influenced by legally irrelevant factors. To this end, two methodologies will be used to examine how jurors and judges respond to both theoretically irrelevant factors (i.e., the bizarreness of the offence), and relevant factors (i.e., the planfulness of the offence and the presence of mental disorder) in insanity defence trials.

#### History of the Insanity Defence in Canada

Although the insanity defence has undergone multiple changes since its inception, certain elements have remained constant: "(1) presence of mental disease, (2) presence of a defect of reason, and (3) lack of knowledge of nature or wrongfulness of the act" (Weiner, 1985, p. 6-7). Thus, to successfully raise the insanity defence, a defendant must suffer from a mental disease that rendered him/her either unable to appreciate the wrongfulness of the act or unable to refrain from committing the act. More succinctly, the responsibility for the criminal act is shifted from the individual to the mental disease.

Although evidence suggests that the key tenets of an insanity defence have been under consideration within the British legal system from as early as the 10th century (Finkel, 1989), the first known legal citation dealing with insanity is from the 16th

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<sup>2</sup> It is worthwhile to point out that public sentiment toward the insanity defence appears to be grounded in little more than myth (Perlin, 1996). Firstly, the insanity defence is rarely used. Further, rather than "getting away" with their criminal actions, those acquitted by reason of insanity often spend double the amount of time institutionalized as would defendants charged with the same crimes (Steadman et al., 1993).

century, referring broadly to exemption from punishment on the basis of "unsound mind" (Walker, 1985, p.27). Further, it was not until the M'Naghten case in 1843 that an insanity standard was legally formulated. M'Naghten, in an effort to assassinate the Prime Minister of England, mistakenly shot and killed the Prime Minister's secretary. At trial, the jury determined that M'Naghten was not guilty by reason of insanity as he suffered from delusions that rendered him incapable of resisting the act in question. The public outcry that followed this trial verdict led to an inquiry and the M'Naghten standard was thus formulated:

1. An individual is presumed sane unless it can be "clearly proved that, at the time of the committing of the act, the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong."

2. "Where a person labours under partial delusion only and is not in other respects insane, ... must be considered in the same situation as to responsibility as if the facts with respect to which the delusion exists were real" (R. v. M'Naghten, 1843).

When confederation was established in 1867, the insanity standard adopted by Canada was essentially equivalent to the M'Naghten Rules used in Britain. In fact, it was not until 1892, with the enactment of the Criminal Code, that even slight modifications were made, though the standard remained essentially cognitive. Section 16 of the Criminal Code, which sets out the key components of the insanity defence, stated:

1. No person shall be convicted of an offence in respect of an act or omission on his part while he was insane.

2. For the purposes of this section a person is insane when he is in a state of natural imbecility or has a disease of the mind to an extent that renders him incapable of

appreciating the nature and quality of an act or omission or of knowing that an act or omission is wrong.

3. A person who has specific delusions, but is in other respects sane, shall not be acquitted on the ground of insanity unless the delusions caused him to believe in the existence of a state of things that, if it existed, would have justified or excused his act or omission.

4. Everyone shall, until the contrary is proved, be presumed to be and to have been sane.

These modifications potentially extended the scope of the insanity defence by (a) including natural imbecility as grounds for acquittal and, (b) using the term "appreciation" instead of "knowledge" (as appreciation implied a greater depth of understanding on the part of the accused at the time of the offence, it rendered the defence more broadly applicable). A study of case law between 1893 and 1953 (the McRuer report) however, indicates that despite these changes, courts continued to apply the M'Naghten standard (Verdun-Jones, 1989). In fact it was not until 1979 that the Supreme Court (R. v. Barnier) clearly distinguished between *know* and *appreciate*, indicating that appreciation required not only a base knowledge, but an analysis of that knowledge or experience. Further, in R. v. Chaulk (1990) the term "wrong" was broadened from its original conceptualization as legally wrong to include morally wrong.

In 1992, Bill C-30 introduced significant changes to the sections of Canada's Criminal Code dealing with the mental disorder defence. The amendments addressed a number of constitutional challenges including R. v. Swain (1991) wherein it was declared that the automatic and indefinite detention of insanity acquittees was inconsistent with Charter rights (Verdun-Jones, 1994). Consequently the verdict of "not guilty by reason of insanity" (NGRI) was changed to "not criminally responsible by reason of mental



disorder" (NCRMD) and the potential scope and ensuing dispositions of the defence were broadened. Section 16 of the Criminal Code now reads:

1. No person is criminally responsible for an act committed or an omission made while suffering from a mental disorder that rendered the person incapable of appreciating the nature and quality of the act or omission or of knowing that it was wrong.

2. Every person is presumed not to suffer from a mental disorder so as to be exempt from criminal responsibility by virtue of subsection (1), until the contrary is proved on the balance of probabilities.

Following a finding of NCRMD, the accused is either discharged absolutely, discharged with conditions, or may be detained in a psychiatric hospital. This decision is in the hands of a provincial review board, the mandate of which is to impose the least restrictive disposition (Verdun-Jones, 1994). The provisions set out in Bill C-30 render the NCRMD defence a more appealing option than the NGRI defence given that the consequences are potentially less severe. Further, the amendments broaden the scope of the defence. Although research conducted in the United States has found that changes in insanity standards cause no demonstrable effects, either in the number of people raising the plea, numbers acquitted, or the characteristics of those acquitted (McGreevy, Steadman, & Callahan, 1991; Ogloff, Schweighofer, Turnbull, & Whittemore, 1992), it is reasonable to postulate that, given the relative stability of Canadian standards up until the introduction of Bill C-30 and the fact that the new standard changes the wording, breadth, and consequences of the verdict, some effects may be found. In particular, it seems likely that there will be a resultant increase in the number of individuals raising the insanity defence in Canada and the number of people acquitted under this defence. Indeed, recent research suggests that psychiatrists'

recommendations for NCRMD have increased since the introduction of Bill C-30 (Roesch et al., 1997).

### How do Juries and Judges Reach Verdicts of Insanity?

Despite extensive criticism directed toward jurors in insanity defence trials, classic studies such as that of Kalven and Zeisel (1971) consistently demonstrate that jurors do attend to and understand the evidence, and are not easily misled or swayed by their own biases. Further, research with mock juries demonstrates that jurors undertake a comprehensive and careful consideration of a large number of factors before rendering a verdict. Among the factors cited as important are expert witness testimony, presence and past history of mental disorder, the defendant's intent to harm and ability to control his/her actions, and the situation at the scene of the crime (Ogloff, 1991). It seems apparent then, that jurors' verdicts in the matter of insanity are far from the indiscriminate, simplistic and biased decisions postulated by critics. Nonetheless, there remains one area of contention - despite the seriousness with which jurors approach their task, research indicates that their decisions are *not* impacted by the specific insanity standards, i.e., the "definition" of insanity, they are given (Finkel, 1989; Finkel & Handel, 1988; Ogloff, 1991). Rather, jurors appear to rely on implicit notions of insanity; construing evidence in light of preexisting schemas or prototypes about what is insane and what is not (Finkel & Handel, 1989). Thus, it seems either that jurors do not attend to and/or understand the instructions they are given or that existing insanity standards assume distinctions that do not have a parallel in "real" life. Consequently, it is important to determine exactly how jurors are construing insanity and whether this interpretation is consistent with its legal definition. If not, there are two possibilities: (a) efforts could be made to communicate more clearly jury instructions and ensure that they are understood and adhered to, (b) legal definitions of insanity could be written such that

they correspond with how it is intuitively construed. Consistent with this latter suggestion, Morse (1978) suggests that there exists a widely-held, implicit understanding of what constitutes "insanity." Further, Morse contends that, because mental disorder is nothing more than crazy behaviour (as defined by social norms), laypersons (e.g., jurors) are in as good a position to determine insanity as are mental health professionals.

The present study addresses the practical construal/interpretation of legal definitions of insanity by examining the impact of theoretically relevant and irrelevant variables on verdicts of insanity. In the following sections I explore the rationale behind the choice of the variables bizarreness, planfulness, and mental disorder.

### Bizarreness

Szasz (1987) argues that the more foreign an act from one's own experience, the more likely it is that persons will attribute it to mental illness as opposed to free will or intent. His argument rests on the fact that society has difficulty accepting that sane individuals (i.e., individual like themselves) will commit seemingly "insane" acts. In a similar vein, Rosenberg (1984) defines insanity as a label we use to refer to individuals with whom we cannot relate. In a study conducted by Kleinke and Baldwin (1993), individuals who offered crazy explanations for their behaviour were evaluated as having less intent and being less responsible for their actions. Of these, those who committed bad deeds were judged as most mentally ill and attributed less responsibility. Given this, we would expect jurors to attribute less personal responsibility to individuals whose criminal acts are bizarre in nature. Indeed, the only two studies that examine this question demonstrated an effect for bizarreness, with individuals who committed bizarre crimes being less likely to receive a guilty verdict (Boardman, Stafford, & Ben-Porath, 1996; Roberts, Golding, & Fincham, 1987). However, such intuitions "set up a perverse

standard: the more terrible the crime, the crazier, therefore the less culpable the criminal" (National Review, 1992). In response to this, State v. Nuetzel (1982) stresses that:

The fact of the crime's bizarreness and emotional impact is not by itself a proper foundation from which experts should render opinions as to appellant's psychiatric condition. Sole reliance on bizarreness would result in the psychiatrists explaining appellant's mental state on the basis of the crime rather than vice versa (p. 930).

This issue is, unfortunately, not clear cut. To the extent that bizarreness is indicative of mental disorder at the time of the offence, it *should* play a role in the insanity verdict. Gilman (1983) points out that the inclusion of the term bizarre in almost all standard definitions of schizophrenia, in fact denotes it as a major indicator for mental disorder. So as not to ignore the overlap between bizarreness and mental disorder, the present research asserts only that bizarreness *in and of itself* should not increase the likelihood of an insanity verdict. Otherwise stated, bizarreness should have no effect on verdicts *over and above* the effect of mental disorder.<sup>3</sup>

### Planfulness

Central to the insanity defence is the notion that an individual can be found criminally responsible only if he/she freely chose to commit an act despite understanding it to be criminal in nature (i.e., the legal concepts of actus reus and mens rea). Given that an organized sequence of actions is indicative of the intentional and voluntary nature of the act (mens rea), the degree of planfulness of a criminal act is relevant to

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<sup>3</sup> Even this distinction may appear somewhat contrived. As Morse (1978) states, "mental disorder fundamentally refers to crazy behavior" (p.560). It would appear then, rather nonsensical to distinguish between mental disorder and crazy behaviour. However, at the risk of further complicating this issue, the present research attempts only to differentiate between crazy behaviour *at the time of* the offence (i.e., the bizarreness of the index offence) and crazy behaviour *prior to or otherwise unrelated to* the offence (i.e., presence of a mental disorder as indicated by the psychiatric testimony/report).

the insanity defence (Golding & Roesch, 1987). Indeed, planful behaviour typically leads to guilty verdicts, even when the defendant's assertion of insanity is not challenged. In their research, Roberts et al. (1987) found that planfulness acted as a "discounting principle" (p. 221) in that high levels of planfulness led to guilty verdicts in the face of clear evidence favouring insanity.

However, given the increasing breadth of the insanity defence, the role of planfulness in determining the verdict is less clear. Consider the defendant who, as a consequence of a delusional state, felt it was his/her moral duty to murder a particular group of persons and proceeded to do so in a highly systematic fashion. Given that the planning itself arose from the delusional state, it is not indicative of mens rea, and consequently should not detract from a verdict of insanity (Finkel, 1995). Thus it is possible that delusional content that is tied to the crime may increase the probability of an insanity verdict, irrespective of the degree of planning. Although this prediction is not borne out by research (Roberts & Golding, 1991), Study 1 of the present research avoids this potential complication by presenting a vignette in which delusional content is unrelated to the index offence. It is expected that defendants who commit highly planned index offences will be less likely to be acquitted by reason of insanity.

### Mental Disorder

The presence of mental disease, a constant element in all insanity defence standards is, for obvious reasons, highly relevant in the determination of criminal responsibility. However, the term "mental disease" encompasses a broad range of disorders that vary in the extent to which they render individuals incapable of meeting the legal criteria for responsibility. Although some states have ruled that individuals suffering from certain disorders are excluded from the insanity defence (e.g., the Oregon legislature excludes those individuals diagnosed only with a personality

disorder; Reichlin & Bloom, 1993), Canadian law has no such restrictions. Consequently it is in the hands of the judge/jury to determine, on an individual basis, whether the impact of a particular mental disease meets the criteria for legal insanity.

