

**FROM INSANITY TO MENTAL DISORDER:
AN EXPLORATION OF THE INSANITY DEFENCE IN
BRITISH COLUMBIA BEFORE AND AFTER BILL C-30**

by

Jennifer Ann Reiss

M.A., Simon Fraser University, 1990

**Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy**

in the Department

Psychology

© Jennifer Ann Reiss, 1997

SIMON FRASER UNIVERSITY

December, 1997

All rights reserved. This work may not be reproduced in whole or part, by photocopy or other means, without permission of the author.



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-25908-0

Canada

APPROVAL

Name: Jennifer Ann Reiss
Degree: Doctor of Philosophy (Psychology)
Title of Thesis: From Insanity to Mental Disorder:
An Exploration of the Insanity Defence in
British Columbia Before and After Bill C-30

Examining Committee:

Chair: Dr. Vito Modigliani

Dr. Ronald Roesch
Senior Supervisor
Professor

Dr. James Ogloff
Professor

Dr. William Glackman
Associate Professor

Dr. David Cox
Internal External Examiner
Associate Professor

Dr. Julio Arboleda-Florez
External Examiner
Professor
University of Calgary

Date Approved:

December 5, 1997

ABSTRACT

In 1992, changes to the Canadian insanity defence (Bill C-30) altered the wording of the standard, and also affected the larger scope of the plea in a manner that rendered it more lenient. The present study investigated the potential effects of these modifications by evaluating the files of all British Columbia insanity acquittees ($n=103$) who had some inpatient contact with the provincial forensic psychiatric facility between February 1, 1989 and January 31, 1995 inclusive. Data also were collected from the files of a random sample of individuals remanded to the same hospital over the same period for an assessment of mental status at the time of the alleged offence ($n=215$). As hypothesized, the frequency with which referrals were made for insanity assessments, the acquittal rate, and the number of psychiatric recommendations supporting a finding of not criminally responsible all increased subsequent to the enactment of Bill C-30. The demographics, and psychiatric and criminal histories of both insanity acquittees and remands did not change. Also as predicted, insanity acquittees had less lengthy criminal histories, longer-mental-health histories, and greater psychopathology associated with their index offences than did remands. An unexpected finding was that index crimes of insanity acquittees were more severe than those of remands after, but not before, Bill C-30. It was concluded that despite its increased use and success in British Columbia subsequent to Bill C-30's enactment, the insanity defence continues to be employed in an appropriate manner.

ACKNOWLEDGEMENTS

The enormous tasks of researching, analysing the data for, and writing this dissertation would not have been possible without the help of many people. I am indebted to my committee members: Ron Roesch for his help of both a pecuniary and non-pecuniary nature, and also for taking the time to read and comment upon drafts of this thesis long-distance from Italy; Jim Ogloff for going beyond the call of duty in undertaking the arrangements for my defence while Ron was out of the country; and Bill Glackman for providing not only help with statistics but also continued good humour, support, and patience, no matter how silly the question or how frantic the person asking it. Ray Koopman, though not on my thesis committee, took the time to solve a particularly difficult statistical problem, and then to explain, and re-explain, his solution until I could follow it (I think). Similarly, Joan Foster gave great advice regarding data entry and analysis (as usual), while Joan Wolfe helped to make this document presentable. Two of my fellow graduate students, namely Jocelyn Lymburner and Karen Whittemore, helped me to collect the data, while David Roesch took on the task of entering it all into the computer.

Notwithstanding all the invaluable assistance provided by those named above, I would not have been able to collect my data without access to the files at the Forensic Psychiatric Institute. Consequently, I would like to thank Derek Eaves for granting me

permission to mine those files. I also would like to acknowledge Linda Westfall and the rest of the staff at information services (medical records) who cheerfully welcomed me into their office even though I caused more work and less space (thanks Linda, Fran, Tara, Marcia, Lori, Shirley, Paola, Sherri, Rae, and *especially* Ludy!).

I feel that a part of this dissertation belongs to the members, past and present, of the thesis support group to which I belonged. The weekly meetings were a source of guidance, support, companionship, and sometimes anxiety or inspiration. Thank you Rebecca England, Jordan Hanley, Susan Turnbull, Angela Haig, Ross Robinson, and Alice Bush! I also would like to thank two other friends who provided support and advice, namely Susanne Schibler and Sandra Vermeulen.

Another part of this dissertation belongs to my family. My husband, Peter Elsaesser, who often sacrificed his own needs and wants "for the good of the thesis", offered moral support throughout this endeavor, remaining patient and uncomplaining despite my frequent absences and unpredictable moods. My son Braeden was (and is) an always cherished (though sometimes unwelcome) source of distraction who helped me to remember the real priorities in life. My parents, Nellie and Frank Reiss, have continued to believe in me (though, I think, not always that I would get it done). I love you all. I would also like to thank my sister-in-law, Angela Beers, for all the planned and unplanned babysitting, and my extended family in Vancouver, Winnipeg, and Merritt for love, support, and food.

The final part of this dissertation belongs to me. Wheee! It's done!

TABLE OF CONTENTS

APPROVAL	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
INTRODUCTION.....	1
Evolution of the Insanity Defence Standard?.....	2
Insanity Defence Standards in the United States	7
Insanity Defence Standards in Canada	13
Effects and Effectiveness of Changing Insanity Defence Standards	21
The Logic Behind the Present Research.....	47
Hypotheses	50

METHOD	58
Setting	58
Files Evaluated	59
Procedure	60
RESULTS	67
DISCUSSION	92
REFERENCES	125
Appendix A Coding Form for Insanity Acquittees.....	131
Appendix B Coding Form for Remands	146
Appendix C Reliability Data	156

LIST OF TABLES

Table 1:	Demographics of Insanity Acquittees	72
Table 2:	Offence Psychopathology and Severity of Index Offences of Insanity Acquittees	74
Table 3:	Psychiatric and Criminal Histories of Insanity Acquittees	75
Table 4:	Demographics of Remands	77
Table 5:	Psychiatric and Criminal Histories of Remands.....	78
Table 6:	Psychiatric Circumstances Surrounding Index Crime.....	79
Table 7:	Severity of Remands' Index Offences	80
Table 8:	Index Crimes of Acquittees and Remands	82
Table 9:	Prior Convictions of Acquittees and Remands.....	83
Table 10:	Prior Charges of Acquittees and Remands	83
Table 11:	Psychiatric Histories of All Acquittees and Remands.....	85
Table 12:	Psychiatric Histories of NGRIs and Pre-Bill C-30 Remands	86
Table 13:	Psychiatric Histories of NCRMDs and Post-Bill C-30 Remands	87
Table 14:	Index Offence Psychopathology of All Acquittees and Remands	88
Table 15:	Offence Psychopathology of NGRIs and Pre-Bill C-30 Remands	89
Table 16:	Offence Psychopathology of NCRMDs and Post-Bill C-30 Remands	90
Table 17:	Reliability Data for Insanity Acquittees	156
Table 18:	Reliability Data for Remands	157

LIST OF FIGURES

Figure 1: Model Depicting Plea Rates for the Years 1989 to 1995.....	71
--	----

INTRODUCTION

In Canada, the basis for the criminal justice system is that people are held accountable for their illegal actions. However, a provision is made for individuals who are deemed to have a mental illness that affects their ability to form criminal intent. This provision is commonly known as the insanity defence. In 1992, amendments to the *Criminal Code of Canada* (set forth in Bill C-30) came into effect, changing the verdict of insanity from "not guilty by reason of insanity" (NGRI) to "not criminally responsible on account of mental disorder" (NCRMD) (Greenberg & Gratzer, 1994; Verdun-Jones, 1994). It is of interest to know whether, subsequent to this change, there was a concomitant change in the demographics, and the mental health and criminal histories, of those individuals who successfully pleaded insanity. It is also of interest to know whether the change in definition affected the frequency of remands, as well as to investigate such factors, if any, as might distinguish those remanded defendants whose insanity pleas were successful from those whose defence of insanity was unsuccessful. However, before these issues are addressed, it is important to gain some understanding of the evolution of the insanity defence itself. Therefore, a brief history of the insanity defence first will be traced,¹ followed by a discussion of research addressing the effects of changes to insanity defence standards on acquittal rates and legal decision making.

¹ Much of what follows appeared in similar form in my Master's thesis (Reiss, 1989).

Evolution of the Insanity Defence Standard

At the core of the defence of insanity are the linked concepts that a defendant's behaviour is punishable only when (a) he or she has committed a criminal act (*actus reus*) and (b) he or she understood the act to be criminal but nevertheless freely chose to do it (*mens rea* or criminal intent) (Golding & Roesch, 1987). The notion of exempting an individual from responsibility, and hence punishment, for crimes committed while insane has been discussed by British jurists since at least as early as the 10th century (Finkel, 1988), and the roots of the concept are even older (for a more complete treatment of the early history of the insanity defence, see Hermann, 1983; Finkel, 1988; Walker, 1985). Although Walker (1985) cites a 16th century English case in which a murderer was allowed to "go free" because he was "of unsound mind" (p. 27) at the time of his offence, British case law dealing specifically with the insanity plea customarily is dated to the 18th century (Finkel, 1988).

Rex v. Arnold

An early trial that was material in establishing a standard of criminal responsibility in British law was that of Edward Arnold in 1724 (Walker, 1985). In *Rex v. Arnold*, in which Arnold unsuccessfully pleaded NGR1, the judge's instructions to the jury provided authority for the proposition (often called the "wild-beast test" of insanity) that in order for a defendant to be found not responsible on account of madness he or she must be totally insane (Walker, 1985). In other words, both awareness and perceptions must be

impaired to such a degree that a defendant would, for example, not have known that he or she was firing a gun or, if aware of his or her actions, believed that he or she was shooting at a tree rather than at a person (Finkel, 1988).

Rex v. Ferrers

The 1760 trial of *Rex v. Ferrers* solidified the notion that the defendant must demonstrate complete insanity in order to be exonerated from blame (Hermann, 1983).

Ferrers' lawyers (using a formulation that presages the right and wrong test developed half a century later) unsuccessfully attempted to argue that although Ferrers appeared to know what he was doing when he planned his crime, he nevertheless lacked the ability to tell the difference between good and evil on a moral level (Hermann, 1983).

From Arnold's and Ferrers' convictions, it might appear that the insanity defence hardly ever was successful in Britain, at least during the 18th century. To the contrary, according to Walker (1985), throughout the 1700s the issue of insanity was raised at trial in at least 100 cases, and in just over 50% of them achieved exculpation for the defendant. However, none of these cases set a precedent (Walker, 1985), perhaps because they were not contested, but more likely because they did not attract public attention and/or incur notoriety.

Rex v. Hadfield

The ruling in the case of *Rex v. Hadfield*, which was tried in 1800, also failed to establish precedent in English law, although it later appears to have influenced American

legal thinking (Hermann, 1983).

According to Finkel (1988), Hadfield, who was charged with treason arising from an attempted regicide, suffered from delusions, but clearly both planned his crime and knew that his actions were illegal. At trial, Hadfield's lawyer argued for a conception of mental illness that did not follow the total lunacy criterion necessary to meet the wild-beast test, suggesting instead that Hadfield's delusions rendered him unable to resist his impulses (Finkel, 1988). That defence succeeded, and Hadfield was acquitted, which represents an anomaly in British case law development (Simon, 1983). In effect, a "new insanity standard [was created] by divorcing the issue of insanity from the ability to distinguish good from evil, and by eliminating the requirement that a defendant be deprived of all mental faculty" (Ogloff, Schweighoffer, Turnbull, & Whittemore, 1992, p. 172). Also of note is that *Rex v. Hadfield* likely was the first insanity trial at which the jury gave a reason for the verdict rendered, that is, explained that the defendant was not guilty by reason of, or due to, insanity (Moran, 1985).

Finally, the case is important because, before *Hadfield*, defendants found not guilty by reason of insanity were released or, if considered dangerous, were civilly committed under a separate process (Moran, 1985). However, following Hadfield's acquittal, concern was expressed that he should not be free to roam the streets (Moran, 1985). Consequently, a Bill was created (and made retroactive to include Hadfield) that established the procedure of automatically, involuntarily, and indefinitely committing the defendant to a mental institution following a finding of NGRI (Finkel, 1988; Moran,

1985).