Not surprisingly, research has consistently demonstrated that the majority of insanity acquittees have been diagnosed with a psychotic disorder, although diagnoses of personality disorders, depression, anxiety disorders, and substance abuse are not uncommon (Ogloff et al., 1992; Roesch et al., 1997; Steadman, Keitner, Braff, & Arvanites, 1983). The present research explores the impact of various mental disorders on verdicts of insanity in an effort to elucidate the relationship between psychiatric and legal definitions of insanity.

#### The Present Research

The present research explores the impact of offense characteristics and mental disorder on the success of the insanity defence. Given the paucity of research in the area, the study represents a much needed endeavour in the effort to elucidate current knowledge on court decisions in insanity cases. Of particular importance, the two part analysis of the bizarreness and planfulness of the index offence, and the impact of mental disorder can potentially reveal discrepancies between jury decision making and current insanity standards.

#### Study 1. Mock Jury Paradigm

Study 1 is essentially a replication of Roberts et al. (1987), modified to address the limitations of and expand upon their research. Roberts et al. (1987) used a mock jury paradigm to examine the influence of mental disorder and offence characteristics, i.e., bizarreness and planfulness, on verdicts of insanity. Undergraduate students read short vignettes portraying a murder by a mentally disordered defendant, expert testimony pertaining to mental disorder, and the ALI's insanity test. Three independent

variables were manipulated: 1) mental disorder (antisocial personality disorder, paranoid schizophrenia with delusions untied to the crime, paranoid schizophrenia with delusions tied to the crime, schizotypal personality), 2) bizarreness (bizarre, not bizarre), and 3) planfulness (planful, not planful). Dependent variables included decisional ratings of NGRI vs. guilty and NGRI vs. GBMI vs. guilty. The results of this research are consistent with previous work and seem to suggest that there exist widely-held implicit theories of responsibility. More specifically, Roberts et al. (1987) found that psychotic defendants were judged insane more frequently than their nonpsychotic, personality-disordered counterparts, and that evidence of a planful index offence decreased the likelihood of an insanity verdict. The introduction of the GBMI verdict had an interesting effect, serving to markedly reduce both the number of schizophrenic individuals found NGRI and the number of personality disordered defendants found guilty. Further, although the bizarreness of the offence did not increase the number of NGRI verdicts, it did increase the probability that an otherwise guilty, personality disordered individual would be found GBMI. Roberts et al. (1987) concluded that the GBMI verdict "blurs classic legal distinctions" (p.223) and obscures the meaning of both insanity and guilt, thus leading to inappropriate verdicts.

In the present study the following modifications were made to Roberts et al. (1987):

1) The crime vignette describes a violent assault rather than a murder. This change was based on a number of factors, the most important of which is that the typical insanity acquittee has not committed a murder (Ogloff et al., 1992, Pasewark, 1981). In addition, it is expected that a less severe crime will yield a greater number of NCRMD verdicts as individuals may be less inclined to demand retribution. A more equal distribution across verdicts will allow sufficient power to examine the effects of all manipulations.

2) in addition to the NCRMD vs. guilty decision, participants were asked to make a second decisional rating that involved the determination of disposition or sentencing.

Though not a juror duty, this methodology has been used in previous research to allow a closer examination of the effects of the independent variables, e.g., while jurors may be unwilling to find a defendant NCRMD, it is probable that evidence of bizarre behaviour may act as a mitigating factor and lessen attributions of responsibility (Kleinke & Baldwin, 1993).

3) the present research includes a "no disorder" condition to allow for an examination of the effects of bizarreness in and of itself, i.e., whether jurors construe bizarreness as evidence of mental disorder in the absence of any other evidence.

4) obsessive-compulsive personality disorder is used instead of antisocial personality disorder to provide a clearer manipulation of mental disorder (i.e., psychotic vs. non-psychotic disorders) by eliminating the potential confound of criminal history.

5) Finally, the present research represents the only such study conducted in Canada using Canadian insanity standards. This is particularly important given the recent amendments to the Criminal Code, changing the verdict of "not guilty by reason of insanity" to "not criminally responsible by reason of mental disorder." It is of interest to determine how the NCRMD verdict is understood and utilized in the Canadian legal system.

### Study 2. Archival Data

Study 2 utilizes archival data to explore the extent to which ratings of the bizarreness and planfulness of the index offence and the mental disorder of the offender predict court verdicts of NGRI/NCRMD. This research draws upon Boardman et al. (1996), who rated bizarreness *at the time of* the offence and planning and preparation for the index offence, and mental disorder in a sample of 300 insanity evaluatees in the



state of Ohio. Boardman et al. found that, compared to insanity evaluatees, insanity acquittees were more likely to have exhibited bizarre behaviour at the time of the index offence, were more likely to have been diagnosed with schizophrenia, and were less likely to have shown indications of planning or a conventional criminal motivation. To my knowledge, the impact of the bizarreness of the index offence, per se, has not yet been examined. It is hypothesized that bizarre index offences will be viewed as indicative of mental disorder and consequently contribute to the likelihood of a verdict of insanity. Further, in line with previous research, it is expected that evidence of a planful index offence will decrease the probability of an insanity verdict.

## METHOD AND RESULTS

The present research uses two methodologies to examine the impact of the bizarreness and planfulness of the index offence, and mental disorder on the success of the insanity defence. Study 1, which is a modified replication of Roberts et al. (1987), utilizes a mock jury paradigm; Study 2 utilizes archival data at the Forensic Psychiatric Institute, Port Coquitlam, BC. The present research received ethical approval from both a university review panel and the Forensic Psychiatric Institute.

### Study 1

#### Participants

A total of 122 undergraduate students (56 females and 66 males)<sup>4</sup> enrolled in an undergraduate psychology course participated for course credit. The average age of participants was 20.9 years.

#### Stimuli

The three independent variables, i.e., bizarreness (bizarre; not bizarre), planfulness (planful; not planful), and mental disorder (obsessive-compulsive personality

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<sup>4</sup> The N's may change slightly in the results section due to occasional missing data.

disorder; schizophrenia; no disorder), were presented in several short descriptive passages. Thus, the present study is a 2 (bizarreness) x 2 (planfulness) x 3 (mental disorder) between-subjects design, yielding a total of 12 cases.

Stimuli consisted of:

- a) A short vignette describing the circumstances of an assault with a weapon. The vignette comprised a standard paragraph describing the victim's (a mailman) typical afternoon, a paragraph describing the defendant and his actions, and a brief summary of a hospital report pertaining to the victim's injuries. The bizarreness of the index offence was manipulated through varying the injuries sustained by the victim. In the nonbizarre condition the victim was knocked unconscious and sustained three slash wounds across his chest; in the bizarre condition the victim was also knocked unconscious but the slash wounds on his chest formed a perfect triangle. Planfulness was manipulated as per Roberts et al. (1987), i.e., in the planful condition the defendant purchased the knife the day before the assault and called in sick for his job at the restaurant (the scene of the crime) on the day of the crime; in the nonplanful condition the defendant used a readily available kitchen knife for the assault and left his workstation in a sudden and unexplained manner (see Appendix A for vignette).
- b) A summary of a psychiatric assessment report in which mental disorder was manipulated (schizophrenia, obsessive-compulsive personality disorder, no disorder) (see Appendix B). The paragraph used to describe schizophrenia was taken from Roberts et al. (1987) which had been designed to meet DSM-III criteria; that describing obsessive-compulsive personality disorder was constructed by the present researcher to meet DSM-IV criteria, and the no disorder paragraph was constructed to represent an average individual. As per Roberts et al., the present study did not utilize psychiatric jargon or labels in describing the mental state of the offender and made no reference to

the psychiatrist's opinion regarding the issue of insanity. These omissions served to eliminate variability arising from differing interpretations of psychiatric labels or different weight given to expert testimony.

c) The standard jury instructions for the "not criminally responsible by reason of mental disorder" defence were presented. The instructions include a description of Section 16 of the Criminal Code, calls jurors' attention to the specific questions they must address in their deliberation, and caution jurors to render a verdict without consideration of the disposition/sentence (see Appendix C for standard NCRMD jury instructions).

d) Participants were also presented with two questions regarding the defendant's criminal responsibility: (a) NCRMD vs. guilty, (b) if the participant indicated NCRMD she/he then determined an appropriate disposition, i.e., complete discharge, discharge with conditions, or detention in a psychiatric facility; if the defendant was found guilty the participant chose between three possible sentences, varying the length of detention (see Appendix D for responsibility decisions). The first decision was followed by a confidence rating in which participants were asked to rate their confidence in their decisions on a scale ranging from 50% (coin flip) to 100% (absolute certainty).

e) Three manipulation checks were also presented: (a) Does it seem that this crime was planfully committed?, (b) Relative to other criminal acts, does it seem that this crime was bizarre?, (c) Does it seem that this defendant was mentally ill or psychologically disordered?

f) Finally, an attitudinal measure adapted from Roberts & Golding (1991), was presented. This 19-item measure comprised three components: a) strict liability orientation; b) detention concerns; and c) insanity irrelevant to guilt, and tapped participants' attitudes toward the insanity defence, personal responsibility, mental illness, punishment and treatment, and judicial dispositions in cases involving mental disability.

Each item was rated on a 7-point scale that ranged from strongly disagree to strongly agree (see Appendix E for attitude measure).

### Procedure

A total of 23 juries ( $n = 110$ )<sup>5</sup> were run in the present study, with two juries in each of the 12 cells with the sole exception of the bizarre, nonplanful, personality disorder condition, in which there was only one jury. Each group consisted of three to seven jurors, with 87 % ( $n = 20$ ) having four or more members (see Table 1 for jury distribution across cells). Participants signed a consent form (Appendix F) and were then asked to envision themselves as members of a real jury and to take their time, referring back to case materials when necessary. After reading the vignettes, participants were asked to make two decisional ratings: (a) NCRMD vs. guilty, (b) disposition/sentence for the defendant. The first decisional rating was followed by a confidence rating ranging from 50% to 100%.

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<sup>5</sup> As participants occasionally failed to appear for assigned time slots, 12 participants were run individually or in pairs. Consequently, no jury data is available for these individuals.

Table 1

Distribution of Juries and Gender Across Cells

bizarreness	planfulness	mental disorder	Total			July 1			July 2		
			Female	Male	Total	Female	Male	Total	Female	Male	Total
NON BIZARRE	NON- PLANFUL	no disorder	4	5	9	2	3	5	2	2	4
		O-C disorder	7	5	12	3	3	6	4	2	6
		schizo- phrenia	7	5	12	4	2	6	3	3	6
	PLANFUL	no disorder	4	3	7	1	2	3	3	1	4
		O-C disorder	5	4	9	1	2	3	4	2	6
		schizo- phrenia	0	9	9	0	5	5	0	4	4
BIZARRE	NON- PLANFUL	no disorder	4	5	9	2	3	5	2	2	4
		O-C disorder	2	2	4	2	2	4			
		schizo- phrenia	3	6	9	1	4	5	2	2	4
	PLANFUL	no disorder	6	3	9	2	2	4	4	1	5
		O-C disorder	4	6	10	3	4	7	1	2	3
		schizo- phrenia	3	8	11	3	3	6	0	5	5
		TOTAL	49	61	110 <sup>a</sup>						

<sup>a</sup> N is not equal to 122 as not all participants were run within juries.

After rendering individual verdicts (more specifically, jurors indicated in which direction they were *leaning* prior to deliberation), participants deliberated for 30 minutes to reach a group verdict and disposition. During deliberation the experimenter left the room, returning after 15 minutes to clarify any possible questions, and again after 25 minutes to indicate time remaining. No extra time was given for deliberation. Juries that did not reach a unanimous verdict in the allotted 30 minutes recorded a verdict of "hung jury." Juries also responded to an open-ended question asking them to rank order the factors they felt were most important in reaching their verdict, in addition to the issues that they had most difficulty agreeing upon. As per Roberts et al. (1987), participants then responded to manipulation checks. Finally, participants completed a short measure designed to tap attitudes toward the insanity defence. Group debriefing followed the attitudinal measure.

### Results

The results were analyzed at the both the jury level and the level of individuals. Although I present only the individual analyses, in all instances, the jury data followed the same pattern of results.

#### Manipulation Checks

Both a series of logistic regressions and 2 (bizarreness) x 2 (planfulness) x 3 (mental disorder) analyses of variances were performed to explore the impact of the experimental manipulations on perceived bizarreness, planfulness, and mental disorder. The dependent variables were participants' "yes/no" responses to the bizarreness, planfulness and mental disorder manipulation checks, while the independent variables were the actual manipulations of these variables. The two forms of analyses yielded somewhat conflicting results. As an examination of cell proportions revealed the results of the logistic regression to be suspect, and the program would not produce enough

diagnostic information to determine whether the data were being interpreted correctly, only the ANOVA data are presented below.