Rex v. Bellingham

The case of *Rex v. Bellingham*, in 1812, introduced the right and wrong test of insanity. The right-wrong test holds that if the defendant was sufficiently in possession of his or her reason to differentiate between good and evil at the time that he or she committed the offence, then he or she should be found guilty (Rogers, 1986). However, this standard is not generally viewed as having been established until the trial of Daniel McNaughtan².

The McNaughtan Rules

The landmark case in the formulation of an insanity defence standard was that of Daniel McNaughtan, in 1843. McNaughtan set out to murder Sir Robert Peel, the Prime Minister of England but, due to a case of mistaken identity, instead killed the Prime Minister's secretary, Edward Drummond (Moran, 1985). At trial, McNaughtan's defence counsel argued, along the same lines as *Hadfield*, that McNaughtan suffered from delusions that rendered him partially insane and that he thus was unable to resist undertaking the actions for which he was charged (Finkel, 1988). The prosecution agreed with the defence that McNaughtan was mentally ill, but contended that he did not fit the definition of insanity found in the wild beast test, that is, he was not totally mad (Finkel, 1988). Nevertheless, McNaughtan was found not guilty by reason of insanity and spent the

² See Moran (1981, pp. xi-xiii) for an explanation for and justification of this spelling.

rest of his life in a mental institution (Moran, 1985). Royalty, politicians, and members of the public alike had trouble understanding how McNaughtan could have been exempted from punishment (Finkel, 1988). Consequently, an inquiry was held in which the 15 judges on the Queen's bench were asked to provide answers to several questions relating to the defence of insanity. It is these answers that comprise what have come to be known as the *McNaughtan* rules (Quen, 1983). The *McNaughtan* standard holds that:

1. The jurors ought to be told that every man is presumed to be sane, and to possess a sufficient degree of reason to be responsible for his crimes, until the contrary be proved to their satisfaction (*R. v. McNaughtan*, 1843).
2. To establish a defence on the ground of insanity, it must be clearly proved that at the time of committing the act the party 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 as not to know that what he was doing was wrong (*R. v. McNaughtan*, 1843).
3. A party labouring under a partial delusion must be considered in the same situation, as to responsibility, as if the facts, in respect to which the delusion exists, were real" (*R. v. McNaughtan*, 1843).

Thus the *McNaughtan* Rules focus on distortions of thought rather than volitional factors, thereby establishing a purely cognitive standard (Finkel & Handley, 1989). It is of interest that, had McNaughtan been tried following the rules that bear his name, he would almost certainly have been found guilty (Finkel, 1988).

The significant contribution of the *McNaughtan* rules to the development of British law is their clarification of the right and wrong standard. Thus, according to *McNaughtan*, "understanding" relates not to moral judgement in the abstract but rather to knowledge of right and wrong with respect to the specific act with which the defendant is charged (Hermann, 1983). Despite being considered by many (e.g., Quen, 1983) to be

overly inflexible and stringent, by 1951 the *McNaughtan* rules had been adopted by most federal and state courts in the United States (Simon, 1983). Similarly, when Canada seceded from Britain and entered confederation in 1867, the *McNaughtan* rules also were adopted as the Canadian standard in insanity defence cases (Verdun-Jones, 1979). In England, the *McNaughtan* rules continue to be employed and have undergone little modification since their inception (Simon & Aaronson, 1988). In the United States and in Canada, the development of the insanity defence since *McNaughtan* has followed somewhat different courses and so its subsequent history in these two countries will, henceforth, be traced separately.

Insanity Defence Standards in the United States

Most states of the union imported and adopted the *McNaughtan* rules soon after their inception in England (Dix, 1984), and many maintain the *McNaughtan* standard, in one form or another, to this day (Ogloff et al., 1992). Nevertheless, dissatisfaction with the rigidity of the standard prompted some states to experiment with alternate insanity defence formulations, and one state, New Hampshire, never accepted *McNaughtan*, preferring instead to implement an original test of insanity (Simon, 1983).

The New Hampshire Standard

New Hampshire's standard, based on the Hadfield case of 1800 (Simon, 1967), first was formulated in 1869 in *State v. Pike* (Simon, 1983). Presaging the Durham or product rule by almost 100 years (Simon, 1983), the New Hampshire standard states that

(a) the defendant should be found NGRI if his or her criminal act was the product of mental illness, and (b) it is the jury, and not the court, that must determine what constitutes insanity (Rappeport, 1992; Rogers, 1986). The standard was reaffirmed two years later, in *State v. Jones*, and has remained the law in New Hampshire ever since (Simon, 1983). Other states, uninfluenced by New Hampshire's experiences, attempted to broaden the *McNaughtan* rules by adding to them a standard often referred to as the Irresistible Impulse test.

The Irresistible Impulse Standard

The main concept underlying the irresistible impulse standard is that an individual may understand that his or her actions are culpable, but may nevertheless be unable, due to mental illness, to refrain from engaging in them (Weiner, 1985). At the same time, behaviours arising from affective states, such as rage or envy, are not excused under the standard, unless the emotions themselves are the product of a mental disorder (Rogers, 1986). Thus the standard holds that a defendant may be exculpated should mental illness be determined to have affected either the volitional or the cognitive components of his or her behaviour (Hermann, 1983). Opponents of the standard have argued that a separate test of volition is unnecessary, since will cannot be impaired without reason (and hence the knowledge of right and wrong) also being affected (Hermann, 1983). The difficulty of distinguishing between impulses that were irresistible and those that were not resisted also has been pointed out (Rogers, 1986).

The Durham Standard or Product Rule

Due to increasing dissatisfaction with the *McNaughtan* Rules, even when supplemented by the Irresistible Impulse standard, the District of Columbia set out, in 1954, to create a broader test of insanity (Weiner, 1985). Based on a reformulation of the New Hampshire standard, that places emphasis on the link between mental illness and the criminal act committed (Hermann, 1983; Rapoport, 1992), the *Durham* rule states that "an accused is not criminally responsible if his unlawful act was the product of a mental disease or mental defect" (*Durham v. United States*, 1954, pp. 874-875). Disease is defined as a "condition which is capable of either improving or deteriorating", while defect is described as a "condition which is not considered capable of either improving or deteriorating and which may be either congenital, or the result of injury, or the residual effect of a physical or mental disease" (p. 875).

The goal of the Durham standard was to encourage expert testimony from mental health professionals, in order to further define mental disease or defect (Weiner, 1985). It was hoped that psychiatric testimony phrased in conclusory terms would be discouraged, thereby enabling the jury to decide, based on comprehensive and comprehensible descriptions of mental disorder, whether the act in question was or was not caused by the presence of a mental illness (Bazelon, 1974). Unfortunately, this new standard also was not devoid of problems, principal among which being that (a) psychiatrists continued to present conclusory evidence thus usurping the province of the jury, (b) the standard did not provide enough structure, and relatedly (c) the terms "product", "mental disease", and

"mental defect" were not given precise definitions (Hermann, 1983). Attempts to clarify the terms in later decisions did not prove successful. Consequently, the Product Rule was overturned in *United States v. Brawner* (1972) in favour of the standard developed by the American Law Institute (Rogers, 1986).

American Law Institute (ALI) Standard

The American Law Institute (ALI) standard, set forth in section 4.01 of the Model Penal Code, was the result of a nine-year-long study of criminal responsibility undertaken by members of the legal and medical communities (Simon & Aaronson, 1988). The standard reads:

A person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either to appreciate the criminality (wrongfulness) of his conduct or to conform his conduct to the requirements of law.

As used in the Article, the terms 'mental disease or defect' do not include an abnormality manifested only by repeated criminal or otherwise anti-social conduct (Model Penal Code, 1962 cited in Weiner, 1985, pp. 10-11).

The ALI approach bears a strong resemblance to the combined McNaughtan-Irresistible Impulse standard, incorporating both a cognitive (lacks capacity to appreciate the wrongfulness of actions) and a volitional (cannot conform conduct to requirements of law) component (Rappeport, 1992). However, three changes in vocabulary are of note. First, the defendant need demonstrate only "substantial" impairment in understanding the import of his or her behaviour at the time that he or she committed the offence, which is broader than the McNaughtan requirement of total incapacity (Weiner, 1985). Second, use of the term wrongfulness opens the door to the consideration of both legal and moral

wrong (Hermann, 1983). Third, the substitution of "appreciate" for "know" in the phrase "lacks capacity to appreciate the wrongfulness of his conduct" deepens the understanding required of the accused before a plea of insanity can be rejected based on the finding that the defendant possessed *mens rea* (Simon & Aaronson, 1988). Thus the ALI standard appears to be a more liberal standard than those that preceded it.

The Model Penal Code insanity standard was favourably received at both the federal and state levels and, by 1980, all federal and at least half the state courts were employing the ALI formulation, albeit in modified form in some jurisdictions (Simon & Aaronson, 1988). However, with the attempted assassination of President Ronald Reagan in 1981, and the attendant furor raised by members of the press, the public, and the White House alike when the would-be assassin was adjudicated NGRI, alterations intended to curtail the use of the insanity plea were introduced (Dix, 1984; Simon & Aaronson, 1988). One of these, the Insanity Defence Reform Act, passed by Congress in 1984, abolished the ALI standard, replacing it with a more rigid standard for defendants being tried in federal court (Simon & Aaronson, 1988).

The Insanity Defence Reform Act

The test of insanity mandated in subsection (a) of the Insanity Defence Reform Act is reminiscent of a stringently interpreted version of the M'Naughtan rules. It holds that:

It is an affirmative defense to a prosecution under any Federal statute that, at the time of the commission of the acts constituting the offence, the defendant, as a result of a severe mental disease or defect, was unable to appreciate the nature and quality or the wrongfulness of his acts. Mental disease or defect does not otherwise constitute a defense (cited in Simon & Aaronson, 1988, p.49).

The reformed insanity standard thus eliminates the volitional component that was present in the ALI formulation (Finkel, 1989; Finkel & Fulero, 1992; Rapoport, 1992), and resurrects the view that lack of understanding, with respect to the nature and quality or-wrongfulness of the act committed, must be total (Simon & Aaronson, 1988). Moreover, the requirement that the mental disease or defect suffered by the defendant be "severe" (Insanity Defence Work Group, 1983), presumably tightens the range of mental disorders deemed admissible to those pleading insanity in the federal court system.

The Insanity Defence Reform Act did not mandate a standard to be implemented at the state court level. Consequently, in state courts standards such as M'Naghten and ALI may still be used, although most states employing the latter modified it to render it more rigorous (Rapoport, 1992). At least two states (Idaho and Montana), responded to the outcome of the Hinckley case by abolishing the insanity defence completely (Simon & Aaronson, 1988), while others introduced an alternative verdict entitled Guilty but Mentally Ill (GBMI) (Finkel, 1990).

Guilty but Mentally Ill (GBMI)

The GBMI option first was adopted in Michigan in 1975, but was introduced in the 12 other states that offer it only following Hinckley's acquittal (Bumby, 1993; Finkel, 1990; Simon & Aaronson, 1988). The GBMI verdict is intended to cut a middle ground between a finding of guilt and one of NGRI. It may be applied to people who were mentally ill at the time they committed their crime but who do not meet the standard for being found NGRI, purportedly allowing for both punishment and treatment (Simon &

Aaronson, 1988). As Savitsky and Lindblom (1986) point out, the main difference between a verdict of NGRI and one of GBMI is that with the latter finding defendants are given a specified sentence and are not released before its expiration, even if their symptoms of mental illness have abated. Each state's statute sets out the criteria for determining the differences between mental illness and legal insanity (Simon & Aaronson, 1988). There has been on-going controversy surrounding both the effect and the effectiveness of the GBMI plea (see Bumby, 1993 for a summary of findings).

As Rogers (1986) commented, in the United States attitudes toward the insanity plea, and consequently the standards of criminal responsibility themselves, over time have alternated between tolerance and restrictiveness. It is also of note that changes have occurred both as the result of the progression of legal history and due to explicit discontent with the outcome of particular cases. Moreover, in America the distinctions between standards vary not only from one period of time to the next, but also across states and/or jurisdictions (see Simon & Aaronson, 1988 for a list of the various insanity standards, verdict forms, and burdens of proof in use across the 50 States). The situation in Canada, however, is somewhat different despite the geographic and social proximity of the two countries.

Insanity Defence Standards in Canada

The insanity standard adopted in Canada, upon confederation in 1867, was essentially identical to the *McNaughtan* Rules employed in England at the time (Verdun-

Jones, 1979). Furthermore, according to Verdun-Jones (1979), the few Canadian insanity cases reported during the 19th century, the most famous being that of Louis Riel who was charged with treason for leading the Metis rebellion of 1885 (see Perr, 1992a,b), appear to have employed a very rigid interpretation of the *McNaughtan* Rules, requiring the defendant to have been totally mad at the time the offence was committed. However, the possible existence of unreported cases, in which the rules were applied with more flexibility, also has been suggested (Verdun-Jones, 1979).

Enactment of the Criminal Code

Perhaps surprisingly, considering the case law alluded to above, when Canada enacted a criminal code (which took effect July 1, 1893), the provisions for a defence of insanity followed a slightly *modified* version of the *McNaughtan* Rules (Verdun-Jones, 1979). Section 16 (subsections 1 to 4) of the Criminal Code of Canada 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 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.

The modifications to *McNaughtan* were important in that they, at least potentially,

broadened the scope of the standard. First, the Canadian standard included natural imbecility as grounds for exculpation whereas the British code did not (Verdun-Jones, 1979). Second, while the *McNaughtan* Rules referred only to possessing "knowledge" of the nature and quality of an act, the Canadian code made reference to having an "appreciation" of the nature and quality of an act or omission (Verdun-Jones, 1979). Theoretically, the term "appreciate" implies the need for a greater depth of understanding, on the part of the accused at the time the crime was committed, than the word "know", thereby increasing the applicability of the defence. However, despite the differences between the wording of the Canadian insanity standard and that put forth in *McNaughtan*, a study of case law between 1893 and 1953 (the McRuer Report), revealed that, in many cases, the Canadian standard was applied as if it were exactly the same as *McNaughtan* (Verdun-Jones, 1979). Although, subsequent to the McRuer Report, more emphasis was placed on the distinction between the words "know" and "appreciate", into the late 1970's there still existed cases distinguished by their reliance on the old *McNaughtan* Rules rather than on the Canadian Code test of insanity (see Milliken, 1985 for examples).

Eventually, attention was directed toward new formulations of the term "appreciate" (Orchard, 1984). For example, as of 1980 it became clear, in the cases of *R v. Barnier* and *Cooper v. the Queen* (see Verdun-Jones, 1979), that "know" and "appreciate" were no longer viewed as synonyms by the Supreme Court of Canada. On the contrary, in *Barnier*, "know" was described as relating to the awareness of reception of information only, while appreciate was seen as indicating that some analysis of the information

received had occurred (see Verdun-Jones, 1989). Unfortunately, these liberal interpretations of the term "appreciate" were offset, somewhat, by the Supreme Court's construal of the phrase "nature and quality of an act or omission" to mean "the physical consequences of an act or omission" (see the discussion of the *Kjeldsen* case in Verdun-Jones, 1989, p. 198). Thus Verdun-Jones (1989) commented that interpretations of section 16.2 (of the Canadian Criminal Code) as a whole were fairly restrictive, despite the trend toward a relaxed definition of the term "appreciate" contained within that section.

Another instance in which the Canadian criminal justice system followed the lead provided by England, at least until recently, involves the definition of "wrong". British law defines wrong to mean legally wrong, although the word elsewhere (e.g., Australia, see Verdun-Jones, 1989) has been interpreted to encompass both legal and moral wrongfulness. Canada, until a 1990 ruling by the Supreme Court, had maintained the strict definition of legal wrongfulness advocated in Britain (Orchard, 1984; Verdun-Jones, 1989, 1994). However, in *Chaulk v. the Queen* the interpretation of "wrong" was broadened to mean morally as well as legally wrong (Davis, 1992; Verdun-Jones, 1994; Wilson, 1992). This change potentially increased the number of mentally disordered offenders for whom a plea of insanity could be successful, as the door was now open to individuals who "even though they knew that their actions were contrary to the law, nevertheless firmly believed, for example, that they were acting on divine instructions and, therefore, would earn the moral approbation of their fellow citizens for their conduct" (Verdun-Jones, 1994, p. 185).

Changes to the Canadian Insanity Standard

While the *Chaulk* ruling potentially broadened the applicability of the insanity defence, a landmark case, heard by the Supreme Court of Canada in 1991, led to significant changes in insanity defence procedures. The defendant in the case, Owen Swain, had been psychotic when he committed the crime with which he was charged. However, following treatment, his mental condition improved to the point that he was living in the community prior to his case coming to trial. At trial the insanity defence successfully was raised, by the Crown, over the protestations of Swain's defence lawyer, and Swain was automatically committed to a mental institution (Swaminath, Norris, Komer, & Sidhu, 1993). In *Regina v. Swain*, it was found that the practice of automatically incarcerating NGRI acquittees conflicted with rights delineated in the Canadian Charter of Rights and Freedoms (Gelinas, 1994; Swaminath et al., 1993; Verdun-Jones, 1994; Wilson, 1992). Following *Swain*, legislators were given six months (subsequently extended) in which to modify the Criminal Code with respect to this issue (Greenberg & Gratzner, 1994; Verdun-Jones, 1994; Wilson, 1992). The Criminal Code amendments came into effect on February 4, 1992 and changed the verdict of "not guilty by reason of insanity" (NGRI) to "not criminally responsible on account of mental disorder" (NCRMD) (Davis 1992; Swaminath et. al, 1993; Verdun-Jones, 1994; Wilson, 1992). Section 16 of the Criminal Code now reads:

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 be exempt from criminal responsibility by virtue of subsection (1), until the contrary is proved on the balance of probabilities.

(3) The burden of proof that an accused was suffering from a mental disorder so as to be exempt from criminal responsibility is on the party that raises the issue.

The main change effected in Section 16 is the replacement of "insanity" with the words "mental disorder", although the definition of mental disorder as "a disease of the mind" (see Section 2 of the Criminal Code) serves to preserve "much of the jurisprudence associated with the 'old' insanity defence" (Verdun-Jones, 1994, p. 185). However, the amendments have wrought substantial changes to procedural issues surrounding the insanity defence, most notably with respect to the raising of the insanity defence at trial, the disposition of insanity acquittees, and potentially, the length of time that insanity acquittees are detained. It is noteworthy that although there had been attempts to reform the insanity defence prior to *Swain*, it is quite possible that these efforts would not have succeeded had Swain's appeal not been successful (Wilson, 1992).

As alluded to above, prior to *Swain*, individuals found NGRI were automatically and indeterminately committed to a mental hospital, and decisions regarding their release were made by the provincial governments (Gelinas, 1994; Hoyer, Eaves, & Enright, 1995; Verdun-Jones, 1994; Wilson, 1992). Moreover, the issue of insanity could be introduced at trial by the defence, the prosecution, or the judge (Greenberg & Gratzner, 1994).


However, subsequent to the Criminal Code amendments prompted by *Swain*, only the defence continues to be able to raise the issue of insanity at any time during the trial, while the prosecution may raise the issue if the defence calls into question the defendant's mental

state (Verdun-Jones, 1994) or after the defendant has been found guilty but before he or she is sentenced (Greenberg & Gratzer, 1994; Wilson, 1992). Further, as previously mentioned, prior to *Swain*, an acquittal by reason of insanity resulted in automatic detention (Greenberg & Gratzer, 1994; Verdun-Jones, 1994; Wilson, 1992). Currently however, following an NCRMD ruling one of three dispositions is possible, namely: (a) absolute discharge, (b) discharge to the community with conditions, or (c) detention in a psychiatric hospital (Gelinias, 1994; Swaminath et al., 1993; Verdun-Jones, 1994; Wilson, 1992). Moreover, while the court may render the initial disposition, the disposition also may be made by a provincial review board (Greenberg & Gratzer, 1994; Swaminath et. al, 1993; Wilson, 1992). In either case, it is the responsibility of the review board to oversee, and annually review, the progress and eventual release of an individual not absolutely discharged (Gelinias, 1994; Verdun-Jones, 1994; Wilson, 1992). Thus the decision to release an individual from custody is no longer under the purview of a political functionary.

Although not yet law, the Criminal Code amendments also made provisions for a limit, or "cap", to be placed on the number of years an individual could be held in custody (Gelinias, 1994; Greenberg & Gratzer, 1994; Verdun-Jones, 1994; Wilson, 1992). The cap sets detention at no longer than the maximum number of years a defendant would serve in prison had he or she been convicted of the crime with which he or she was charged (Gelinias, 1994; Greenberg & Gratzer, 1994; Verdun-Jones, 1994; Wilson, 1992). This means that, following an NCRMD finding, not only would commitment no longer be

automatic, but, in theory, it also no longer would be indeterminate. However, as noted by Verdun-Jones (1994), since the maximum sentence for crimes such as murder is 25 years, a defendant could still potentially be incarcerated for a very long time. Furthermore, since insanity acquittees do not plea bargain their charges, and since many criminals are not given the maximum sentence for their crimes, a cap could still allow insanity defence acquittees to be held longer than they would have been had they been found guilty (Verdun-Jones, 1994). Moreover, a provision entitled the "dangerously mentally disordered accused" provision, also not yet proclaimed, allows for a defendant found NCRMD and considered a danger to others to be detained for life, which effectively circumvents the capping regulations (Gelinias, 1994; Swaminath, et al., 1993; Wilson, 1992). Nevertheless, and despite potential limitations, the new provisions appear to make raising a plea of NCRMD more attractive, since the consequences of being found NCRMD are less negative than they were for being found NGRI (Davis, 1992). This has led at least one set of authors (Greenberg & Gratzler, 1994) to comment that the new provisions are "expected to create an increased demand for forensic services" (p. 8).

It is clear that the evolution of the insanity defence in Canada has proceeded with fewer variations and modifications than in the United States. Several researchers (e.g., Blau & Pasewark, 1994; Roberts, Golding, & Fincham, 1987) have remarked that, in the United States, insanity defence reform often is enacted to assuage the public's and/or politicians' negative opinions, following a notorious trial (e.g., *Hinckley*), rather than as the result of empirical documentation. In Canada, the situation is different in that the plea



remained relatively unchanged from its inception until 1992 (Arboleda-Florez, Crisanti, & Holley, 1995). Further, the changes implemented in 1992 resulted from a supreme court challenge and likely served to increase, rather than decrease, the attractiveness of the defence, at least for those who may want to raise it. Regardless of the reasons for change, the question remains as to the effects, if any, of changes to insanity defence procedures on verdicts, and on the types of individuals who raise and are successful with an insanity defence.

Effects and Effectiveness of Changing Insanity Defence Standards

The logic behind having an insanity defence standard is that it is supposed to guide or instruct the decisions of triers of fact (judges, juries) rendering verdicts in cases in which the insanity defence has been raised (Finkel, 1989). In other words, the standard should provide some help in determining whether or not particular defendants should be held responsible for their actions. It has been the presumption of administrators, especially in the United States, that changing the wording of the standard (so as to make it more or less stringent) will have an effect on the number of NGRI verdicts returned (Finkel & Fulero, 1992). In the research literature, the potential impact of varying the insanity defence standard on findings of insanity has been explored in two ways, namely (a) by employing experimental analogues, and (b) by using archival or naturalistic methods (Ogloff et al., 1992).

Experimental Analogue Studies

Studies classified as experimental analogues involve the use of participants, usually mock jurors, but sometimes mental health professionals, who are asked to come to a decision about a defendant's culpability in a simulated and/or hypothetical case. The effect of manipulating independent variables such as the type of insanity standard employed, the degree to which the defendant appears to be mentally ill, and the burden or standard of proof, on the dependent variable (verdict) is then assessed (Blau & Pasewark, 1994).