Planfulness. A check of participants' perceptions of the planfulness of the index offence yielded a significant main effect for the planfulness manipulation,  $F(1, 110) = 79.02, p < .001$ , with 83.9% of participants in the planful condition perceiving the index offence as planful as compared to only 23.3% in the nonplanful condition. Perceived planfulness was also a function of the bizarreness manipulation,  $F(1, 110) = 8.94, p < .01$ ; and two-way interactions between bizarreness and disorder,  $F(2, 110) = 4.96, p = .01$ , and planfulness and disorder,  $F(2, 110) = 5.40, p = .01$ . Bizarre crimes were generally viewed as more planful than nonbizarre crimes. Interestingly, planfulness ratings were highest for nondisordered individuals who committed bizarre crimes. Participants also perceived nonplanful index offences committed by nondisordered individuals as more planful than nonplanful offences committed by mentally disordered persons. Finally, the disorder manipulation came close to reaching significance,  $F(2, 110) = 2.89, p = .06$ , with individuals tending to view crimes committed by nondisordered persons as more planful (Table 2a, 2b).

Mental Disorder. The manipulation of mental disorder also worked as intended, showing a strong main effect for disorder,  $F(2, 109) = 29.38, p < .01$ . Of those participants in the *schizophrenia* condition, 86% identified the defendant as mentally disordered, while only 19% of participants in the *no disorder* condition perceived the defendant as mentally disordered. Participants in the *personality disorder* condition were, expectedly, less decisive, with 54% perceiving the defendant as mentally disordered. Participants' perceptions of mental disorder were also a function of a main effect for planfulness,  $F(1, 109) = 10.52, p < .01$ , and a two-way interaction between planfulness and disorder  $F(2, 109) = 6.22, p < .01$ . In general, individuals perceived

more mental disorder underlying nonplanful crimes, with this pattern strongly exemplified for personality disordered defendants (Table 3).

Bizarreness. The experimental manipulation of bizarreness was more problematic, with results suggesting that perceptions of bizarreness were similar for bizarre and nonbizarre crimes,  $F(1, 109) = .00, p = .99$  (63% and 67% respectively). Participants appeared to perceive something more bizarre about nonplanful offences,  $F(1, 109) = 11.63, p = .001$ . In the nonplanful condition 80% of participants responded that the offence was bizarre, as compared to 50.8% in the planful condition. Finally, a significant interaction between bizarreness and planfulness was found,  $F(1, 109) = 9.37, p < .01$ , with participants in the bizarre condition perceiving nonplanful crimes as more bizarre than planful crimes while individuals in the nonbizarre condition appeared not to be influenced by planfulness (Table 4).



Table 2a

Proportion of Individuals who Perceived the Index Offence as Planful in CellsRepresenting the Planfulness and Mental Disorder Manipulations

	Planful	Nonplanful	
No Disorder	<b>77.8</b> n=18	<b>50.0</b> n=18	<b>63.9</b> n=36
Personality Disorder	<b>81.8</b> n=22	<b>10.5</b> n=19	<b>48.8</b> n=41
Schizo-phrenia	<b>90.9</b> n=22	<b>13.0</b> n=23	<b>51.1</b> n=45
	<b>83.9</b> n=62	<b>23.3</b> n=60	n=122

Table 2b

Proportion of Individuals who Perceived the Index Offence as Planful in CellsRepresenting the Bizarreness and Mental Disorder Manipulations

	Bizarre	Nonbizarre	
No Disorder	<b>88.9</b> n=18	<b>38.9</b> n=18	<b>63.9</b> n=36
Personality Disorder	<b>60.0</b> n=20	<b>38.1</b> n=21	<b>48.8</b> n=41
Schizo-phrenia	<b>54.5</b> n=22	<b>47.8</b> n=23	<b>51.1</b> n=45
	<b>66.7</b> n=60	<b>41.9</b> n=62	n=122

Table 3

Proportion of Individuals who Perceived the Defendant as Mentally Disordered in Cells  
Representing the Planfulness and Mental Disorder Manipulations

	Planful	Nonplanful	
No Disorder	<b>16.7</b> n=18	<b>22.2</b> n=18	<b>19.4</b> n=36
Personality Disorder	<b>27.3</b> n=22	<b>84.2</b> n=19	<b>53.7</b> n=41
Schizophrenia	<b>85.7</b> n=21	<b>87.0</b> n=23	<b>86.4</b> n=44
	<b>44.3</b> n=61	<b>66.7</b> n=60	<b></b> n=121

Table 4

Proportion of Individuals who Perceived the Index Offence as Bizarre in Cells  
Representing the Planfulness and Bizarreness Manipulations

	Planful	Nonplanful	
Bizarre	<b>39.4</b> n=33	<b>92.6</b> n=27	<b>63.3</b> n=60
Nonbizarre	<b>64.3</b> n=28	<b>69.7</b> n=33	<b>67.2</b> n=61
	<b>50.8</b> n=61	<b>80.0</b> n=60	<b>70.0</b> n=121

### Verdict and Disposition

Of the 23 juries run in the present study, 22% ( $n = 5$ ) reached a verdict of NCRMD, 61% ( $n = 14$ ) reached a verdict of guilty, and 17% ( $n = 4$ ) were unable to reach a unanimous verdict. Of the 122 individual participants, 32% ( $n = 39$ ) reached a verdict of NCRMD and 68% ( $n = 83$ ) reached a verdict of guilty. To examine the first responsibility decision a logistic regression using the SPSS deviation coding scheme was performed. This coding scheme is essentially analogous to ANOVA effect coding, with variables being coded as shown in Table 5. The dependent variable was coded 0, 1 with one representing guilty verdicts and 0 representing NCRMD verdicts.

Table 5

#### SPSS Deviation Coding Scheme for Bizarreness, Planfulness, and Mental Disorder.

		Parameter Coding	
		(1)	(2)
Mental Disorder	No Disorder	1	0
	Schizophrenia	0	1
	O-C P Disorder	-1	-1
Planfulness	Nonplanful	1	
	Planful	-1	
Bizarreness	Nonbizarre	1	
	Bizarre	-1	

The analysis yielded significant results, suggesting that mental disorder influenced participants' verdicts, Dis (1):  $\beta = 3.47$ , Dis 2:  $\beta = -2.49$ ,  $p < .001$ . The main effect for mental disorder is depicted in Table 6, with the frequency of NCRMD verdicts increasing and the frequency of guilty verdicts decreasing, as severity of disorder increases. Figure 1 depicts a parallel trend for jury data. As predicted, participants were most likely to render a verdict of NCRMD when the defendant displayed symptoms of schizophrenia.

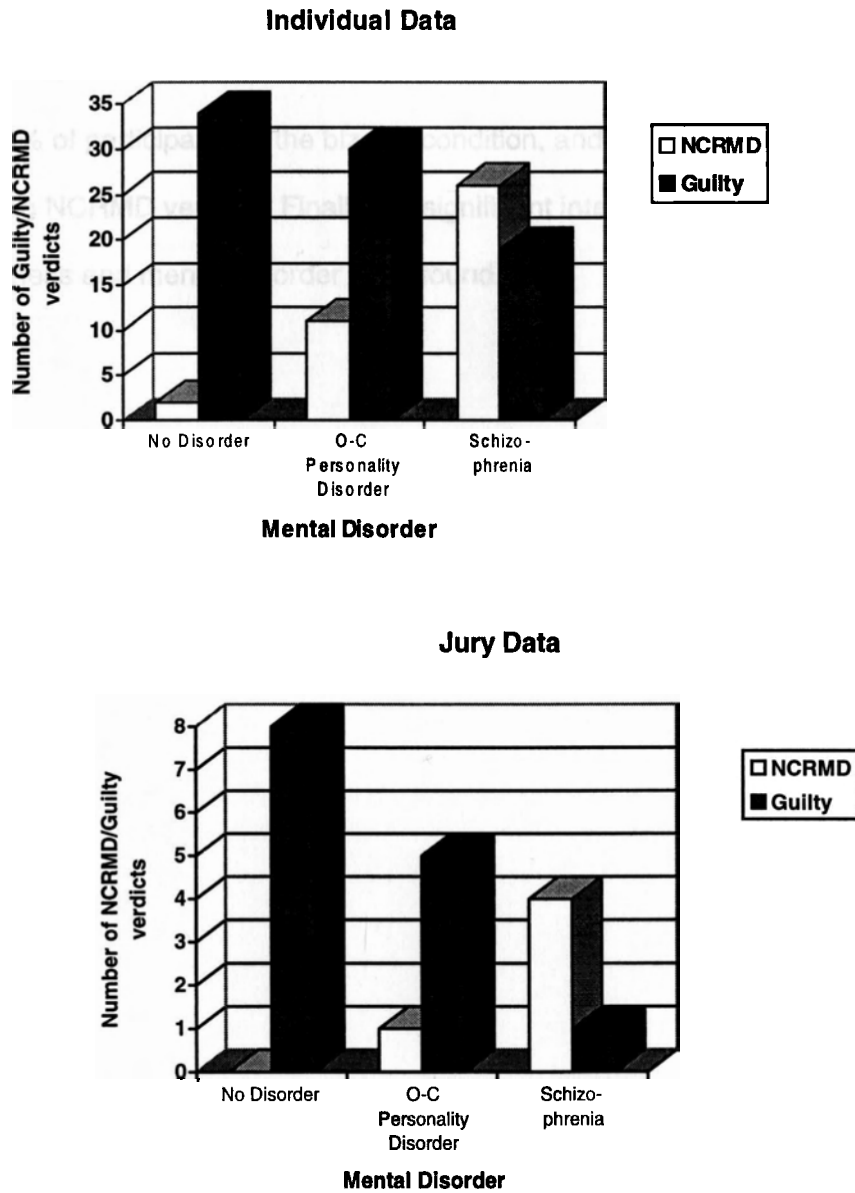
Table 6

Number (and Percent) of NCRMD and Guilty Verdicts by Disorder

Verdict	Disorder		
	No Disorder	Obsessive-Compulsive Personality Disorder	Schizophrenia
NCRMD	2 (1)	11 (27)	26 (58)
Guilty	34 (99)	30 (73)	19 (42)

## Figure Caption

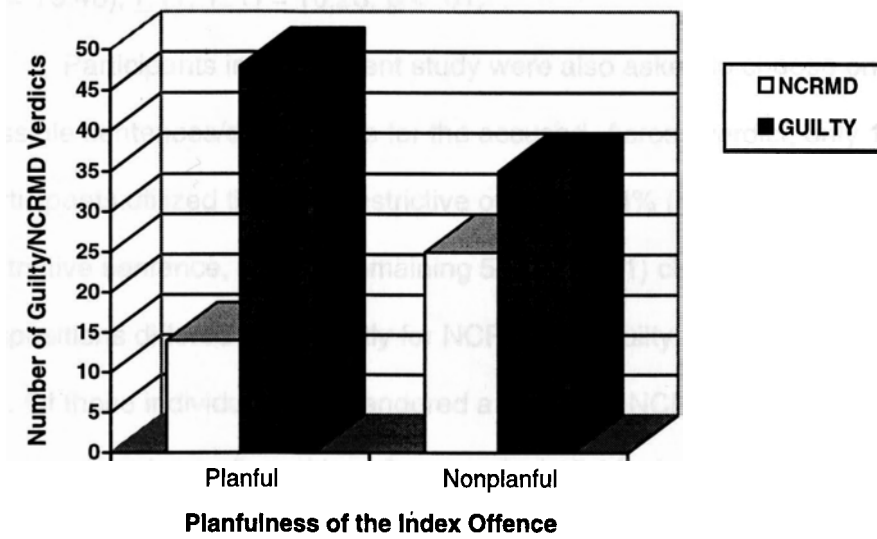
**Figure 1.** Individual and jury data: Number of guilty/NCRMD verdicts for no disorder ( $n = 36$ ;  $n = 8$ ), obsessive-compulsive personality disorder ( $n = 41$ ;  $n = 6$ ) and schizophrenia ( $n = 45$ ,  $n = 5$ ).



The planfulness of the index offence was also used as a responsibility cue, with participants more likely to yield guilty verdicts for planful crimes than for nonplanful crimes (77% of participants rendered a guilty verdict in the planful condition, while only 58% reached guilty verdicts in the nonplanful condition),  $\beta = -1.46$ ,  $p = .02$ . The relationship between planfulness and verdict is depicted in Figure 2. There was no relationship between the bizarreness of the index offence and verdict ( $\beta = -.10$ ,  $p = .99$ ), with 30% of participants in the bizarre condition, and 34% in the nonbizarre condition, reaching NCRMD verdicts. Finally, no significant interactions between bizarreness, planfulness and mental disorder were found.

## Figure Caption

Figure 2. The relationship between the planfulness of the index offence and verdict





After rendering a verdict, individuals were asked how confident they felt in reaching this decision. The mean confidence rating was 72.96 ( $SD = 13.19$ ) with the full range of options being utilized (i.e., 50 to 100). Individuals who rendered NCRMD verdicts did so with less confidence ( $M = 67.59$ ) than those who rendered guilty verdicts ( $M = 75.48$ );  $F(1, 121) = 10.23, p < .01$ .