The advantages of this type of study include the comparative ease with which data can be collected (Blau & Pasewark, 1994) and the degree of control that can be maintained over the data (e.g., selecting one particular variable for study while eliminating potential confounds) (Blau & Pasewark, 1994; Ogloff et al., 1992). The major disadvantage is a potential lack of ecological validity that stems from two sources. First, the mock jury itself often does not approximate real juries due to such factors as (a) the mock juror rendering a verdict alone (i.e., without deliberating with other jurors), (b) the ubiquitous use of university students as subjects in this type of research, and (c) mock jurors receiving less detail than would have been provided in an actual trial (Blau & Pasewark, 1994). Second, the use of a jury may not reflect what actually happens in insanity trials (Sales & Hafemeister, 1984), as most cases involving an insanity defence are plea-bargained, settled because both defence and prosecution agree on the plea, or tried by judge alone (Blau & Pasewark, 1994; McGreevy, Steadman, & Callahan, 1991).

Sales and Hafemeister (1984) comment, further, that how jurors and judges

interpret an insanity standard may be immaterial given research (e.g., Smith & Hall, 1982; Steadman, Keitner, Braff, & Arvanites, 1983; and indirectly Wettstein, Mulvey, & Rogers, 1991) suggesting that it is the forensic psychiatrist's recommendation regarding insanity that best predicts whether or not a defendant is in fact relieved of criminal responsibility. Another problem arises in that mock jurors, and even forensic mental health workers, do not appear to understand the main insanity defence standards (Blau & Pasewark, 1994), which is interesting given research, referred to above, that indicates that their input may be instrumental in the verdicts rendered in cases where mental state at the time of the offence is an issue. This raises the possibility that something other than the phrasing of a particular standard likely is influencing the decisions about insanity that are rendered (Blau & Pasewark, 1994). However, despite the drawbacks outlined above, analogue studies have, over the years, revealed some interesting results. A sampling of these will now be presented.

In 1967, Simon published a book describing her ground-breaking study of, among other things, the effect of varying insanity defence instructions on the verdict returned. Participants, selected from the jury rolls of three large U.S. cities, heard one of two mock trials based on real cases (housebreaking or incest), and were then instructed using one of three criteria for responsibility; McNaughtan, Durham, or no standard provided. Each juror in each trial rendered two verdicts, one before deliberating with other jurors and one after.

In the housebreaking trial two thirds of the jurors found the defendant NGRI and

one third found him guilty when giving verdicts individually. The post-deliberation verdicts evidenced a similar pattern. Overall, however, there was no significant difference between verdicts rendered under McNaughtan and Durham. The incest trial yielded slightly different results. For that case, one third of the jurors found the defendant NGRI, while two thirds found him guilty, when returning individual verdicts. In the post-deliberation decisions almost three quarters of the juries supplied guilty verdicts. A significant difference between the McNaughtan and Durham instruction conditions was found for both individual (12%) and group (19%) verdicts, with the McNaughtan standard more often resulting in guilty verdicts. Under the no instruction condition, the pattern of responses most resembled that found using the Durham rule.

Although Simon's (1967) results do reveal some effect of changing the standard on the verdict returned (at least in the incest trial), Sales and Hafemeister (1984) contend that her findings actually better support the notion that changing the wording of insanity standards does not grossly affect verdict outcome. Sales and Hafemeister base their assertion on the finding, in the incest case, that similar results were obtained from jurors receiving the Durham standard and those receiving no standard. They also comment that a difference of 12%, while statistically significant, likely does not represent a clinically significant finding. Other results from Simon's (1967) study can be seen as supporting Sales and Hafemeister's (1984) point of view.

When jurors in the McNaughtan and Durham conditions were asked what standard they would recommend using in court, responses divided approximately evenly; that is,

33% recommended McNaughtan, 36% recommended Durham, and 31% thought that there was so little difference between the two standards that they were unable to choose one over the other. When jurors who had not been given an official standard were asked the same question, approximately 60% of them recommended the standard they had received (i.e., no standard) or saw no difference between the formal instructions and no instructions. When the 60% of non-instructed jurors who favoured no instructions ($n=182$) and the 31% of instructed jurors who saw no difference between instructions ($n=183$) are combined, it is revealed that 41% of the total sample indicated, in essence, that the specific instructions made no difference. Certainly, subsequent research can be viewed as supporting this contention.

In 1985, Finkel, Shaw, Bercaw and Koch presented 132 undergraduate students with booklets containing five different hypothetical cases in which the defendants were portrayed as suffering from various mental illnesses. Each booklet contained one of six insanity defence instructions, which the participants were to use in rendering verdicts of NGRI or guilty. The standards employed were the wild beast test, McNaughtan, McNaughtan plus irresistible impulse, the Durham rule, the ALI standard, and a "disability of mind" test (which, in addition to assessing mental state at the time of the crime, also considers the defendant's responsibility for engaging in behaviours before the actual crime that might have affected his or her state of mind at the time of the crime). While the type of mental illness exhibited by the defendant had a significant effect on the verdict returned by the mock jurors (who did not deliberate), there was no significant effect for insanity

defence standard.

As a follow-up to the aforementioned study, Finkel and Handel (1988) asked a sample of 263 undergraduates and non-student adults to return verdicts of guilty or NGRI in four hypothetical cases, without the guidance of insanity defence instructions. The results were then compared with those obtained by Finkel et al. (1985). Similar to results reported in the former study (Finkel et al., 1985), the current study found a significant effect for case, in that the percentage of NGRI verdicts returned by the non-instructed participants varied across vignettes. This pattern was similar to that obtained from Finkel et al.'s (1985) instructed jurors. However, a comparison of verdicts rendered with and without the aid of insanity defence standards yielded no significant differences.

Furthermore, comparisons of the no-standard condition with each individual standard also failed to reach significance. Consequently, Finkel and Handel (1988) concluded that "mock jurors will reach similar verdicts in insanity cases whether or not they are given any instructions at all" (p.75).

Finkel and Handel (1989) next shifted their focus to exploring the reasons mock jurors give for the verdict decisions they make. Two-hundred-and-sixty-three participants, including undergraduates and adults who were not students, received a booklet containing four different hypothetical cases. No legal definitions of the verdict options were provided, but participants were asked to return verdicts of guilty or NGRI for each case, and then to explain the processes by which they reached them. The reasons provided were subsequently categorized by independent raters, using seven guilty and seven NGRI

factors (some of which represented concepts found in the various legal tests of insanity).

Not surprisingly, given the prior work reviewed above, Finkel and Handel (1989) found that there were significant case by verdict differences. However, construct patterns were independent of verdict patterns. In other words, even for cases receiving comparable verdicts the constructs invoked often varied, whereas the constructs tended to be similar across cases with different verdicts. Also of note was the finding that, for any particular case, a comparison of the constructs given by jurors who returned a finding of criminal responsibility to those given by jurors who adjudicated the defendant as NGRI revealed that these individuals were not simply citing opposite ends of a construct continuum when giving reasons for their decisions. They were using different, that is, independent, constructs.

Although a number of the categorization factors represented concepts found in the various legal standards (e.g., constructs such as cognition or volition), no single construct found in a legal test of insanity was consistently evoked across the different insanity cases. Even when the cognition and volition factors were combined, they did not rank highly in the jurors' decision-making strategies. However, two factors that do not appear in most insanity standards, to wit capacity-incapacity and culpable-nonculpable, when taken together, ranked as the primary construct raised by the jurors in seven of the eight (i.e., 4 cases x 2 verdicts) possible outcomes (Finkel & Handel, 1989).

Finkel and Handel (1989) concluded that no standard in use at that time captured the layperson's view of insanity. They further suggested that an insanity test that combined

constructs that are meaningful to mock jurors (e.g., capacity-incapacity plus culpable-nonculpable) might also result in verdict differences when compared with other standards. In other words, they suggested that experimental tinkering with the wording of insanity standards had not changed the verdict patterns of jurors, because none of the standards distilled the essence of how jurors view insanity. Consequently, jurors were deciding cases on the basis of their inner concepts rather than being guided by the phrasing of insanity tests. Were the standards to better parallel the inner views of jurors, then differences likely would emerge. It is of note that subsequent research into verdict schemas, discussed below, can be seen to support these contentions.

In 1989, Finkel also investigated whether or not different insanity defence standards gave rise to different constructs, as they should if mock jurors used the wording of the instructions to inform their verdict decisions. Fifty-four undergraduate participants were asked to render verdicts in each of four hypothetical cases in which the psychiatric disorder of the defendant was varied. For each booklet of four cases, one of four insanity defence standards (ALI, ALI without the volitional prong, the wild beast test, and no instructions) was provided, to aid in finding the defendant guilty, not guilty, or NGRI. After they rendered a verdict in each case, participants also were asked to record the constructs or reasons they used in making their decisions. Similar to prior results, while there were significant differences in the verdicts rendered for the four cases, these differences were due to the variations in the psychiatric symptomatology of the defendant but not to the different insanity defence standards furnished.

An analysis of the reasons participants gave for their verdicts revealed that constructs also differed across cases. Even when similar verdicts were returned, the constructs behind them were not necessarily similar (Finkel, 1989). This indicated that the mock jurors discriminated between cases and also that they were flexible in their reasoning processes. Supporting Finkel and Handel's (1989) contention that jurors were guided by their inner concepts of insanity rather than by the wording of the standard, Finkel (1989) discovered that the constructs recorded were *not* determined by the insanity defence standards supplied, as evidenced, for example, by the finding that participants were as likely to cite volitional constructs when the standard provided had no volitional prong as when it did. Evidently, the specific wording of the insanity standard failed to instruct the jurors' decisions.

Ogloff (1991a) conducted two studies that explored the effects of varying the insanity standard, burden of proof, and standard of proof on insanity verdicts. He compared the ALI standard, the M'Naughtan rules, and no standard, hypothesizing that more NGRI acquittals would be returned under the ALI standard than under the M'Naughtan standard, since the former is considered to be less stringent than the latter. Participants were university student mock jurors who did not deliberate.

In the first study, 88.7% of the 177 participants found the defendant guilty. Of the few mock jurors who found the defendant NGRI, no significant differences were noted between participants in the M'Naughtan, ALI, and no instruction conditions. Varying the burden of proof and the standard of proof also did not have an effect on mock jurors'

verdict choices (Ogloff, 1991a). Because so few participants found the defendant NGRI in the first study, a second experiment was conducted in which the number of verdict choices was reduced to two, namely NGRI and guilty of second degree murder. Under this condition, 73% of the 226 participants found the defendant NGRI, but again there were no significant verdict differences between participants in the McNaughtan, ALI, and no instruction conditions. Furthermore, varying the standard and burden of proof also again had no effect (Ogloff 1991a).

Additional evidence that jurors may not pay attention to the standard came from the results of asking participants to indicate what components they considered in rendering a verdict of NGRI. Those factors most important to a finding of NGRI were identified by the participants as expert psychiatric testimony, the defendant's intent to harm, and whether the defendant was insane at the time of the offence (Ogloff, 1991a). Identification of the importance of expert psychiatric testimony supports research by Steadman et al. (1983) and Smith and Hall (1982) indicating that the best predictor of the outcome of an insanity trial is the recommendation made by the forensic examiner with respect to the issue of insanity. However, it does not, of course, represent an element of any insanity defence standard. In fact, of all the components reported by participants, the only elements identified that do form part of existing insanity defence standards were "whether the defendant was insane at the time of the offence", "whether the defendant appreciated the wrongfulness of his actions", and "the defendant's ability to control his actions" (Ogloff, 1991a, p. 524).

Of further interest is the finding, similar to Finkel (1989), that although there is no volitional component to the McNaughtan standard, McNaughtan instructed jurors reported considering "ability to control actions" as often as did ALI instructed jurors. This suggests that jurors were not relying upon the standards they were given when rendering their verdicts. Ogloff (1991a) also attempted to ascertain how well participants remembered the insanity defence standard they had supposedly used, employing both a free-recall and a recognition task, and found that they did not remember it well.

In summary, Ogloff's (1991a) research appears to indicate that mock jurors were not instructed by the insanity test provided, because (a) they did not differentiate between the different insanity standards, (b) they were unable to remember the elements of the insanity defence standard that they were to have been using to render their verdicts, and (c) they identified components other than those comprising insanity defence standards, and/or elements not included in the standard with which they were provided, when asked to indicate what factors they considered in rendering a verdict of NGRI. It must be noted, however, that the case used in this research was unrepresentative of the type of case in which a defendant is typically found NGRI. In Ogloff's (1991a) simulation, the defendant, who murdered four people including his daughter, was neither experiencing psychotic symptoms nor showing any other evidence of suffering from a major mental illness at the time of the offence. He was, however, portrayed as having difficulty curtailing his actions due to exhaustion. As evidenced by the results of the first experiment, participants clearly perceived the defendant as being criminally responsible for his actions. Participants may

not, however, have been willing to find him as responsible as a verdict of second degree murder would hold him. Consequently, in the second experiment, where the only choices were guilty of second degree murder and NGRI, participants may have viewed the NGRI verdict as the only "fair" choice. In other words, it is possible that the wording of the various insanity standards was disregarded because participants had already made the decision not to convict the defendant of murder in the second degree, and choosing a verdict of NGRI, regardless of how the standard was worded, was the only other option they were given.

A slightly different approach to investigating the notion that the specific wording of the insanity standard may have little relevance to verdict outcome is apparent in work by Wettstein et al. (1991). In this study, four forensic psychiatrists practiced in conducting mental status evaluations, and actually working as forensic evaluators, gave opinions about real defendants whom they were in the process of assessing. Information about consecutive admissions was collected over a two year period, but only those defendants believed by the psychiatrists to fit the existing criteria for a verdict of NGRI were selected for the study. This design yielded a final sample of 164 defendants who were recommended as NGRI. The four psychiatrists prospectively rated whether any or all of the following insanity standards, or components thereof, was met by each of the defendants: (a) ALI cognitive (lacks capacity to appreciate wrongfulness of actions), (b) ALI volitional (lacks capacity to conform conduct to requirements of law), (c) McNaughtan, and (d) the APA test (unable to appreciate the criminality of his/her conduct).

at time of offence).

Almost all defendants (97.5%) were rated as meeting the volitional prong of the ALI standard, while 62.8% of defendants also met the other three (cognitive) insanity criteria tested (Wettstein et al., 1991). The observation that almost one quarter of defendants met *only* the ALI volitional criterion was cited by the authors as evidence that psychiatrists were able to distinguish between the volitional and cognitive components of the insanity standards. Nevertheless, variations in the wording of the three cognitive components appeared to effect little difference on whether or not a defendant was thought to meet the cognitive criteria for insanity, implying that the cognitive components themselves may be virtually interchangeable. Furthermore, most defendants who met the cognitive criteria also met the volitional criterion, but the reverse was not true (Wettstein et al., 1991). This finding lead the authors to conclude that eliminating the volitional component could, at least potentially, have an effect on the number of defendants exempted from criminal responsibility. However, the works of Finkel (1989) and Ogloff (1991a), cited above, suggesting that mock jurors invoke volitional constructs ~~whether or~~ not they form part of the insanity standard provided appear to cast doubt on this prediction.

Considering the body of research reviewed above, it must be concluded, as have Finkel (1990) and Ogloff et al. (1992) following similar summaries of the literature, that variations in the wording of the legal test of insanity have little impact on verdict outcome, at least in mock juror research. There are, however, several studies that suggest that

changing the *number* of verdict options, or what Finkel (1991) termed the "verdict schema", for example by introducing a GBMI choice, does affect jurors' verdicts.

An early study, conducted by Savitsky and Lindblom (1986), looked at the effects on verdict patterns of introducing a GBMI option. Participants were 145 university students who first rendered verdicts individually and then again after having deliberated as a mock jury. A 3 (number of verdict choices) by 2 (version of trial) design was employed. The three levels of verdict choice were (a) guilty or innocent, (b) guilty, innocent, or NGRI using the ALI standard, and (c) guilty, innocent, NGRI, or GBMI using the Michigan standard. The two levels of trial were a "defendant obviously guilty" version and a "defendant likely innocent" version.

When the "obviously guilty" version of the trial was employed, adding the NGRI option had no effect on findings of guilt for either the pre- or post-deliberation verdicts. However, adding the GBMI option shifted verdicts from guilty to GBMI in both the pre- and post-deliberation situations. With the "likely innocent" trial version, jurors deliberating both individually and together were more likely to find the defendant NGRI than innocent once the NGRI option was added. When the GBMI option was added, both pre- and post-deliberation jurors were more likely to return a verdict of GBMI than any other verdict (i.e., there was a switch from an overall finding of innocence to an overall finding of guilt).

In sum, Savitsky and Lindblom (1986) determined that when the defendant clearly was guilty, introducing the insanity defence had no effect on findings of guilt. However, offering an insanity plea option did have the effect of reducing both individually and group

rendered findings of innocence in both the guilty and the innocent trial versions. Finally, with the GBMI option, defendants who had formerly been found innocent or NGRI now were found GBMI, and defendants who formerly were found guilty now also were found GBMI. These results suggested to the researchers that their participants used the GBMI option as a compromise verdict, and also supported the notion that varying the verdict schema can have an effect on verdict outcome.

Roberts et al. (1987) had 181 undergraduate students read vignettes of a hypothetical case in which the mental disorder of the defendant at the time of the crime, the apparent degree of planning behind the crime, and the bizarreness of the criminal act were varied, as were the verdict options. To investigate whether changing the verdict options affected the verdicts rendered, the participants first were asked to choose between verdicts of guilty and NGRI (using the ALI standard). Defendants were found NGRI more often when they were portrayed as having schizophrenic symptoms (77%), and most often when they exhibited delusions related to an unplanned crime (95%). A third verdict option, GBMI, was then added and it was explained that GBMI should not be used if the defendant was thought to have been legally insane at the time of the offence. Participants were again asked to render a verdict. Under the aforementioned conditions, fully 77% of the 95% of participants who had earlier found the defendant NGRI then found him GBMI. Further, many personality disordered defendants who had previously been found guilty also were found GBMI. Thus, similar to the findings of Savitsky and Lindblom (1986), the addition of a GBMI choice apparently served to reduce both the number of NGRI findings

and the number of guilty findings (Roberts et al., 1987). It also again is evident that the verdict options offered had a clear influence on the decisions made by the participants. In other words, the introduction of the third option significantly changed the pattern of insanity verdicts.

Finkel (1990), however, points out the findings detailed above may have been influenced by an order effect, because all subjects were first given the two verdict option followed by the three verdict option. Consequently, mock jurors unintentionally may have been induced to select a GBMI verdict more frequently than they would have had the presentation of two *versus* three verdict options been counterbalanced.

Finkel (1991) further attempted to elucidate jurors' processes in opting for verdicts other than the traditional choices of guilty, not guilty, and NGRI. He employed four experimental groups, composed of undergraduates, that each received a booklet containing four randomly ordered cases. Each of the four groups was given a different set of verdict options from which to choose. The first group received the traditional choice of guilty or NGRI. The second group had to select from amongst the options of guilty, NGRI, and diminished responsibility (DR), but were provided with no definitions of the standards. The third group was given a three-choice format (guilty, NGRI, GBMI) where the standards were provided. The fourth and last group employed Finkel's sequential schema, which considers a defendant's culpability not only for those actions engaged in at the time of the crime but also for those undertaken earlier (e.g., use of substances, failure to take medication) which may subsequently affect *mens rea*. Using this format there are

nine possible verdict outcomes. In all groups, verdicts were rendered without deliberation. Finkel (1991) also asked the mock jurors to rate such things as the defendant's level of responsibility, and potential mitigating factors, as well as to provide information about the constructs they used in coming to their verdict decisions.

The results revealed that the number of verdict choices offered affected the types of verdicts rendered, as did the details of the case. Finkel (1991) also found, from looking at the ratings and constructs provided by the participants, that even when there were only two verdict options available, jurors invoked concepts present in the three-choice conditions. He therefore surmised that the traditional two-option model constrained jurors from expressing their real views. In other words, the addition of a choice such as GBMI may shift verdict patterns because, for jurors, it represents a middle ground between guilty and NGRI and, as such, better allows them to indicate their true beliefs about some cases.³ Finkel (1991) reasoned further that providing jurors with even as many as three verdicts might still restrict their options, because they would not be able to express distinctions between culpability at the time of the offence and culpability prior to the offence. The nine verdicts afforded by the sequential schema (Finkel, 1991) permitted such detailed decision-making, and, as it turns out, best reflected the jurors' conceptualizations of the cases while also most reducing variance.

³ It is of note that research discussed by Finkel & Fulero (1992) appears to support the notion of GBMI as a verdict denoting partial responsibility i.e., one where the juror judges the defendant as being less accountable than would be implied by a finding of guilt, but more responsible than a verdict of NGRI would suggest.

Considering the experimental analogue research as a whole, then, one could conclude that altering the insanity standard is unlikely to create a corresponding change in the verdicts rendered by jurors, and thus in the number of defendants absolved of criminal responsibility, unless the modification broadens the range of verdict options available. However, as discussed previously, results from controlled laboratory studies may not generalize to the real world. Consequently, it is important also to consider the findings of archival or field experiments.

Archival Studies

Studies classified as "archival" or "field" usually involve the comparison of such things as the frequency with which an insanity plea is entered, the number of defendants relieved of criminal responsibility, and/or the characteristics of individuals who raise and/or are successful with the defence, before and after the introduction of a change (including rewording the standard) to insanity defence procedures (Blau & Pasewark, 1994). Rarely, jurisdictions are contrasted with respect to any or all of the aforementioned variables (Ogloff et al., 1992).

The main advantage of these types of study is their degree of representativeness. In other words, they tend to be externally valid (Blau & Pasewark, 1994; Ogloff et al., 1992). The main disadvantages include an inability to rule out alternate explanations of variations observed (i.e., one can never be sure that it was the specific modifications to the insanity standard or procedures that one was studying that caused the changes), and a limited ability to generalize obtained results to other regions or periods of time (Blau & Pasewark,

1994; Zonana, Wells, Getz, & Buchanan, 1990). Despite these drawbacks, archival research provides a crucial complement to the findings of experimental analogue studies.

Impact on insanity acquittees of changes to insanity standards

The first work to address the effect of changing the insanity standard on the volume of acquittals was that of Simon (1967), who reported that the number of NGRI verdicts in the District of Columbia multiplied following a shift from the McNaughtan test to the Durham rule. Sauer and Mullens (1976) documented a similar augmentation in the acquittal rate in Maryland after the insanity standard was changed from McNaughtan to ALL. The assumption made by both studies was that the shift to a less stringent insanity standard had a direct effect on the number of NGRI acquittals. However, because these studies neither controlled for the number of pleas entered nor employed time series analyses to rule out alternate explanations, the observed increases cannot unequivocally be attributed to the introduction of more lenient standards (McGreevy et al., 1991; Ogloff et al., 1992). Furthermore, a Utah study revealed that the frequency with which defendants were found NGRI increased subsequent to the introduction of an insanity standard intended to *reduce* the number of insanity acquittals (Heinbecker, 1986). Interestingly, this study also reported that (a) the forensic examiners did not have knowledge of and/or incorrectly applied the new standard, (b) in all but one of the cases the defendants who were found NGRI did not meet the standard in effect at the time, and (c) in all cases in which the plea was successful it also was not contested. These observations suggest that the wording of the standard had no effect, because decisions were made based on other

criteria and, largely, in ignorance of what the standard stipulated.

Paralleling the results of mock jury research, the only research endeavor located that reported an effect on the insanity acquittal rate in the direction intended, following insanity defence modifications, investigated not changes to the insanity standard but rather the introduction of the GBMI verdict (Callahan, McGreevy, Cirincione, & Steadman, 1992). In a well-controlled study of the effects of implementing GBMI legislation in Georgia, Callahan et al. (1992) found that there was a significant decline in the frequency of successful NGRI pleas subsequent to the addition of a so-called "third option".

Conversely, a number of studies have reported that the rate of insanity acquittals remained stable following various alterations to the insanity defence. In both California (McGreevy et al., 1991) and Ohio (Boardman, Stafford, & Ben-Porath, 1996) modifying the insanity standard so as to render it more restrictive resulted in no change to the number of defendants found NGRI. Procedural changes in Michigan (Packer, 1985) and Wyoming (Pasewark, Randolph, & Bieber, 1984) also were of no consequence to the number of defendants relieved of criminal responsibility. Finally, in contradistinction to the findings of the Callahan et al. (1992) study referred to above, the introduction of the GBMI option in Michigan (Smith & Hall, 1982) and in several other states (Steadman, 1985) was reported to have no effect on the volume of NGRI acquittals. These studies, then, suggest that changing insanity defence procedures has little overall effect. Nevertheless, with one exception (namely, McGreevy et al., 1991) the studies all suffer, to varying degrees, from the methodological problems alluded to earlier. In other words, they

do not take into account the number of pleas raised, or they neglect to employ time series analyses, or both, which means that their results must be considered with reservation.