Participants in the present study were also asked to choose one of three possible sentences/dispositions for the accused. Across verdict, only 1.6% ( $n = 2$ ) of participants utilized the least restrictive option, 48.4% ( $n = 59$ ) chose the moderately restrictive sentence, and the remaining 50% ( $n = 61$ ) chose the most restrictive option. Dispositions differed significantly for NCRMD vs. guilty verdicts,  $F(1, 107) = 37.93, p < .01$ . Of those individuals who rendered a verdict of NCRMD, a significant majority chose the most restrictive disposition. Conversely, individuals who rendered a verdict of guilty were more likely to utilize a moderately restrictive disposition (Table 7).

Table 7

Number (and Percent) of Dispositions by Verdict

Verdict	Disposition		
	Least Restrictive	Moderately Restrictive	Most Restrictive
NCRMD	0 (0)	5 (13)	34 (87)
Guilty	2 (2)	54 (65)	27 (33)

Analyses were also conducted to examine the effects of bizarreness, planfulness and mental disorder on disposition<sup>6</sup>. A main effect for mental disorder was found,  $F(2, 110) = 7.47, p < .01$ , with individuals more likely to utilize the most restrictive option when the

<sup>6</sup> Disposition was coded 1 - 3, with 3 representing the most restrictive option and 1 representing the least restrictive alternative.

defendant displayed symptoms of schizophrenia. The relationship between mental disorder and disposition however seems to be an artifact of the relationship between verdict and disposition (as schizophrenic individuals were most likely to receive NCRMD verdicts), and in fact disappears when verdict is entered into the analysis. No relationship was found between the planfulness and bizarreness of the index offence and disposition [ $F(1, 110) = .48, p = .49$  and  $F(1, 110) = .00, p = .99$  respectively].

#### Attitudinal Ratings and their Relation to Verdict and Disposition

Individual scores on the attitude measure ranged from 19 to 119 ( $M = 66.13, SD = 18.79$ ) out of a possible 133, with higher scores representing more conservative attitudes toward the insanity defence. To examine the impact of attitude on verdicts, an additional logistic regression, including attitude as a variable, was computed. As the log likelihood functions as a chi square for error, it should decrease as you add terms to the regression. A comparison of the Log Likelihood values for both regressions (with and without attitude) indicated that attitudes toward the insanity defence contribute significantly to the prediction of NCRMD verdicts,  $\chi^2(12, N = 122) = 28.94, p < .005$ . As the logistic regression yielded significant interactions including attitude, separate logistic regressions were run for each cell to clarify the nature of the relationship between attitude and verdict. Unfortunately, the absence of NCRMD verdicts in several cells rendered some analyses impossible. However, the data obtained suggest that participants' attitudes were most predictive of verdict in the schizophrenic condition. More specifically, while participants' attitudes toward the insanity defence did not impact the likelihood of guilty verdicts for nondisordered or personality disordered defendants ( $\beta = -.02, p = .65$  and  $\beta = .006, p = .76$  respectively), conservative attitudes appeared to be more related to guilty verdicts for schizophrenic defendants ( $\beta = .02, p = .09$ ). The

relationship between attitude and verdict for schizophrenic individuals appeared to be further influenced by the planfulness of the index offence. Conservative attitudes toward the insanity defence were related to guilty verdicts for schizophrenic individuals who committed nonplanful crimes ( $\beta = .04$ ,  $p = .12$ ), but were unrelated to verdict for schizophrenic individuals committing planful crimes ( $\beta = .009$ ,  $p = .72$ ).

On the other hand, individuals' attitudes toward the insanity defence were *not* related to disposition,  $F(1, 109) = .34$ ,  $p = .56$ . When entered as a covariate, attitude did not change the main effects of bizarreness, planfulness, or mental disorder on disposition. As the attitude scale was modified from that used by Roberts and Golding (1991), it was not possible to analyze the data in terms of the five-component model found by these authors.

#### Gender and Verdict/Disposition

To examine the impact of gender on verdicts, a logistic regression, including gender as a variable, was computed. A comparison of the Log Likelihood values for both regressions (with and without gender) indicated that the total contribution of gender was on the expected value, i.e., gender did not add significantly to the regression equation,  $\chi^2(12, N = 122) = 11.47$ ,  $p > .25$ . An analysis of variance further indicated that gender did not significantly contribute to disposition,  $F(1, 107) = .01$ ,  $p = .91$ , and did not change the main effects of bizarreness, planfulness, or mental disorder when entered as a covariate.

#### Discussion

A number of limitations of the present study warrant attention and should be kept in mind when evaluating and interpreting the results. Most importantly, given that the present study utilized a mock jury design, the extent to which the results can be

generalized to real juries is debatable<sup>7</sup>. Although the use of standard jury instructions, and the fact that jurors in the present study were given the opportunity to deliberate, do add to the external validity, there remain obvious constraints on the present design. Briefly, jurors in the present study had access to a limited amount of written information and made decisions without repercussion within a very short time frame. Further, as university students, the participants were not representative of actual jurors in terms of age, socioeconomic status, or education. Another limitation of the present study lies in the manipulation of bizarreness. Given that participants perceived similar levels of bizarreness underlying all offences, it is not possible to make any conclusive statements regarding the apparent lack of a relationship between the bizarreness of the index offence and verdict. Finally, it is impossible to determine whether participants' perceptions of obsessive-compulsive personality disorder are comparable to other personality disorders in terms of severity, and level of mental incapacity. Nonetheless, the purpose of the mental disorder manipulation in the present study was only to vary severity of mental disorder and it seems clear that this objective was achieved.

#### Manipulation Checks

In summary, strong main effects for planfulness and mental disorder indicate that participants perceived these manipulations as intended. Further, interactions between offence characteristics and mental disorder suggest that participants engaged in a careful consideration and integration of all the information they were given.

In making judgments about planfulness, participants were influenced by evidence of planning (i.e., the planfulness manipulation) as well as by the bizarreness of the index offence. The latter finding is consistent with Roberts et al. (1987) and is not

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<sup>7</sup> As the major concerns regarding the external validity of mock jury studies have been comprehensively reviewed elsewhere (e.g., Weitan & Diamond, 1979) I will not reiterate them here.

surprising given that the bizarre offence described in the present study entails a greater degree of effort and exactness than the nonbizarre offence. The results further suggest that participants attended not only to characteristics of the offence but also to the mental state of the defendant, viewing nonplanful crimes committed by nondisordered individuals as more planful than nonplanful crimes committed by mentally disordered persons. In short, it appeared that participants ascribed more intent to those individuals who showed no evidence of mental disorder. Finally, participants attended to subtle discrepancies between offence characteristics and mental disorder, with such inconsistencies (e.g., bizarre offences committed by nondisordered persons) influencing their judgments of planfulness.

Perceptions of mental disorder were also impacted by a broader scope of information than contained within the psychiatric testimony. Specifically, the results suggest that, given ambiguous information as to the defendant's mental state (i.e., symptoms of a personality disorder), jurors may rely to a greater extent on offence characteristics as a basis from which to infer mental status. In the present study, participants perceived more mental disorder underlying nonplanful offences, presumably drawing a connection between spontaneous, unmotivated criminal acts and cognitive distortion (i.e., mental disorder). To the extent that these findings can be extrapolated to real juries, they suggest that jurors undertake a careful consideration of and attempt to integrate all the information they are given. In contrast to Roberts et al. (1987), individuals did not perceive more mental disorder underlying bizarre index offences, though this may be a function of the unsuccessful manipulation of bizarreness.

The majority of participants perceived the index offence as bizarre regardless of the bizarreness manipulation, suggesting that violent crimes are, in general, viewed as bizarre. Consistent with Roberts et al. (1987), nonplanful crimes were rated as more

bizarre than planful crimes. It would appear that participants perceive something bizarre about seemingly spontaneous crimes that lack evidence of conventional criminal motivation.

#### Guilty vs. NCRMD Verdicts and Disposition

In line with Roberts et al. (1987), participants were increasingly more likely to render NCRMD verdicts when faced with evidence of mental disorder. This result is consistent with the general perception of psychotic individuals as less able to control their behaviour and consequently, less responsible and less blameworthy (Morse, 1978). In the personality disordered condition there were significantly fewer judgments of NCRMD, reflecting participants' hesitation about finding a defendant not criminally responsible in the absence of severe cognitive distortion or other evidence of psychosis. Finally, the fact that only two individuals and not a single jury rendered a verdict of NCRMD in the *no disorder* condition, regardless of the level of bizarreness or planning, is reassuring. This finding suggests that individuals attend carefully to psychiatric testimony in insanity defence trials and do not allow themselves to be swayed by legally irrelevant information.

Consistent with prior research (Roberts et al., 1987; Roberts & Golding, 1991), evidence of planning led to an increase in the number of guilty verdicts. It would appear that planful index offences are perceived as indicative of intent, thus meeting the mens rea criterion for a guilty verdict. Using archival data, Boardman et al. (1996) also found that individuals acquitted by reason of insanity were less likely to have committed planful offences (e.g., defendants were less likely to have refrained from criminal behaviour until no witness was present, and made fewer attempts to avoid detection).

Unexpectedly the bizarreness of the index offence did not seem to have any impact on verdict. While the absence of a main effect for bizarreness is reassuring,

suggesting that individuals do not evaluate criminal responsibility on the basis of the bizarreness of the index offence alone, the absence of an interaction with mental disorder is somewhat surprising. To the extent that a bizarre index offence is further indicative of diminished mental capacity, one would expect decisions of responsibility to be swayed by this factor. However, the present research suggests that individuals consider psychiatric testimony as paramount in their decision making, to the extent that the bizarreness of the offence does not contribute anything additional.

As the issue in insanity defence trials is in fact the defendant's mental state at the time of the offence, the weight awarded to psychiatric testimony is reassuring. In sum, the results suggest that individuals attend to relevant factors (i.e., presence of mental disorder, planfulness of the index offence) and ignore legally irrelevant factors (i.e., bizarreness of the index offence) in making decisions about criminal responsibility.

To the extent that confidence ratings represent an indirect measure of participants' comfort level in rendering verdicts, the moderately low mean suggests that individuals do not feel completely at ease with this task. Of particular interest is the finding that individuals who rendered NCRMD verdicts did so with less confidence than those who rendered guilty verdicts. This discrepancy may result from what Perlin (1996) describes as our "culture of punishment [wherein] our innate sense of justice is profoundly disturbed if we see another go unpunished for his antisocial behavior" (p. 10). It is also possible that popular myths about the insanity defence, such as the belief that insanity acquittees are quickly released from custody (Perlin, 1996), or myths about mentally disordered persons, such as the belief that mentally disordered persons are dangerous, contribute to the unease around the NCRMD verdict.

Although jurors do not assign sentences to defendants in Canada, participants in the present study were asked to choose one of three possible sentences/dispositions for

the accused. It was felt that this second decisional rating would provide additional information about participants' perceptions of the responsibility of the defendant and the degree to which he should be held accountable for his actions. Indeed, the results are consistent with hypotheses generated from the low confidence ratings, indicating a general tendency toward more restrictive dispositions. In fact, only two individuals, both of whom had rendered a verdict of guilty, chose the least restrictive option. This tendency in itself reveals much about society's need for retribution. Of particular interest is the finding that dispositions differed for NCRMD verdicts vs. guilty verdicts. Of those individuals who rendered a verdict of NCRMD, a significant majority settled on the most restrictive disposition. Conversely, individuals who rendered a verdict of guilty were more likely to utilize a moderately restrictive disposition. Individuals were also most likely to utilize the most restrictive option when the defendant displayed symptoms of schizophrenia. This finding supports Roberts et al.'s (1987) suggestion that there is both a desire to punish even severely disordered individuals for their criminal behaviour and a fear that these persons may be prematurely released. Ogloff, Roberts, and Roesch (1993) also suggest that notions of retribution and deterrence may carry much of the weight in decisions regarding the commitment and release of insanity acquittees.