Adopting a slightly different perspective on the issue of the relevance of insanity standards to the volume of insanity acquittals, it was reported that even following the abolition of the insanity defence in Montana, individuals continued to be found NGRI, albeit in markedly reduced numbers (Callahan, Robbins, Steadman, & Morrissey, 1995; Steadman, Callahan, Robbins, & Morrissey, 1989). This suggests not only that the standard was not the main influence on insanity acquittals (since they continued to occur in the absence of a standard), but also that altering judicial procedures did not necessarily change practice. In another study demonstrating that legal modifications do not necessarily result in changed procedures, Reichlin, Bloom, and Williams (1990) observed that legislation enacted in Oregon with the intent of prohibiting defendants who received a primary diagnosis of personality disorder from being adjudicated NGRI, had no effect. Specifically, the same percentage of insanity acquittees were found to have a personality disorder as primary diagnosis after the legislation's introduction as before, although a degree of unrepresentativeness was introduced by the fact that the diagnoses employed had been assigned post-disposition rather than prior to the defendants' appearance in court.

In addition to having an effect on the number of individuals absolved of criminal responsibility, changes to the insanity defence may affect the demographic, mental health, and criminal justice involvement profiles of acquittees. Several studies have addressed one

or more of these issues, with varying results. McGreevy et al. (1991) recorded information about defendants found NGRI before and after California's insanity standard was changed from ALI to a modified version of the McNaughtan rules. They found no differences in the demographics, mental health histories, previous criminal involvement, or index offences of insanity acquittees. However, they did report a post-reform decrease in the number of defendants diagnosed as suffering from schizophrenia, but found a corresponding increase in those categorized as having other psychoses or affective disorders. It was concluded that the insanity defence modifications had little effect (McGreevy et al., 1991). Packer (1985) also reported no differences in age, gender, or race of defendants following changes to the wording of, and the procedures surrounding, the insanity defence in Michigan. Conversely, Callahan et al. (1992) observed that the number of female and minority status insanity acquittees increased subsequent to the introduction of the GBMI verdict in Georgia, although the increase was not statistically significant (which they attributed to their small sample size rather than to a lack of true differences). These researchers also reported a non-significant increase in the number of acquittees receiving primary diagnoses of personality disorder, as well as a significant decrease in the number of acquittees charged with violent index offences in the two years immediately following the reform (Callahan et al., 1992). The latter finding is difficult to interpret, however, given that the number of violent index crimes again increased in the third and fourth years post-reform. Nevertheless, several other studies (Packer, 1985; Rogers & Bloom, 1982), including one conducted in Canada (Bradford, 1995), have reported an increase in the

percentage of less serious index crimes among insanity acquittees following reforms to insanity defence procedures that may be considered to render less onerous the consequences of being found not guilty due to a mental disorder.

A somewhat unconventional method of exploring the impact of insanity defence standards is employed by cross-jurisdiction research. In these studies, investigators contrast states or regions with comparable insanity defence standards and/or procedures on a number of outcome variables that might also be expected to be alike. For example, Greenland (1979), compared insanity acquittees in Ontario to those in New York state over similar time intervals. The insanity standards and disposition procedures did not vary greatly across the two jurisdictions during the period covered. Greenland (1979) discovered that while the average age of female acquittees was similar, male acquittees were substantially younger in Ontario ($M=27.5$ years) than in New York ($M=36$ years). The samples did not differ greatly with respect to number of prior convictions (almost half of each cohort had prior arrests), and they also resembled each other with respect to the nature of the index offence (which tended to encompass more violent crimes). Nevertheless, a higher percentage of the acquittees in Ontario had had a previous psychiatric hospitalization and, although a diagnosis connoting psychosis was most frequent in both samples, a much higher proportion of the New York sample were labeled psychotic. While a difference in diagnostic procedures (i.e., categorization differences) may be partially responsible, a greater number of Ontario NGRIs were classified as psychopaths than was the case in New York. Greenland (1979) concluded that the two

samples, though alike in many respects, also evidenced considerable differences.

Similar research conducted by Zonana et al. (1990) compared the psychiatric diagnoses and index crimes of defendants found NGRI in Connecticut between 1970 and 1985 with those of defendants in published studies from three other states (New York, Oregon, Illinois) that also employed the ALI standard. Like Greenland (1979), Zonana et al. (1990) found differences, across regions, in the proportions of defendants diagnosed as schizophrenic and as personality disordered (e.g., Illinois had the greatest percentage of defendants diagnosed psychotic, while Oregon and Connecticut had comparatively more defendants diagnosed with personality disorders). Variations in the percentages of severe (i.e., crimes against the person) index offences also were recorded.

There are some obvious methodological limitations in relating statistics from distinct jurisdictions, collected by different researchers, and covering dissimilar time periods. These include the potentially divergent manner in which diagnoses may be applied across jurisdictions (not only due to the idiosyncrasies of the various forensic examiners but also because one set of researchers may code post-disposition diagnoses while another set records pre-disposition diagnoses), and the possible differences between studies in the systems employed for classifying index offence seriousness. Notwithstanding these pitfalls, consideration must be afforded the researchers' suggestion that, based on their results, the "statutory language of the [insanity] plea may not be applied uniformly across states and may not be the determining factor in whether an individual is acquitted" (Zonana et al., 1990, p. 127).

Impact on insanity pleaders of changes to insanity standards

Of the studies that investigated the impact on insanity pleaders of changes to the insanity defence, none reported an effect on the rate with which the plea was entered, and few documented any changes to the profiles of defendants. To elaborate, after comparing individuals who raised the insanity defence in California before and after a modification to the standard that rendered it more restrictive, McGreevy et al. (1991) concluded that the change affected neither the plea rate nor the demographics, index crimes, mental health histories, or degree of prior criminal involvement of defendants. Similarly, following legislation intended to abolish the insanity defence in Montana, the frequency with which the plea was raised did not diminish (Callahan et al., 1995; Steadman et al., 1989), a fascinating finding given that the plea was no longer supposed to exist. Moreover, no differences were found between the demographics, index crimes, and diagnoses of those who raised the plea either before or after its "abolition" (Callahan et al., 1995). Pasewark et al. (1984), reporting on several changes to both the wording of, and the procedures surrounding, the insanity defence in Wyoming, also indicated that the frequency with which the plea was raised showed no alterations once the crime rate was controlled for. While Pasewark et al. (1984) noted no changes to the demographic profiles, index offences, number of prior psychiatric hospitalizations, and occurrence of past arrests of insanity pleaders, the diagnosis given to defendants pleading insanity was found to vary across the reforms. Finally, Callahan et al. (1992) reported that there was no statistically significant change in the number of insanity pleas raised before and after the GBMI verdict

was implemented in Georgia. However, following the 1982 reform, the cohort of insanity pleaders was found to be older, more often female, more often non-Caucasian, and less often diagnosed schizophrenic than was the pre-reform group (Callahan et al., 1992).

Comparison of insanity acquittees and insanity defence raisers

Studies comparing insanity acquittees to defendants who raise, but are not successful with, the insanity defence consistently have found that acquittees (a) more often received a diagnosis of psychosis (Boardman et al., 1996; Callahan et al., 1992; Callahan, Steadman, McGreevy, & Robbins, 1991; McGreevy et al., 1991; Rice & Harris, 1990), (b) committed index offences that more frequently were categorized as serious or violent (Callahan et al., 1992; Callahan et al., 1991; McGreevy et al., 1991; Rice & Harris, 1990), (c) had on record a greater number of past psychiatric hospitalizations (Boardman et al., 1996; Callahan et al., 1991; Smith & Hall, 1982), and (d) evidenced less lengthy criminal histories (Boardman et al., 1996; Callahan et al., 1991; Rice & Harris, 1990; Smith & Hall, 1982). When differences in age (Callahan et al., 1991; Rice & Harris, 1990; Smith & Hall, 1982) or gender (Callahan et al., 1992; Callahan et al., 1991) were reported, insanity acquittees were found to be older and more often female than insanity pleaders. Only one study (Smith & Hall) revealed a discrepancy in level of education, recording a greater number of insanity acquittees as having completed high school. Finally, of the three research endeavors that noted a divergence between acquittees and pleaders with respect to ethnicity, two found that there was a greater percentage of non-Caucasian defendants adjudicated NGRI (Callahan et al., 1992; Smith & Hall, 1982) while one reported the

opposite (Callahan et al., 1991).

Few studies (i.e., only Callahan et al., 1992; McGreevy et al., 1991) recorded information about the effects of reforms to the insanity defence on the comparative characteristics of insanity acquittees and insanity pleaders. McGreevy et al. (1991) looked at a group of individuals found NGRI and a group of defendants who raised but did not succeed with the plea before and after California switched to a more stringent insanity defence standard. They reported differences between the two groups only with respect to psychiatric diagnosis and severity of index offence (as detailed above). However, the modification of the standard made no difference to these, or any other, relationships. Callahan et al. (1992) collected data in twelve Georgia counties for the six-and-a-half years prior to, and the three-and-a-half years after, the introduction of the GBMI option. Before the enactment of GBMI legislation, the mean age of defendants pleading insanity ($M=28.1$) was younger than that of those acquitted ($M=31.2$). After the reform, the mean ages of both groups were the same ($M=30$), although from the information provided in the study, it is not possible to say whether or not this change is statistically significant. Thus it is conceivable that the reform had some effect on the composition of acquittees compared to pleaders, but it cannot so be concluded definitively. Furthermore, it does not seem that the reform affected any other relationship of acquittees to pleaders.

The Logic Behind the Present Research

There is intuitive appeal to the notion that changing the insanity standard may

affect the number of people raising the insanity defence and/or the number of individuals for whom the plea is successful (Blau & Pasewark, 1994). One plausible suggestion is that the absolute number of defendants entering the plea might fluctuate with changes to the insanity standard, such that making the standard more restrictive could be expected to decrease the number of defendants entering the plea, while increased leniency in the standard could be expected to increase the number of defendants who plead insanity (Blau & Pasewark, 1994). Alternately, the same number of people might raise the plea as before the changes, but the courts may acquit them more (or less) often, perhaps because the consequences of being acquitted as insane are perceived as more (or less) restrictive than formerly, or because clinicians' reports favour acquittal more (or less) often and the courts are complying (Steadman et al., 1983). It also is possible that changing the standard could affect the demographic, psychiatric, and criminal history profiles of defendants who raise the plea and those who are successful at gaining acquittal. This would not be expected, however, since the defence pertains to the defendant's mental state at the time the offence was committed rather than to their demographic, psychiatric, or criminal histories (Steadman et al., 1983). It is of interest, therefore, that a number of archival and analogue studies have shown, at least in the United States, that changing the insanity defence standard has no effect on the success rate of the plea (Blau & Pasewark, 1994; Boardman et al., 1996; Finkel, 1988; McGreevy et al., 1991; Ogloff, 1991a), on the demographics of individuals acquitted by reason of insanity (McGreevy et al., 1991; Pasewark et al., 1984), or on the characteristics of defendants who raise, but are not necessarily successful with, a

defence of insanity (McGreevy et al., 1991).

While it could be expected that the situation in Canada would be similar to that in the United States (i.e., that changes to the insanity defence would affect neither the acquittal rate nor the demographics of defendants raising the insanity defence), this question has not been widely researched in Canada, likely because, until 1992, the insanity defence had remained largely unaltered. The 1992 changes to the Canadian insanity defence (Bill C-30) not only modified the wording of the standard (from "not guilty by reason of insanity" to "not criminally responsible because of mental disorder"), but also affected the larger scope of the plea in a manner that likely leads to it being perceived as more lenient. The expanded disposition options, which mean that incarceration is no longer automatic, and the capping provisions (not yet proclaimed), which potentially limit detention times, may serve to make the plea more appealing both to defendants and to defence lawyers. The *Chaulk* decision (1990), rendered prior to the changes contained in Bill C-30, also may result in an increase in the success of the defence, due to the broadening of the word "wrong" (Verdun-Jones, 1994). These changes to Canadian insanity defence procedures have prompted a call for research documenting their impact, if any, on defendants employing the insanity defence (Arboleda-Florez et al., 1995; Verdun-Jones, 1994).

In the present research, the three main foci of investigation were (a) a comparison of people acquitted by reason of insanity before and after Bill C-30, (b) a comparison of defendants who considered employing the insanity defence before and after Bill C-30, and

(c) an examination of the differences, if any, between individuals who successfully and unsuccessfully raised the insanity defence, both pre- and post-Bill C-30. Essentially, four questions were explored, namely:

1. Was there a significant increase in the insanity defence plea rate (i.e., in the number of defendants raising the plea when the crime rate is controlled for) after the implementation of Bill C-30?
2. Was there a significant increase in the acquittal rate of defendants pleading insanity (i.e., in the number of acquittals divided by the number of pleas entered) since the introduction of Bill C-30?
3. What demographic, mental health, and criminological factors, if any, differentiate (a) insanity acquittees before and after Bill C-30, (b) insanity pleaders prior and subsequent to the enactment of Bill C-30, and (c) successful and unsuccessful insanity pleaders pre- and post Bill C-30?
4. Was there a change in the number of people clinicians recommended as legally insane post-Bill C-30?

Hypotheses

Although this study was partly exploratory in nature, a number of hypotheses were postulated. These included:

1. Post-Bill C-30 it was expected that the plea rate (i.e., the number of defendants raising the plea when crime rate was controlled for) would increase, because the

consequences of being found NCRMD are potentially less negative than previously. The reasons for this are threefold. First, the implementation of an annual review ensures that individuals who no longer meet the criteria for detention will be released (Gelinas, 1994). Second, incarceration is no longer automatic (Verdun-Jones, 1994). Third, the capping rules, when and if proclaimed, would make determinate the time spent incarcerated, at least in many cases (Verdun-Jones, 1994), and it is possible that the existence of these capping provisions, even though not currently in force, could influence lawyers' considerations regarding employment of the insanity defence.

2. It was expected that the insanity defence acquittal rate (i.e., the number of acquittals divided by the number of pleas) would increase post Bill C-30. Although prior research (e.g., Blau & Pasewark, 1994; Boardman et al., 1996; Finkel, 1988; McGreevy et al., 1991; Ogloff, 1991a) indicated that modifications of the insanity standard alone do not affect the success rate of the plea, it also has been contended (McGreevy et al., 1991; Ogloff et al., 1992) that procedural changes may affect the number of individuals successfully pleading insanity. The 1992 changes to the insanity defence in Canada were procedural, suggesting that the number of defendants employing the defence may have been affected. Further support for this notion was found in a report that following the implementation of Bill C-30 there was a substantial increase in the number of patients found not responsible, at least in Ontario (Bradford, 1995).

3. Based on the results of prior research (McGreevy et al., 1991; Packer, 1985) it was expected that the demographics of successful insanity pleaders would not change post

Bill C-30.

4. It was expected that the index crimes of successful insanity pleaders would be less serious subsequent to the introduction of Bill C-30, because the disposition options are potentially less onerous for defendants found NCRMD than they were for those found NGRI. Further support for this hypothesis came from a study by Packer (1985) who reported that, following the removal of automatic indeterminate incarceration of individuals found NGRI (a modification similar to one of those effected by Bill C-30), there was an increase in the percentage of less serious index crimes among insanity acquittees in Michigan. At the same time, it was predicted that there would be no significant differences between pre- and post-Bill C-30 insanity acquittees with respect to psychopathology surrounding the index offence (e.g., diagnosis that went to court, presence of psychotic symptoms in the year preceding the index offence). This was hypothesized because Bill C-30 did not change the reasons for which an insanity defence may be raised, namely that the defendant either did not know what he or she was doing when the crime was committed or did not know that he or she was doing what was wrong.

5. Although this study was largely exploratory regarding changes to the criminal and mental health histories of successful insanity defendants post Bill C-30, the only research found that investigated these variables (McGreevy et al., 1991) suggested that there would be no significant differences before and after the changes to the insanity standard.

6. Four studies were found that addressed the effects of insanity defence reform on the characteristics of individuals who raise the insanity defence (Callahan et al., 1992; Callahan et al., 1995; McGreevy et al., 1991; Pasewark et al., 1984). Three of the four reported no significant changes, pre and post reform, in the characteristics of defendants who pleaded insanity. McGreevy et al. (1991) explored the impact of changes to the insanity defence standard itself, rather than the effects of alterations to general insanity defence procedures, which they suggested might be more far-reaching, while Callahan et al. (1995) reported no differences in the profiles of insanity pleaders before and after the introduction of legislation aimed at abolishing the insanity defence. In Pasewark et al.'s (1984) study, one of the changes did affect insanity defence trial procedures, but not in a manner likely to have a widespread effect on the stringency or leniency of the defence. Finally, Callahan et al. (1992) researched the characteristics of insanity pleaders before and after a change to insanity defence procedures that introduced the GBMI option, and reported a number of significant differences (e.g., post-reform, pleaders were older, more often female, more often non-Caucasian, and less frequently diagnosed as schizophrenic). As the Canadian modifications to the insanity defence were both procedural and likely to have a widespread impact on the disposition of defendants found not criminally responsible, it was hypothesized that the characteristics of individuals who raised, but were not necessarily successful with, a defence of insanity post Bill C-30 would differ from those of individuals who raised, but were not necessarily successful with, a defence of insanity pre Bill C-30, especially with respect to diagnosis, and mental health and

criminal histories.

7. It was postulated that there would be a change, post Bill C-30, in the seriousness of the charges for which the insanity defence is attempted. In other words, it was expected that the defence no longer would be raised only for the most serious offences, because the consequences of being acquitted due to insanity may now be perceived as less negative than previously, as outlined above. Indirect support for this hypothesis also comes from the finding that in Ottawa, after Bill C-30, more people were absolved of criminal responsibility for less serious offenses than previously (Bradford, 1995).

8. It was logical to assume that the severity of the index crime per se should not significantly differentiate between successful and unsuccessful insanity pleaders, since it is not the crime but rather the individual's mental state at the time the crime is committed that is relevant to the defence. However, many studies report that serious crimes, and crimes against people, are over-represented amongst insanity acquittees (e.g., Norwood, Nicholson, Enyart, & Hickey, 1992; Zonana et al., 1990), though Sales and Hafemeister (1984) described the crimes of which defendants pleading insanity have been acquitted as an area in which reported data has fluctuated greatly. Nevertheless, according to Callahan et al. (1992), studies comparing successful and unsuccessful insanity evaluatees also report that violent crimes and crimes against people (especially relatives) are over-represented among successful insanity pleaders, a finding which they themselves replicated. Therefore, it was hypothesized that, in the present study, the crimes of successful insanity pleaders,

both before and after the implementation of Bill C-30, would be more severe and would involve a victim more often than those of unsuccessful defendants both pre- and post-Bill C-30.

9. On one hand, criminal history can be postulated to be irrelevant to an acquittal by reason of insanity, because the plea relates to the defendant's mental state at the time of the offence rather than to his or her past offences, or lack thereof. On the other hand, it can be argued that there have been specific attempts, at least in the United States, to render the defence of insanity an inappropriate one for defendants with lengthy criminal histories. The only study uncovered that specifically addressed the question of the effects of criminal history on a successful insanity defence, found that unsuccessful insanity pleaders had more felony convictions than had defendants acquitted by reason of insanity (Boardman et al., 1996). In the present study, it was hypothesized that successful insanity pleaders, as compared to those who were not successful with the defence, would evidence a less lengthy criminal history. It was not expected that the enactment of Bill C-30 would have made a difference in this regard.

10. It was expected, if the insanity defence was being implemented as intended, that individuals who were found NGRI/NCRMD would exhibit a mental disorder that rendered them "incapable of appreciating the nature and quality of the act or omission or of knowing that it was wrong". A number of studies described insanity acquittees as having a psychotic disorder as primary diagnosis (Norwood et al., 1992; Sales & Hafemeister, 1984; Zonana et al., 1990), and two studies that actually compared

successful and unsuccessful insanity evaluatees (Boardman et al., 1996; McGreevy et al., 1991) reported that defendants who were acquitted as insane evidenced more severe psychopathology. Therefore, it was hypothesized that, both before and after Bill C-30, individuals who were acquitted due to insanity, as compared to unsuccessful insanity pleaders, would evidence more severe psychopathology, as represented by a longer psychiatric history and greater psychopathology surrounding the index offence.

11. It has been suggested that psychiatrists' recommendations supporting (or not supporting) an insanity defence may fluctuate with changes to the insanity standard and/or to the procedures surrounding the defence (Steadman et al., 1983). As noted above, due to changes associated with Bill C-30, the consequences of being acquitted by reason of a mental illness may now be perceived as less negative than before. Therefore, it is possible that psychiatrists' recommendations were more supportive of the insanity defence subsequent to the implementation of Bill C-30. Although an Alberta study (Arboleda-Florez et al., 1995) reported that there had been no change in the number of psychiatrists' recommendations supporting an insanity defence before and after the enactment of Bill C-30, research conducted in British Columbia (Roesch, Ogloff, Hart, Dempster, Zapf, & Whitemore, 1997), that compared the fiscal year prior to the Bill's enactment with the fiscal year following the Bill's implementation, found a dramatic increase in the number of psychiatrists' reports that were supportive of an insanity acquittal. Consequently, in the present study, it was hypothesized that the aforementioned trend endures and that there would continue to be an increase in the number of psychiatrists' recommendations

supporting the insanity defence post-Bill C-30.

METHOD

Setting

The Forensic Psychiatric Institute (FPI) is located in Port Coquitlam, British Columbia (near Vancouver) and is a secure psychiatric facility. Prior to the implementation of Bill C-30, FPI housed all individuals found NGRI in the province. Following Bill C-30, FPI has housed all individuals found NCRMD for whom the initial disposition (by court or review board) was custodial, as well as a number of individuals for whom disposition was deferred to the review board by the courts. The latter group also often remained at FPI for some time following a conditional discharge ruling by the review board. Post Bill C-30, there are a number of individuals found NCRMD who have had no contact with FPI, namely those who received absolute discharges, and those who were immediately conditionally discharged to the community and followed by an outpatient forensic clinic. These individuals were not included in the present study.

Similarly, prior to the implementation of Bill C-30, all individuals for whom an evaluation of criminal responsibility was requested, by either the courts or the prosecution, were assessed as inpatients at FPI. However, after Bill C-30 came into effect, many individuals requiring evaluation of mental status at the time of the offence were seen as outpatients (i.e., had no contact with FPI). These individuals also were excluded from the

present study.

Files Evaluated

The time frame covered in the present research included the three years preceding and the three years following the implementation of Bill C-30 (i.e., February 1, 1989 to January 31, 1995). Within that window, two groups of files were selected for study. The first group included the files of all individuals in British Columbia who had been found NGRI ($n=27$) or NCRMD ($n=76$) and sent to FPI immediately following disposition (this excludes successful insanity acquittees who only were admitted to FPI following a breach of their discharge conditions). Data were not collected from the files of two individuals found not-responsible elsewhere but transferred to FPI during the years encompassed by the study.

The second group of files from which data were collected was that of a random sample of individuals remanded to FPI for an insanity evaluation (evaluation of mental status at the time of the offence), either on its own or in addition to a fitness evaluation. Prior to the implementation of Bill C-30 (pre-February 1992), a total of 808 individuals were remanded to FPI, and in 307 cases a request was made for evaluation of mental status at the time of the offence. Following the implementation of Bill C-30 (post-February 1992) there were 984 remands to FPI, of which 522 contained a request for evaluation of mental status at the time of the offence. From the 829 files identified as containing a request for an evaluation of criminal responsibility, the random sample was

selected by choosing every fourth consecutive admission. This resulted in the inclusion of 87 files in the pre-Bill C-30 remand group and 128 files in the post-Bill C-30 remand group.