#### Attitudinal Ratings and their Relation to Verdict

The attitude measure utilized in the current study tapped individuals' perceptions of: (a) "the relevance of mental state to the attribution of blame and the imposition of punishment" (Roberts & Golding, 1991, p. 367), (b) concerns about detention of NCRMD acquittees, and (c) whether mentally disordered persons can properly be found guilty. Consistent with past research, individuals' attitudes toward the insanity defence contributed significantly to the likelihood of an NCRMD verdict (Roberts et al., 1987; Roberts & Golding, 1991). More specifically, individuals who held conservative attitudes



toward the insanity defence were more likely to reach guilty verdicts irrespective of strong evidence supporting an NCRMD verdict (i.e., symptoms of schizophrenia, a nonplanful index offence). The results are also consistent with past research on the death penalty which suggests that death-qualified juries (those from which persons adamantly opposed to the death penalty have been excluded) are more likely to convict than normally selected juries (Bersoff & Ogden, 1987; Haney, Hurtado, & Vega, 1994). If, as suggested by the research, jurors' attitudes toward the insanity defence play a significant role, and possibly outweigh trial evidence, in determining verdict, attitudes about the criminal responsibility of mentally disordered persons may need to be considered in the process of jury selection. However, as with the selection of juries for death penalty trials, the difficulty lies in selecting a group which is neither conviction-prone nor acquittal-prone.

## Study 2

### Participants

File data were coded for 181 individuals remanded for insanity evaluations at the Forensic Psychiatric Institute in Port Coquitlam, BC. Of these, 54 files came from 1990 when the NGRI verdict was still in place (two years prior to the introduction of Bill C-30) and 127 files came from 1994, two years post-amendment wherein the verdict was changed to NCRMD. Of the defendants included in the present study, 91% ( $n = 165$ ) were male.

### Procedure

Files of defendants remanded for NGRI/NCRMD evaluations in British Columbia were reviewed for the years 1990 and 1994. A computer check of remands during this period yielded a sample of 336 (131 in 1990 and 205 in 1994). Of these, 155 remands

were excluded from the study as outcome data were unavailable.<sup>8</sup> Consequently, the final sample consisted of 181 defendants, 54 from 1990 and 127 from 1994. For each remand, raters read police reports; statements provided by witnesses, victims, and defendants; and psychiatric reports. Bizarreness and planfulness ratings were made on separate 5-point scales, with 1 = not planful/not bizarre and 5 = planful/bizarre. The scoring criteria for planfulness used in the present study were a modified version of those utilized by Boardman et al. (1996). Raters were asked to attend to a number of factors identified by Boardman et al. (e.g., evidence of a co-conspirator, chose specific victim, chose specific site). Attention was also paid to such factors as the level of preparation, attempt to conceal evidence, and previous disclosure of intent. Raters were admonished to consider only those behaviours that occurred prior to the onset of the crime. As there existed no standard scoring criteria for rating the bizarreness of a criminal offence, a scale was devised for the present research on the basis of prior research (e.g., Boardman et al., 1996) and examination of FPI files. In rating bizarreness, the severity of the crime was not taken into consideration. Thus, raters used the offence category as opposed to "normal" behaviour as the base line for ratings. Factors that were considered included age of victim for sexual assault, presence of a highly unconventional motive, and absence of distress (see Appendix G for planfulness and bizarreness rating criteria). For the most part, raters were blind to the outcome verdict at the time of bizarreness and planfulness ratings. However, in eight cases, where the defendant had previously been found NGRI/NCRMD and returned to FPI, this was not possible as files were clearly marked as such. A comparison of the bizarreness and planfulness ratings for known insanity acquittees versus insanity

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<sup>8</sup> Outcome data, in the form of court verdicts were obtained through Crown Counsel or the Court Registry. Unfortunately, due to the archiving or destruction of some older files (only 41% of the files for 1990 were included in the final analysis as compared to 61% of the files from 1994), and the failure of some offices to respond, outcome data were not available for all remands at the time of coding and analysis.

evaluatees indicates that mean bizarreness ratings for known NCRMD cases were actually lower ( $M = 3.0$ ) than those for blind ratings ( $M = 3.5$ ) while mean planfulness ratings were somewhat higher for known NCRMD cases (2.25 as compared to 2.21). These differences were not significant,  $t(20) = -1.14$ ,  $p = .27$  and  $t(20) = .08$ ,  $p = .94$  respectively, suggesting that raters were not biased.

Mental disorders were coded from medical records and psychiatric reports. For the purpose of analysis, mental disorder was broadly classified as psychotic vs. non-psychotic (see Appendix H for mental disorder classification scheme). For each defendant, the most serious current offence was coded from police reports under two classification schemes, (a) violent vs. non-violent, and (b) violent vs. property vs. miscellaneous (see Appendix I for offence type classification scheme). Court verdicts for each individual were obtained through the Crown Counsel or Court Registry. Verdicts were coded as guilty, NGRI/NCRMD, stay of proceedings/unfit, not guilty, or other. For the purpose of analysis, verdicts were recoded as (a) NGRI/NCRMD vs. non NGRI/NCRMD, and (b) guilty vs. stay of proceedings/unfit vs. NGRI/NCRMD.

#### Inter-rater Reliability

The present researcher trained a second graduate student in utilizing the bizarreness and planfulness rating scales. Training occurred over a two-day period with the first day spent reviewing and discussing eight files from the years 1992-1993. On the second day of training, nine files were coded independently, with discussion after each file. Inter-rater reliability reached acceptable levels for both planfulness ( $ICC = .86$ ) and bizarreness ( $ICC = .89$ ). For inter-rater reliability estimates, 30 files (17%) were rated independently by a second rater. For these 30 files, inter-rater reliability for both the planfulness and bizarreness of the index offence were acceptable, ( $ICC = .75$  and  $ICC = .88$  respectively). The decrease in reliability estimates for the planfulness variable can

be attributed to an increase in the difficulty of the task due to the greater range of offences considered in the final data pool. Although raters were admonished to "*rate planfulness in light of the crime as some crimes will inherently require a greater degree of planning than others*", this was not easily accomplished. It is likely that individuals differ, with regard to their perceptions of the *inherent planfulness* of various offences, or perhaps simply do not have a good sense of the level of planfulness inherent in a crime and thus, having no implicit rules to guide them, are inconsistent in their ratings. A number of steps should be taken to improve the reliability of the planfulness rating scale before it is utilized for future research: (a) the scale must explicitly address variability across offences, perhaps establishing guidelines with regard to the relative level of *inherent planfulness* across offence categories, (b) training files should comprise various levels of planfulness on a wide range of offences.

## Results

Characteristics of Insanity Evaluatees. Tables 8 and 9 present frequency data for the most serious charges laid against defendants in the present study. Most of the defendants referred for evaluation were charged with violent offences (63%;  $n = 114$ ), with the single most frequent offence being assault ( $n = 63$ ). Other common charges were sexual assault and weapons offences. Nonviolent offences represented 37% ( $n = 67$ ) of all charges and were for the most part trivial, comprised primarily of charges such as uttering threats, breach of probation, mischief, and possession of stolen property. The frequency of violent, property and miscellaneous offences did not differ between 1990 and 1994,  $\chi^2(2, N = 181) = .75, p = .69$ .

Only four (2%) defendants in the present sample did not receive a diagnosis. Multiple diagnoses were common with 106 (59%) of the present sample receiving more than one diagnosis. Of these, defendants were most often diagnosed with a psychotic

disorder in combination with personality disorder ( $n = 17$ ) or substance abuse ( $n = 15$ ), or a psychotic disorder and both personality disorder and substance abuse ( $n = 18$ ). Dual diagnoses of personality disorder and substance abuse were also common ( $n = 16$ ). For the purpose of analyses only the most serious diagnoses were included (see Table 10). Of the 102 insanity evaluatees diagnosed with a psychotic disorder (61%), the most common diagnosis was schizophrenia ( $n = 66$ ). Diagnoses of bipolar mood disorder - manic were also common ( $n = 11$ ). Finally, of those individuals diagnosed with a nonpsychotic disorder ( $n = 68$ ), personality disorders were most common, constituting 43%. The proportion of insanity evaluatees diagnosed with a psychotic disorder did not differ between 1990 and 1994,  $\chi^2(1, N = 181) = 1.37, p = .24$ .

Table 8

Number (and Percent) of Offences by Remand Year

		Frequency and percentages by remand year		
		Total (N= 181)	1990 (n = 54)	1994 (n = 127)
<b>VIOLENT OFFENCES</b>	murder; attempted murder	10 (5.5%)	4 (7.4%)	6 (4.7%)
	sexual assault	20 (11%)	9 (16.7%)	11 (8.7%)
	assault; kidnapping	63 (34.8%)	17 (31.5%)	46 (36.2%)
	robbery	4 (2.2%)	1 (1.9%)	3 (2.4%)
	weapons offences	17 (9.4%)	4 (7.4%)	13 (10.2%)
<b>NONVIOLENT OFFENCES</b>	property	13 (7.2%)	4 (7.4%)	9 (7.1%)
	theft, psp <sup>a</sup>	17 (9.4%)	6 (11.1%)	11 (8.7%)
	miscellaneous (e.g., breach)	31 (17.1%)	8 (14.8%)	23 (18.1%)
	driving	6 (3.3%)	1 (1.9%)	5 (3.9%)

<sup>a</sup> possession of stolen property

Table 9

Number (and Percent) of Violent vs. Property vs. Miscellaneous Offences by RemandYear

	Frequency and percentages by remand year		
	Total (N= 181)	1990 (n = 54)	1994 (n = 127)
<b>VIOLENT</b> murder, sexual assault, assault, robbery, weapons	114 (63%)	35 (64.8%)	79 (62.2%)
<b>PROPERTY</b> mischief, arson, theft, psp <sup>a</sup>	30 (16.6%)	10 (18.5%)	20 (15.7%)
<b>MISCELLANEOUS</b> breach of probation, utter threats, driving	37 (20.4%)	9 (16.7%)	28 (22%)

<sup>a</sup> possession of stolen property

Table 10

Insanity Evaluatees: Most Serious Psychiatric Diagnoses at Time of Admission

Frequency and percentages		
	Diagnoses	Total (N= 181)
<b>PSYCHOTIC DISORDERS</b>	schizophrenia	66 (37%)
	schizoaffective	6 (3%)
	delusional/psychosis	19 (11%)
	bipolar mood disorder	11 (6%)
<b>PERSONALITY DISORDERS</b>	antisocial personality	9 (5%)
	mixed/NOS personality	16 (9%)
	borderline personality	4 (2%)
<b>OTHER DISORDERS</b>	depressive disorders (bipolar-depressive)	17 (9%)
	anxiety disorders	2 (1%)
	paraphilias	4 (2%)
	mental retardation	9 (5%)
	substance abuse	9 (5%)
<b>NO DISORDER</b>	other non-psychotic	5 (3%)
	no disorder	4 (2%)

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Characteristics of Insanity Acquittees. To determine which of the characteristics were related to the likelihood of a successful insanity plea, chi-square tests were calculated between the factors and a dichotomous dependent variable that indicated whether or not the defendant was found NGRI/NCRMD. As the results of such analyses are highly susceptible to base rates, they must be interpreted with caution. Nonetheless, to the extent that the current sample is representative of insanity remands in British Columbia, the results provide some insight into factors which differentiate successful and unsuccessful insanity acquittees in this province. The results are presented in Table 11 and indicate that the only factor that is significantly related to NGRI/NCRMD verdicts is *presence of a psychotic disorder*.

Table 11

Factors Related to Insanity Acquittals

VARIABLES (n)	Relation to Insanity Acquittals		
	Percent found NGRI/ NCRMD	Chi-square <sup>c</sup> t-test <sup>t</sup>	Significance
GENDER			
Male (165)	13.3	2.43 <sup>c</sup>	.12
Female (16)	0		
DATE			
1990 (54)	9.3	.60 <sup>c</sup>	.44
1994 (127)	13.4		
OFFENCE TYPE			
Violent (114)	13.5	1.02 <sup>c</sup>	.60
Property (30)	6.7		
Miscellaneous (37)	13.2		
MENTAL DISORDER			
Psychotic (102)	17.6	6.6 <sup>c</sup>	.01
Nonpsychotic (79)	5.1		
<i>Mean Bizarreness Rating:</i>			
NGRI/NCRMD	MEANS 3.32	.71 <sup>t</sup>	.48
Non-NGRI/NCRMD	3.02		
<i>Mean Planfulness Rating:</i>			
NGRI/NCRMD	MEANS 2.23	1.61 <sup>t</sup>	.11
Non-NGRI/NCRMD	2.92		

Court Verdicts. In the present study, only 22 (12.2%) of the 181 defendants remanded for insanity evaluations during 1990 and 1994 received a verdict of NGRI or NCRMD. Although there was a slight increase in the proportion of defendants acquitted by reason of insanity between 1990 and 1994 (9.2% and 13.4% respectively), this difference was not significant,  $\chi^2(1, N = 181) = .60, p = .44$ . In 29.9% ( $n = 54$ ) of cases, the proceedings were stayed or defendants were found unfit. Table 12 presents court verdicts for the sample of defendants included in the present study.

Table 12

Court Verdicts

	Frequency and percentages by remand year		
	Total (N= 181)	1990 (n = 54)	1994 (n = 127)
GUILTY	98 (54.1%)	28 (51.9%)	70 (55.1%)
STAY OF PROCEEDINGS/UNFIT	54 (29.9%)	19 (35.2%)	35 (27.6%)
1990 - NGRI 1994-NCRMD	22 (12.2%)	5 (9.2%)	17 (13.4%)
NOT GUILTY/DROPPED	7 (3.8%)	2 (3.7%)	5 (3.9%)

Insanity Verdicts and the Planfulness and Bizarreness of the Index Offence.

Collapsing across all other variables (mental disorder, violence of the index offence and date), a 5 x 5 table was constructed to examine the proportion of insanity verdicts across different levels of bizarreness and planfulness (Table 13). Proportions of NGRI/NCRMD verdicts were highest in those cells representing more bizarre and less planful index offences. Further, no insanity verdicts occurred in those cells representing the most highly planned crimes (ratings of 5) or in those cells representing the nonbizarre crimes (ratings of 1).

Table 13

Proportion of NGRI/NCRMD Verdicts for Different Levels of the Planfulness and Bizarreness of the Index Offence

	Nonplanful				Planful	
	1	2	3	4	5	
<b>Nonbizarre</b> <b>1</b>	.00 0/4	.00 0/13	.00 0/8	.00 0/6	.00 0/3	.00 0/34
<b>2</b>	.07 1/14	.20 2/10	.11 1/9	.13 1/8	.00 0/4	.11 5/45
<b>3</b>	<b>.19</b> 3/16	<b>.27</b> 3/11	<b>.22</b> 2/9	.00 0/3	.00 0/3	.19 8/42
<b>4</b>	<b>.13</b> 1/8	<b>.20</b> 2/10	<b>.13</b> 1/8	<b>.33</b> 2/6	.00 0/1	.18 6/33
<b>5</b> <b>Bizarre</b>	<b>.25</b> 1/4	<b>.20</b> 1/5	<b>.33</b> 1/3		.00 0/6	.17 3/18
	.13 6/46	.16 8/49	.14 5/37	.13 3/23	.00 0/17	<u>n</u> = 172 <sup>c</sup>

<sup>a</sup> For x/y: x = # of NCRMD/NGRI verdicts and y = # of remands per cell

<sup>b</sup> Bolded proportions represent the increased frequency of NGRI/NCRMD verdicts for highly bizarre and less planful offences.

<sup>c</sup> Due to sparse or missing police reports, it was not possible to rate the bizarreness and planfulness of the index offence for 9 individuals. Consequently, n = 172 for the above table.

Prediction of NGRI/NCRMD Verdicts. A logistic regression was run including the main effects and all possible interactions for bizarreness, planfulness, mental disorder (psychotic vs. nonpsychotic), violence of offence (violent vs. nonviolent), and date (1990 vs. 1994). SPSS deviation coding was utilized for the categorical variables date, mental disorder, and violence (Table 14), while bizarreness and planfulness were recoded manually as mean deviations (bizarreness:  $M = 2.74$ ; planfulness:  $M = 2.51$ ). The dependent variable was coded 0 - 1, with 1 representing NCRMD verdicts and 0 representing non-NCRMD verdicts.

Table 14

SPSS Deviation Coding Scheme for Mental Disorder, Offence Type, and Date

		Parameter Coding
		(1)
Mental Disorder	Non-psychotic	1
	Psychotic	-1
Offence Type	Non-violent	1
	Violent	-1
Remand Year	1990	1
	1994	-1

Given that the initial analysis yielded no p values under .98, all five-way and four-way interactions were excluded. The second logistic regression, including only main effects, two-way and three-way interactions, yielded some significant interactions. However, as all p-values for terms including violence were greater than .86, violence terms were removed from the analysis to further clarify interpretation. The change in log likelihood values as a consequence of the removal of violence was not significant,  $\chi^2 (11, N = 172) = 5.00, p > .90$ . The results of the final logistic regression are presented in Table 15.

Table 15

Prediction of NCRMD Verdicts

	$\beta$	Model if Term Removed			
		Log Likelihood	-2 Log LR	df	Significance of Log LR
Bizarreness	-3.54	-54.32	2.00	1	.157
Planfulness	-7.82	-57.75	8.86	1	.003
Psychosis	-12.12	-56.18	5.72	1	.017
Date - 1990/1994	-12.11	-56.91	7.18	1	.007
Biz x Plan	-18	-53.44	.24	1	.623
Biz x Psych	-3.93	-55.48	4.33	1	.037
Biz x Date	-4.00	-55.11	3.59	1	.058
Plan x Psych	-7.46	-55.65	4.67	1	.031
Date x Plan	-7.76	-57.18	7.72	1	.006
Date x Psych	-11.34	-55.04	3.44	1	.064
Biz x Date x Psych	-4.07	-56.11	5.58	1	.018
Biz x Date x Plan	-.08	-53.35	.056	1	.813
Biz x Plan x Psych	.02	-53.32	.007	1	.934
Date x Plan x Psych	-7.31	-55.31	3.99	1	.046

To aid in the interpretation of significant three-way interactions for bizarreness x date x mental disorder and planfulness x date x mental disorder, separate logistic regressions were run for each cell of the date by disorder matrix, using bizarreness and planfulness as predictors. However, given the small number of insanity acquittals, data were unavailable for one cell, rendering interpretation impossible. A similar analysis was conducted to explore the bizarreness x planfulness x mental disorder interaction but empty cells again rendered interpretation impossible. Finally, separate logistic regressions were run to explore the two-way interactions between date and mental disorder, date and planfulness, and date and bizarreness. The results suggest that presence of a psychotic disorder was related to insanity acquittals in 1994 but not in 1990, while the planfulness of the index offence showed a reverse trend, influencing the likelihood of insanity verdicts in 1990 but not in 1994 (see Table 16). Caution is warranted in interpreting this result however, given that the two-way interactions were embedded within three-way interactions.

Table 16

The Role of Bizarreness, Planfulness, and Psychosis in Predicting Insanity Verdicts in 1990 and 1994.

	Year of Remand	
	1990 (n = 54)	1994 (n = 127)
<b>Bizarreness</b> of the index offence	$\beta = .35, p = .42$	$\beta = .36, p = .09$
<b>Planfulness</b> of the index offence	$\beta = -1.26, p = .04$	$\beta = -.06, p = .76$
Presence of a <b>psychotic</b> disorder	$\beta = -.34, p = .55$	$\beta = -.71, p = .02$

To further explore the pattern of interactions, a regression equation was computed for each of the four cells representing the date by mental disorder interaction (i.e., 1990/nonpsychotic; 1990/psychotic; 1994/nonpsychotic; 1994/psychotic). The results are presented in Table 17 and indicate an unusual pattern in the 1990/nonpsychotic cell. This discrepancy provides an explanation for the interactions observed in the overall regression.

Table 17

Regression Equations for Cells Representing the Date x Mental Disorder Interaction

CELL	Regression Equations
1994/ Psychotic	$-1.3513 + 0.3167 X_{BIZ} + 0.0925 X_{PLN} - 0.1216 X_{BIZ}X_{PLN}$
1994/ Non-psychotic	$-2.9077 + 0.6083 X_{BIZ} - 0.2167 X_{PLN} - 0.0872 X_{BIZ}X_{PLN}$
1990/ Psychotic	$-2.8873 + 0.4589 X_{BIZ} - 0.7973 X_{PLN} - 0.2786 X_{BIZ}X_{PLN}$
1990/ Non-psychotic	$-49.8025 - 15.5407 X_{BIZ} - 30.3477 X_{PLN} - 0.2442 X_{BIZ}X_{PLN}$

Discussion

A number of limitations of the present study warrant attention and should be kept in mind when evaluating and interpreting the results. Firstly, of the 336 insanity remands to the Forensic Psychiatric Institute in 1990 and 1994, court verdicts were obtained for only 181 defendants. Consequently, only 54% of the initial sample was included in the final data pool. To further complicate this matter, the missing data were not evenly dispersed across year, with 59% of the court verdicts for 1990 remands missing, while 38% were missing for 1994. Although there is no reason to suspect any form of systematic bias, it is impossible to determine whether the current sample is completely representative of insanity remands during this period. Another limitation of the present study arises from the moderate reliability of the planfulness ratings, which raises

questions about the validity of these results. In addition, it is possible that the broad coding of mental disorder as psychotic vs. nonpsychotic and offence type as violent vs. nonviolent may have limited the utility of these variables as predictors. More generally, the present research is constrained by the fact that only a limited number of variables were examined. As no effort was made to explore all potentially important factors, no conclusions can be drawn about the relative importance of the factors included in the present study in predicting verdicts of insanity.

The Effects of Bill C-30. Based on the number of remands referred to the Forensic Psychiatric Institute in 1990 and 1994, the present study concludes that the number of individuals raising the insanity defence in the province of British Columbia has increased during this time frame<sup>9</sup>. Although it is possible that the increase was due to the introduction of Bill C-30, additional data would be needed to rule out the presence of a preexisting trend. Nonetheless, a comprehensive examination of remands in the province of British Columbia for the 1992-93 and 1993-93 fiscal years, found similar results, with a 20% increase in remands during the second year (Roesch et al., 1997)<sup>10</sup>. Roesch et al (1997) also found that the number of NCRMD recommendations made by evaluating psychiatrists had risen, suggesting that the success rate of the NCRMD defence may be increasing. However, the present study, which utilized court verdicts as an outcome measure, did not show an increase in the proportion of insanity remands that led to acquittal. Given that prior research has consistently shown high rates of agreement between evaluators and the courts (Steadman et al., 1983; Weiner, 1985; Williams & Miller, 1981), this result is somewhat surprising. It is possible that while

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<sup>9</sup> As FPI receives approximately 85% of all insanity remands in the province of British Columbia (Roesch et al., 1997), these figures are fairly representative of the province as a whole.

<sup>10</sup> Some caution is warranted here as the data collected for the present study overlaps slightly with that collected by Roesch et al. (1997) - for FPI records only, the overlap constitutes 3 months of the two year target periods.



psychiatrists view the NCRMD standard as having greater applicability and breadth than the NGRI standard, the courts interpret both standards in the same way. Future studies would usefully include both evaluator recommendations and court verdicts to help clarify this issue.

Characteristics of Insanity Evaluatees. Consistent with prior research (e.g., Boardman et al., 1996; Steadman et al., 1983), the present study found that individuals remanded for insanity evaluations at the Forensic Psychiatric Institute during 1990 and 1994 were most likely to be male, to have committed a violent offence and to be diagnosed with schizophrenia. With respect to offence type, Roesch et al. (1997) also reported that the majority of persons remanded for mental status evaluations had committed offences against persons, with assault being the most frequent charge. However, in line with the present results, these researchers further observed that a significant number of insanity evaluatees had committed nonviolent offences, many of which were trivial in nature. Similarly, research in the United States has concluded that while individuals who raise the insanity plea are most likely to have been charged with a violent offence, other, less serious, crimes (e.g., property offences, breaches) are also common (Cirincione, Steadman, & McGreevy, 1995; McGreevy, Steadman, & Callahan, 1991). When Bill C-30 was introduced there was speculation as to whether the less restrictive disposition resulting from an NCRMD verdict might render the insanity defence a more appealing option and consequently result in its use for less serious charges. While the present study indicates that the overall number of remands has risen, there was no apparent increase in the proportion of individuals who raise the insanity defence for less serious offences.

With respect to mental disorder, the present results are consistent with past research, showing that the majority of insanity remands were diagnosed with a psychotic

disorder, the most common of which was schizophrenia (McGreevy et al., 1991; Norwood, Nicholson, Enyart, & Hickey, 1992; Roesch et al., 1997). Given that the insanity standard requires that defendants exhibit a mental disorder that renders them "incapable of appreciating the nature and quality of the act or omission or of knowing it was wrong" it is not surprising that the majority of insanity evaluatees show severe psychopathology. However, the fact that a significant proportion of those raising the insanity defence do not have a psychotic disorder, and in fact may have a primary diagnosis of personality disorder, raises some questions. In their study of the effects of Oregon's statutory reform excluding personality disordered individuals from the insanity defence, Reichlin and Bloom (1993) deduced that trial evidence for personality disordered defendants often included a diagnosis other than personality disorder. It is possible that a similar process is occurring here, with diagnostic disagreement leading to a number of separate diagnoses that are introduced at the trial level. Conversely, it is also possible that the insanity defence is being inappropriately raised for defendants who do not meet the legal criteria. This explanation would not be surprising given that decisions about insanity remands are generally made by lawyers on the basis of scant information and before a psychological assessment has been conducted. In any case, prior research indicating that the majority of insanity acquittees suffer from a psychotic disorder, while the insanity pleas of those who do not show severe psychopathology are more often unsuccessful, is reassuring in the sense that it suggests that inappropriate referrals do not lead to inappropriate insanity acquittals (Boardman et al., 1996; Cirincione et al., 1995; McGreevy et al., 1991; Steadman et al., 1983).

Prediction of NGRI/NCRMD Verdicts. Given the large number of significant three-way and two-way interactions in combination with the low base rate of insanity verdicts, interpretation of the logistic regression was difficult and any conclusions are

tentative at best. In general, low beta weights and the inconsistent pattern of results (in particular, the discrepancy observed within the 1990/nonpsychotic cell), suggest that the factors examined in the present study are not the most important predictors of a successful insanity defence. In support of this assertion, prior research has consistently shown that the evaluation of the forensic examiner is paramount to the success of an insanity plea, with court verdicts most often coinciding with clinicians' recommendations (Boardman et al., 1996; Golding & Roesch, 1987; Steadman et al., 1983). Other potentially important contributors to verdicts of insanity are: (1) a prior finding of incompetency (Boehnert, 1989); (b) judge versus jury as the trier of fact (Boehnert, 1989 found that most successful insanity pleas arose from judge trials); (c) mental state of the accused at the time of the trial (Whittemore & Ogloff, 1995); (d) criminal history of the defendant; and (e) previous psychiatric hospitalizations (e.g., Boardman et al., 1996). It is possible that the variables included in the present study interact with missing variables or simply make no unique contribution to the prediction of insanity verdicts (e.g., offence characteristics might play an indirect role through psychiatric evaluations). To address this question, future research would usefully examine a number of other variables including, most importantly, psychiatric recommendations.

Since the insanity defence is concerned not with the offence per se, but with the individual's mental state at the time of the offence, one would not expect the severity of the index offence to be related to verdicts of insanity. The results of the present study in fact support this logic, with *violent index offence* dropping out of the regression equation as a predictor of NGRI/NCRMD verdicts. Further, insanity acquittees were no more likely to have committed violent offences than property or miscellaneous offences. While these results make intuitive sense, they are not consistent with the majority of prior research. Studies comparing the characteristics of successful and unsuccessful insanity

evaluatees have, for the most part, found that violent crimes and crimes against people are over-represented among successful insanity pleaders (Callahan, McGreevy, Cirincione, & Steadman, 1992; Norwood et al., 1992). Nonetheless, the results of the present study are not unparalleled. Both Boardman et al. (1996) and Steadman et al. (1983) found no relationship between seriousness of the index offence and the likelihood of acquittal.

The present study further suggests that the factors playing a role in the prediction of insanity acquittals differed between 1990 and 1994. More specifically, the planfulness of the index offence was related to insanity verdicts in 1990 but not in 1994, while presence of a psychotic disorder showed a reverse pattern. Given that Bill C-30 did not introduce any major substantive changes to the insanity standard, it is difficult to explain these results. However, one might hypothesize that changing the wording of the defence from *insanity* to *mental disorder* placed greater emphasis on psychiatric diagnoses in determining criminal responsibility.

The finding that insanity acquittees were more likely to have been diagnosed with a psychotic disorder than their unsuccessful counterparts is consistent with prior research (e.g., McGreevy et al., 1991). Specifically, Steadman et al. (1983) found that the best predictor of NGRI verdicts was clinicians' recommendations for the insanity defence and the major factor related to a clinical finding of insanity was a diagnosis of psychosis. Boardman et al. (1996) also found that insanity acquittees were more likely to have had past psychiatric diagnoses of schizophrenia, bipolar disorder, schizoaffective disorder or psychotic disorder and were more likely to have been diagnosed with schizophrenia or schizoaffective disorder at the time of the sanity evaluation. However, as stated by Ogloff et al. (1993, p. 174), "the mere fact that one has a psychotic disorder does not necessarily (or even usually) entail mental

nonresponsibility.” Thus, the trier of fact must consider a more comprehensive base of evidence in determining the extent to which the presence of a mental disorder has impacted the defendant’s cognitive capacity. It is at this point that offence characteristics, such as the planfulness and the bizarreness of the index offence, were hypothesized to play a role.

Although the planfulness of the index offence did not differentiate between successful and unsuccessful insanity pleas, it did make a significant contribution to the prediction of insanity verdicts. Specifically, the less planful the index offence, the greater the likelihood of an NGRI/NCRMD verdict. It appears that nonplanful index offences imply a lack of intent, increasing the likelihood that a defendant will fail to meet the mens rea criterion for a guilty verdict. The results are consistent with prior research showing that individuals acquitted by reason of insanity were less likely to have shown conventional criminal motivation, and made fewer attempts to avoid detection (Boardman et al., 1996).

Although the bizarreness of the index offence did not significantly contribute to the prediction of insanity verdicts nor differentiate between successful and unsuccessful insanity pleas, it appeared to function as hypothesized in relation to the dependent variable. More specifically, the highest proportion of NGRI/NCRMD verdicts tended to occur where the index offence was both highly bizarre and nonplanful (which, in itself, may be viewed as bizarre). As the present study did not include psychiatric evaluations on the issue of insanity it is impossible to determine whether offence characteristics such as bizarreness might play a more indirect role in insanity defence trials by increasing the likelihood of a psychiatric recommendation in favour of the defence.

In sum, the results of the archival study are consistent with Study 1, suggesting that the planfulness of the index offence and presence of a psychotic disorder are

related to insanity acquittals, while the bizarreness of the index offence does not contribute significantly to the prediction of NGRI/NCRMD verdicts.

## General Conclusions

In light of the criticism directed toward jurors in insanity defence trials and recent changes to the Canadian insanity standard, the present research investigated the impact of theoretically relevant and theoretically irrelevant factors on mock jurors' verdicts of insanity. The present research used a mock juror paradigm to investigate factors that potentially impact responsibility decisions in insanity defence trials in the first study, and, in a second study, obtained archival data from a forensic facility and the courts to determine the role these same factors play in predicting actual verdicts of insanity. The results of both studies indicate a strong effect for mental disorder. As compared to insanity evaluatees, insanity acquittees were more likely to have been diagnosed with or displayed symptoms of a psychotic disorder. Given that the presence of a mental disorder is key to the insanity defence, it is not surprising that this factor plays such a significant role in predicting verdicts of insanity. Nonetheless, the presence of a psychotic disorder is not, in and of itself, sufficient evidence upon which to base an insanity verdict. Triers of fact must determine whether the presence of a mental disorder "rendered the person incapable of appreciating the nature and quality of the act or omission or of knowing that it was wrong" (Section 16 of the Criminal Code). The present research offers partial support for the role of offence characteristics (especially the planfulness of the index offence) in assisting with this determination. As Morse (1978, p. 553) states, "a person will be considered truly crazy only if it is believed that the actor had little or no choice about whether to behave crazily." Thus, evidence of intention, motivation, and purposefulness, as might be gleaned from the level of planning of the offence, play a critical role in perceptions of "craziness" or nonresponsibility. In short, the present research suggests that jurors undertake a comprehensive and careful consideration of a number of legally relevant factors in

making determinations about criminal responsibility. However, there is limited evidence to suggest that changes in the insanity standard may have influenced the relative importance assigned to different factors in decisions about insanity. Specifically, since the introduction of Bill C-30, factors which explicitly relate to mental disorder (i.e., psychiatric diagnoses) appear to have played a larger role in determinations of criminal responsibility, while factors which are more indirectly linked to the issue of insanity (i.e., the planfulness of the index offence), appear to have lessened in significance. Given the complexity of decisions about criminal responsibility, the possibility that more subtle cues are now outweighed by an emphasis on psychiatric diagnoses, raises some concerns.

The low levels of confidence with which participants rendered insanity verdicts in combination with the almost exclusive use of the most restrictive disposition for acquittees imply both a fear of mentally disordered offenders and a desire to punish these persons for their criminal behaviour. Given that Bill C-30 lessened the severity of dispositions tied to the NCRMD defence, attitudes toward mentally ill offenders become particularly important. There is a potential for unreasonable fears about the premature release of insanity acquittees (Perlin, 1996), and the belief that mentally ill offenders are unpredictable and dangerous, to lead to a decrease in the number of successful insanity pleas. Thus, public education aimed at rebutting widely-held myths about the insanity defence must become a priority. To this end, dissemination of research such as that of Feder (1991), who found that mentally ill offenders recidivate no more often and for no more violent crimes than offenders from the general prison population, would be particularly useful.



### General Limitations and Directions for Future Research

As the present research made use of two very distinct methodologies, one might reasonably argue that they are, in essence, addressing somewhat different research questions. Perhaps most fundamentally, while the first study examined decisions about insanity made by mock jurors, the second study examined decisions made by a group comprising judges, juries, and lawyers. Further, while decision-makers in Study 1 rendered verdicts on the basis of a tightly controlled and limited amount of information, decision-makers in the second study were exposed to any number of unidentified factors, from length of remand to psychiatric evaluations. It is possible that the variables examined in the present study play only a minor role in the prediction of insanity verdicts. Nonetheless, despite inherent differences between laboratory and “real life” research, the two, very different, methodologies utilized in the present research yielded parallel results, offering further support to the conclusions drawn from these data.

Future research needs to address the generalizability of Study 1 to other stimuli (e.g., different offence types, mental disorders, manipulations), stimulus formats (e.g., videotaped trials) and subject populations (e.g., names drawn from a list of potential jurors). Conclusions drawn from the archival research would be strengthened through the inclusion of a number of additional factors including criminal and psychiatric history, length of remand, previous findings of incompetency, identity of the trier of fact, and the defendant's behaviour at the time of the trial. Including a second outcome measure, in the form of psychiatric recommendations, would allow one to examine the relationship between psychiatric opinions and court verdicts, as well as to explore alternative pathways leading to insanity verdicts. Finally, follow up research would usefully explore review board decisions regarding disposition in addition to the length of detention, and rates of recidivism and rehospitalization.

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## Appendix A

## Brief Crime Vignette with Bizarreness and Planfulness Manipulations

Standard opening paragraph Michael V. (injured party), age 43, worked as a mail carrier for the past 10 years in a neighbourhood adjacent to the urban center of a midwestern city. It was his custom to stop midday at McCafferty's Tavern, a local establishment, where he typically would have a hamburger and a beer for lunch. He would leave through the back door, by the kitchen, as it was the most convenient exit as he continued his walking route. On August 21, 1980, at 1:15 P.M., Michael V. was found lying unconscious in the alley behind the tavern. The hospital report indicated that Michael V. sustained a sharp blow to the back of the head which had knocked him unconscious.

Nonbizarre He also had three lacerations across his upper chest. Although he had lost a significant amount of blood by the time he arrived at the hospital, his recovery was complete.

Bizarre He also had three lacerations on his chest. The cuts had been made such that they formed an inverted triangle on his chest, connecting the navel and nipples. Although Michael had lost a significant amount of blood by the time he arrived at the hospital, his recovery was complete.

NonPlanful The defendant, Jeffrey J., age 24, a dishwasher at the tavern, was reported, according to eyewitness testimony, to have suddenly left the dishwashing counter shortly after the decedent had finished his lunch and paid his tab. The defendant had been working at cleaning up the lunch hour dishes, and apparently left the work station, leaving the water spigot running. At 1:30 P.M., the defendant was picked up two blocks from the tavern by a patrol car. Following arrest, he was found to have a five inch blood-stained carving knife in his possession. This knife, established as the assault weapon by blood-type matching and physical characteristics, had the defendant's fingerprints on the handle and blade. Testimony established that the knife was from the tavern's kitchen.

Planful The defendant, Jeffrey J., age 24, a dishwasher at the tavern, was reported by the manager to have called in sick that day for his 10:00 a.m. - 6:00 p.m. shift. At 1:30 P.M., the defendant was picked up two blocks from the tavern by a patrol car. Following arrest, he was found to have a five-inch blood-stained hunting knife in his possession. This knife, established as the assault weapon by blood-type matching and physical characteristics, was established to have been purchased by the defendant the previous day at a local pawn shop.

## Appendix B

## Psychiatric Report with Mental Disorder Manipulation

No Disorder: The defendant's social functioning is average, though he prefers to engage in quiet activities either alone or with his one close friend. He has recently begun to associate with his coworkers, who describe him as friendly, though a little withdrawn. He dated occasionally, having one long-term relationship between the ages of 20 and 22. His school report indicated an average record with no marked behaviour problems. The defendant's drug and alcohol use are minimal though he had a brief period of heavier drinking during adolescence, during which time he also experimented with marijuana. At the age of 20, he moved away from home and has supported himself through his employment at McCafferty's Tavern since that time. During the assessment his speech was normal in tone, volume and syntax, and he was cooperative with the examiners though not overly talkative. He appeared to understand and respond appropriately to all questions.

Obsessive-Compulsive Personality Disorder: The defendant has become increasingly socially isolated over the past few years. During his last years of high school he gradually withdrew from contact with his peers and his previously adequate school performance deteriorated. His teachers believed this to be a consequence of "an obsession with perfectionism." They described the defendant as being virtually incapable of completing tasks as he was unwilling to hand in anything that he believed to be less than perfect. He also had tremendous difficulty working with others unless they were willing to conform exactly to his way of doing things. As a consequence of these difficulties, he has not been able to hold a job for longer than two months. He carefully saves what little money he does make, living with his parents, so it will not be wasted on necessities. The defendant's room is full of worthless items which have accumulated over the past 8 years as he refuses to throw away anything. During the assessment his speech was normal in tone, volume and syntax, and he was cooperative with the examiners though he seemed somewhat rigid. He appeared to understand and respond appropriately to all questions though he occasionally digressed on the topic of work, expressing his frustration with his inefficient coworkers.

Schizophrenia: The defendant had been socially isolated for many years. During his senior year of high school he gradually withdrew from all contact with peers and his previously adequate school performance deteriorated severely. Since high school he has supported himself with menial jobs and periodic social assistance. He was frequently unkempt and disheveled in appearance. His speech had a tendency to be off topic and vague; often his reply to a question was only minimally relevant, the connection of ideas within his speech was impossible to follow, and the direction and purpose of his speech was therefore lost. He believed that others could hear his thoughts, and he reported that voices constantly commented on his behaviour, usually with a negative tone. He was convinced that a group of alien creatures were conspiring to take over the world and that they were beginning their takeover by shooting their "zylon rays" at his brain in an effort to control his every movement. Their plan was to eventually ship him off to their galaxy to study his brain and thereby to improve their techniques of mental control.



## Appendix C

## Standard NCRMD Jury Instructions as Presented

**Please read carefully:**

Members of the jury. You have heard the submissions of counsel for the Crown and the accused. They have agreed (in writing) that the accused did commit the act of assault as charged in the indictment. Thus the only question you must decide is whether or not the accused was mentally disordered to the extent necessary to be exempt from criminal responsibility for the offence of *Assault with a Weapon*.

The following is the law on the defence of mental disorder. Section 16 of the Criminal Code describes the defence of mental disorder in these words:

**16. (1) No person is criminally responsible for an act committed or an omission made while suffering from a mental disorder that rendered the person incapable of appreciating the nature and quality of the act or omission or of knowing that it was wrong.**

**(2) Every person is presumed not to suffer from a mental disorder so as to exempt from criminal responsibility by virtue of subsection (1), until the contrary is proved on the balance of the probabilities.**

As you can see, The Criminal Code is quite clear. It states that no person is criminally responsible for an offence if at the time of the offence he/she did not appreciate what he/she was doing or did not know that it was wrong.

The Criminal Code states that you must presume a person was not so mentally disordered at the time of the offence as to be exempt from criminal responsibility until the contrary is proved on a balance of probabilities.

Section 16 also gives you the legal definition of the defence of mental disorder. You must of course apply this legal definition; you are not permitted to apply your own definition of mental disorder.

As you will notice, Section 16 requires you to determine:

- 1) first, whether Jeffrey J. was suffering from a mental disorder at the time of the offence, and
- 2) second, whether the mental disorder was serious enough to render Jeffrey J. incapable of appreciating the nature and quality of his conduct or of knowing that it was wrong.

It is proper for you to know, in order to avoid any misapprehension on your part, that Jeffrey J. will not necessarily be set free if you find him not responsible on account of mental disorder. He will remain in custody until it is safe to release him. If necessary, he will receive treatment for his mental disorder. However, I must also advise you that the legal consequences of your verdict are not a factor you should take into account in arriving at your verdict. Your decision must be based solely on the evidence you have heard, the arguments of counsel, and the law I have given to you.

## Appendix D

## Form A - Responsibility Decisions

**Instructions:** Imagine that you are a juror on this case and you have just heard the evidence presented in court. You will be asked to deliberate (carefully examine and discuss all the facts of this case) with the members of your jury and reach a verdict (Guilty as Charged or NCRMD). Before you do this however, we would like to know which way you are **leaning** at this point in time (of course this is only a tentative response since deliberation may bring forth new arguments and ideas which will help you make a final decision).

So, before you take time to deliberate with the other members of the jury, please answer the following questions:

1. According to the formulation you read above, would you find the defendant, Jeffrey J. Not Criminally Responsible by Reason of Mental Disorder or Guilty of Assault with a Weapon. **Circle one.**

NCRMD

GUILTY

2. Right now, how confident do you feel in making this decision? [Indicate a number between 50% -100%, where 50% = chance and 100% = complete confidence].

\_\_\_\_\_ %

3. Answer *either* 3.1 or 3.2.

3.1. If you are leaning toward an **NCRMD** verdict, which disposition do you feel is most appropriate for the defendant? **Circle one.**

- a. Absolute discharge into community
- b. Discharge subject to conditions
- c. Detention in a psychiatric hospital

3.2. If you are leaning toward a **Guilty** verdict, which sentence do you feel is most appropriate for the defendant? **Circle one.**

- a. \$2000 fine
- b. \$2000 fine, 18 months imprisonment
- c. Imprisonment for five years

## Appendix E

## Attitudinal Measure

Indicate the degree to which you agree or disagree with the following statements using the scale below. Write the number of your choice in the blank to the left of each statement.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>STRONGLY</b>						<b>STRONGLY</b>
<b>DISAGREE</b>						<b>AGREE</b>

- \_\_\_\_\_ 1. It is immoral to criminally punish someone for something they did under the influence of irrational experiences over which they had no control.
- \_\_\_\_\_ 2. I believe that persons are responsible for their actions no matter what the extenuating circumstances.
- \_\_\_\_\_ 3. The insanity defence is sometimes justified.
- \_\_\_\_\_ 4. Persons who commit antisocial acts should be punished, liable to criminal sanctions, regardless of their degree of mental disturbance.
- \_\_\_\_\_ 5. The insanity defence is a necessary moral element in our criminal justice system.
- \_\_\_\_\_ 6. The insanity defence should be eliminated.
- \_\_\_\_\_ 7. People with mental illness, regardless of its severity, are equally blameworthy as non-mentally-ill persons as far as socially deviant behaviour is concerned.
- \_\_\_\_\_ 8. The issue of insanity should not be allowed as a complete defense to a charge.
- \_\_\_\_\_ 9. Punishment for antisocial behaviour should be sure and swift, with no exceptions.
- \_\_\_\_\_ 10. I believe that insane persons ought to receive punishment in addition to treatment when they commit antisocial acts.
- \_\_\_\_\_ 11. I believe that the insanity defence is a loophole in the law.
- \_\_\_\_\_ 12. Persons found not criminally responsible by reason of mental disorder should be held at least as long as those found guilty of similar criminal offenses.
- \_\_\_\_\_ 13. Persons found not criminally responsible by reason of mental disorder should be detained longer than those found guilty of criminal offenses.
- \_\_\_\_\_ 14. I think it is unreasonable to hold an individual found not criminally responsible by reason of mental disorder for a shorter period of time than if she/he had been found guilty.
- \_\_\_\_\_ 15. I object to the "not criminally responsible" aspect of how the insanity defense is worded.
- \_\_\_\_\_ 16. The issue of insanity is not relevant to the criminal responsibility of a person but it should be considered at the time of sentencing.
- \_\_\_\_\_ 17. There is nothing inconsistent about finding a severely mentally disturbed person guilty of a criminal charge.
- \_\_\_\_\_ 18. It is much too easy to be acquitted for a crime by reason of mental disorder.
- \_\_\_\_\_ 19. Most individuals found not criminally responsible by reason of mental disorder should have been found guilty for their crimes.

## Appendix F - Jury Study Information and Consent Form

**Nature of Participation** The present study is designed to explore a number of different legal issues including jury decision making and the insanity defence. Participation involves reading a short vignette describing a crime, a psychological assessment summary, and the insanity defence jury instructions. You will be asked to play the role of a juror and render a verdict and disposition for the case both individually and as a jury member. You will be also asked several other questions about what you have read and the decision you have reached. Finally you will complete a short questionnaire pertaining to legal issues. The entire study should take approximately 45 minutes to one hour.

This research is being conducted by Jocelyn Lymburner in the Department of Psychology at Simon Fraser University under the supervision of Dr. Ron Roesch. We and the University make every attempt to protect the interests, comfort, and safety of those who participate in research. Your participation is completely voluntary. If you choose to participate, you will receive 2% course credit. If you choose to participate and then change your mind, you may withdraw from the study at any time. Your decision about whether or not to participate will not affect your treatment in the Department of Psychology or at the University in any way.

Any information provided to us by you is confidential. No-one but the researchers who are part of this project will have access to the research information. Your responses will be kept in a secure location, filed using an arbitrary research code. Identifying information, such as the names and telephone numbers of participants, will be kept securely in a completely different location, and will be destroyed as soon as it is no longer needed. Any presentations or publications resulting from this study will be based on group data, not on individual cases, and will not reveal the identity of participants.

**Risks and Benefits** Though we have attempted to describe the crime in a nongraphic and nondetailed manner there is a possibility that some participants may find the description upsetting. Remember that you are free to withdraw from the study at any time without penalty.

If you complete the study, you will receive 2% course credit for your time. While the results are not likely to benefit you directly in any other way, they will help psychologists and courts to better understand the process of juror decision making in insanity defence trials.

I have read and understand the Jury Study Information Form, which includes a statement of the risks and benefits of participation. By signing this form, I give my consent freely and voluntarily to participate in this study.

If I want information concerning the results of the Study, I may contact the researchers, Dr. Ron Roesch and Jocelyn Lymburner, Department of Psychology, SFU, at 291-5868. I may register any complaint I might have about the Study with the researchers or with Dr. Christopher Webster, Chair of the Department of Psychology, SFU, at 291-3250.

NAME (please print): \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## Appendix G

## Bizarreness and Planfulness Rating Criteria

**Bizarreness and planfulness are to be rated on two separate 5 pt scales with:**

1	2	3	4	5
not planful/ not bizarre				highly planful/ highly bizarre

**The Crime Category should be used as your base line as opposed to “normal” behaviour. Thus, the severity of the crime is irrelevant.**

**Planfulness:**

1. Only behaviours which occur prior to the onset of the crime are relevant here. Awareness of one's actions, in and of itself, (i.e., the opportunity to reflect) is not evidence of planning.
2. Rate planfulness in light of the crime as some crimes will inherently require a greater degree of planning than others.
3. You are interested only in the degree of planning for the particular crime you are coding. Evidence of similar crimes in the past is, in itself, irrelevant. However, there may be instances in which a series of similar offences are indicative of premeditation (e.g., repeated harassment of same individual)

**Potential factors for consideration:**

- premeditation (e.g., prior statements to others about planning to commit offence)
- did the individual take steps so as not to be caught
- level of preparation (e.g., used weapon or other materials brought to scene)
- refrained until no witness was present
- evidence of co-conspirator
- staked or cased out scene or target before index offence
- chose specific victim
- chose specific site

**Bizarreness:**

Again, use the crime category as your baseline as opposed to normal behaviour.

**Potential factors for consideration and scoring guidelines:**

- For sexual assault consider: age of victim and the discrepancy between age of victim and age of offender:

Age of victim	0-5	=	2-3 pts
	6-10	=	1-2 pts
	11-14	=	0-1 pts

Adult	=	0 pts
Elderly	=	max: 3 pts

- no apparent motive/no instigating factors - 3 pts max. (consider material and psychological gains)
- a bizarre motive in the absence of a bizarre crime = max. of 3 pts
- lack of appropriate emotion or distress = max. 2 pts

## Appendix H

## Mental Disorder Classification Scheme

**Disorders classified as psychotic:**

Schizophrenia  
Schizoaffective Disorder  
Delusional Disorder  
Bipolar Mood Disorder  
Psychotic Disorder  
Drug-Induced Psychotic Episodes

**Disorders classified as non-psychotic:**

Delirium  
Adjustment Disorder  
Panic Disorder  
Mental Retardation  
Substance Abuse  
Paraphilias/Impulse Control Disorders  
Disassociative Disorders  
Personality Disorders

Dysthymia  
PTSD  
Dementia  
Depression

## Appendix I

## Offence Type Classification Schemes

**1) Violent vs. Non-violent**Offences classified as Violent:

Murder/Attempted Murder/Manslaughter	
Sexual Assault	
Assault	Criminal Harassment
Weapons offences	Kidnapping
Robbery	

Offences classified as Nonviolent:

Property	Mischief
Public Order/Nuisance	Breach
Drug Offences	Driving offences
Theft	Break and Entry
Possession of Stolen Property	

**2) Violent vs. Property vs. Miscellaneous**Offences classified as Property:

Theft
Break and Entry
Possession of Stolen Property
Arson
Mischief

Offences classified as Miscellaneous:

Public Order/Nuisance
Breach
Drug offences
Driving offences