Procedure

Most of the data were collected from a review of the files at FPI, although some information from collateral sources was requested when needed (see below for details). Standard coding forms (modified from those employed by Golding, Eaves, & Kowaz, 1989) were used to record file information (see Appendix A for a copy of the NGRI/NCRMD coding form and Appendix B for a copy to the Remand coding form).

Demographic Information

Using as the point of reference each individual's situation at the time they committed the index offence, the following demographic information was collected from, or calculated using information collected from, the files at FPI: age, gender, ethnicity, marital status, and years of education. Due to small cell sizes, for statistical analysis the last three variables, namely ethnicity, marital status, and years of education, were collapsed into the dichotomous categories caucasian or non-caucasian, never married or married/common-law at some point, and secondary school complete or incomplete, respectively. These categories represent meaningful distinctions in the context of the prior research done in this area. Specifically, past studies (see, for example, Ogloff et al.'s 1992 review) consistently have looked at these variables dichotomously.

Index Charge(s)

From information available in each individual's file, up to five of the charges that formed the basis of the referral to FPI were recorded, in descending order of seriousness (i.e., most serious first). Charges later were reclassified, in concordance with the categories employed by Statistics Canada's Adult Criminal Court Survey, into the following groups: crimes against the person (e.g., homicide, robbery, kidnapping, sexual assault, assault); crimes against property (e.g., arson, fraud, theft, break and enter, mischief, possession of stolen property); other criminal code offences (e.g., weapons, criminal harassment, uttering threats, failure to comply/appear, escape custody); traffic crimes (e.g., impaired driving, dangerous operation, failure to stop); and drug related offences (e.g., trafficking, possession). For some analyses, a simple dichotomy (crimes against the person vs. other), was employed.

The date(s) upon which the offence(s) occurred, and, if pertinent, the number of victims involved, the relationship of the victim(s) to the perpetrator (e.g., stranger, relative, acquaintance), and the weapon employed in the crime (e.g., gun, knife, hands) were recorded from information (usually the police report) available in each individual's file. Many crimes were considered to be victimless (e.g., property crimes, some robberies, most weapons offences, and most driving offences). For the purposes of this study, victims were defined as those people who suffered some form of interpersonal harm or threat to their well-being. Dates chronicling FPI admissions and discharges relating to the index charges (e.g., remands for assessment, hospitalization as unfit, admission as

NGRI/NCRMD) also were transcribed when applicable.

For the remand sample, an attempt was made to obtain the final disposition of each charge by writing to the relevant court registry and/or Crown Counsel's office. When disposition information was not available from these sources, a further bid to discern eventual outcome was made by referring to CPIC records. It should be noted that, as coded in these data, a disposition of guilty does not necessarily mean that the individual was convicted of the charge as recorded, since the actual charge for which the person pleaded and/or was found guilty may have been reduced as the result of procedures such as plea-bargaining.

Finally, for each year of the study, the total number of charges in British Columbia for each of the crime categories described above (i.e., crimes against the person, crimes against property, other criminal code offences, traffic crimes, and drug related offences) was obtained from Statistics Canada (Cat. No. 85-205). These figures were used in the calculation of the insanity plea rates for the years 1989 to 1995 or portions thereof (e.g., 11 months of 1989 were covered, one month of 1995 was covered).

Current Psychiatric Information

An attempt was made to capture information pertaining to individuals' psychiatric conditions both at the time of the FPI-based assessment of criminal responsibility and at the time the crime allegedly was committed. With respect to the period of assessment at FPI, the report prepared for court by the attending psychiatrist was read so as to identify the primary psychiatric diagnosis conferred. This diagnosis was recorded according to the

ICD-9 classification system and also was assigned to one of the following categories: psychotic disordered, other major disordered, personality disordered, substance abuse, organic (not psychotic), other, no diagnosis, or unknown. For use in statistical analyses, due to small cell sizes, the aforementioned diagnostic categories were further condensed into psychotic or non-psychotic, because this distinction is the most relevant to the issue of mental status at the time of the offence. When more than one diagnosis was given, the diagnosis that was the most serious and/or appeared most relevant to the person's mental state at the time of the crime was selected. Thus, for example, an individual with a dual diagnosis of schizophrenia and substance abuse was coded as having a primary diagnosis of schizophrenia, unless the psychiatrist's report indicated that the schizophrenic symptoms had been in remission (not active, residual, prodromal) at the time of the offence and/or that in the psychiatrist's opinion the person's behaviour had been more influenced by the effects of the substance than the effects of the schizophrenic symptoms. In general, psychiatrists addressed this area in enough detail that making such distinctions was not difficult (note the relevant reliability data reported in Appendix C). Psychiatrists' recommendations regarding criminal responsibility (i.e., supported or did not support the insanity defence) also were recorded.

With respect to psychiatric condition for the period immediately preceding the index offence, two variables were coded based on information available in the files at FPI. The first addressed the presence, or absence, of psychiatric symptomatology in the year before the index offence. The second attempted to capture the nature of the psychiatric

episode in terms of duration and relationship to prior episodes of psychiatric illness (e.g., the individual had been virtually free of symptoms antecedant to the onset of the current condition, the current episode represented an exacerbation of an already existing condition).

Mental Health History

Details of the individual's mental health history were adduced both through an attempt to capture information about the first onset of psychiatric difficulties and from the number and length of their prior contacts with mental health professionals. To these ends, the following information was collected from, or calculated using information collected from, the files at FPI: Age range at first experience of psychiatric symptoms, length of time since first experience of psychotic symptomatology (e.g., hallucinations, delusions), longest period of continuous experience of psychiatric symptoms, past suicide attempts, all previous psychiatric admissions (to FPI or elsewhere), and all past outpatient contacts (with an uninterrupted series of appointments counting as one contact). Inpatient and outpatient interactions were recorded in the form of categorical values, with 4 representing no prior psychiatric care, 3 representing little history (1-2 contacts or admissions), 2 representing some history (3-5 admissions), 1 representing 6 to 9 contacts or admissions, and 0 representing a frequent history of in- or outpatient psychiatric care.

For the NGRI/NCRMD sample only, further information about inpatient admissions, in the form of diagnosis upon discharge and the actual admission and discharge dates, was collected. This allowed the calculation of two additional variables for

each individual in this sample, namely the total number of inpatient admissions and the total length in days of all inpatient admissions (i.e., the sum across all inpatient admissions).

Criminal History

Past criminal involvement was assessed by recording the number and type (e.g., murder, assault, robbery, offensive weapons, property, theft, etc.) of convictions and charges occurring prior to the index offence and available from CPIC.⁴ For each individual, this information was later recalculated to furnish the total number of prior convictions, the total number of prior charges and, separately for convictions and charges, subtotals for the categories (further described above under the subheading **Index Charges**) crimes against the person, crimes against property, other criminal code offences, drug related crimes, and traffic offences. An attempt also was made to capture the involvement of drugs or alcohol in past criminal behaviour, as well as the presence or absence of a history of weapons use.

Reliability

An independent rater, who had prior experience in culling information from the files at FPI, received training in the use of the present coding forms and then coded 19 randomly selected insanity (NGRI/NCRMD) files and 27 randomly selected remand files.

⁴ CPIC printouts frequently are requested upon an individual's admission to FPI and are, therefore, often available in a patient's chart. When this was not the case, a request for CPIC information was made.

Tables of reliability coefficients, are presented in Appendix C.

With respect to insanity acquittees, every variable coded, with the exception of three (to be discussed below), had a kappa value of .70 or higher (range=.31 to 1.00). The three variables with kappas lower than .70 were prior outpatient admissions (.31), longest period that psychiatric symptoms were continuously experienced (.44), and presence of psychotic symptoms in the year prior to the index offence (.51). All of these variables required coders to assign a number that represented a period of time, an approximate frequency, or a magnitude (e.g., none, moderate, severe). When the degree of concordance between the raters was expanded to include adjacent categories, the inter-rater agreement increased to 95% for both presence of psychotic symptoms and length of time that symptoms were experienced, but to only 68.4% for outpatient admissions. Consequently, outpatient admissions were not included in any comparisons involving insanity acquittees.

With respect to remands, four variables had kappa values lower than .70, to wit: prior outpatient admissions (.27), presence of psychotic symptoms in the year prior to the index offence (.63), total number of previous convictions (.66), and total number of prior charges (.54). When the degree of concordance between coders was expanded to include adjacent categories, the percentages of agreement rose to 91.6, 96.2, 84.6, and 80.8 respectively. All other variables obtained kappa values of .79 or higher (range=.79 to 1.00).

RESULTS

Following a brief description of the characteristics of the individuals composing the pre- and post-Bill C-30 comparison groups, the results will be presented in eleven sections, reflecting the hypotheses tested.

The NGRI sample included 26 men (96.3%) and 1 woman (3.7%) ranging in age (at time of offence) from 18 to 65 years ($M=33.97$, $SD=10.73$). Approximately 93% of the sample was Caucasian, 74.1% had never been married, and 25.9% had graduated from high school (grade 12). With respect to mental health characteristics, 96.3% of the sample went to court with a diagnosis denoting the presence of psychosis, while 92.6% had had at least one prior inpatient hospitalization. With respect to criminologic characteristics, 74.1% of the index crimes of this sample constituted crimes against persons and 11.1% were crimes against property. Sixty-three percent of the individuals found NGRI had at least one prior conviction.

The NCRMD sample was composed of 63 men (82.9%) and 13 women (17.1%) ranging in age (at time of offence) from 17 to 76 years ($M=33.20$, $SD=10.82$). In contrast to the NGRI sample, only 78.9% of the NCRMD sample was Caucasian, while 60.5% had never married, and 33.8% were high school graduates. Over three quarters (86.8%) of the sample went to court with a diagnosis denoting the presence of psychosis, while 80.3% had a history of at least one prior inpatient hospital admission. With respect to criminologic characteristics, 73.7% of the index crimes of this sample constituted crimes

against persons and 15.8% were crimes against property. Just over half of the individuals found NCRMD (56.5%) had at least one prior conviction. It should be noted that there was no overlap between the NGRI and NCRMD samples (i.e., amongst the individuals who were included in the present study, no defendant who had been found NGRI reappeared in the NCRMD group).

The pre-Bill C-30 remand sample comprised 81 men (93.1%) and 6 women (6.9%) ranging in age (at time of offence) from 19 to 74 years ($M=32.85$, $SD=11.83$). Caucasian individuals made up 83.9% of this sample, with 59.8% having never married and 24.1% having completed high school. With respect to mental health characteristics, 60.9% of the sample was given a psychiatric diagnosis indicative of the presence of psychotic symptoms, and 74.4% had a history of at least one previous inpatient admission. Of the index crimes alleged, 62.1% were against persons, while 18.4% were property offences. Fully 69% of this sample had a record of prior convictions.

The post-Bill C-30 remand sample consisted of 111 men (86.7%) and 17 women (13.3%) ranging in age (at time of offence) from 18 to 72 years ($M=34.79$, $SD=11.86$).⁵ Roughly 70.3% of this sample was Caucasian, 53.1% had never been married, and 34.4% were high school graduates. As concerns mental health issues, 62.5% of the individuals in this sample went to court with a psychiatric diagnosis indicative of the presence of psychosis, and 76% had been previously hospitalized as inpatients on at least one occasion.

Two individuals in the post-Bill C-30 remand group also were included in the pre-Bill C-30 remand group as they had been sent to FPI for assessment on more than one occasion, but for different index offences.

Crimes against persons made up 55.5% of the index charges faced by these remands, while crimes against property accounted for a further 17.2%. Finally, just over 67% of the sample had a criminal record indicating at least one past conviction.

Hypothesis 1: Comparison of Plea Rates

To test the hypothesis that the insanity plea rate increased following the implementation of Bill C-30, the number of individuals raising the insanity defence before and after the implementation of Bill C-30 must be compared, while controlling for the rate of crime in each of the relevant years. Accordingly, plea rates were calculated for each of the seven years covered by this study (data included 11 months of 1989 and 1 month of 1995) by dividing the number of remands for evaluation of mental status at the time of the crime by the number of offences reported for British Columbia (Statistics Canada Cat. No. 85-205).⁶ After a number of models describing the data were considered, the model that there was little change to the plea rate prior to Bill C-30 followed by a steady yearly increase in the plea rate subsequent to Bill C-30's implementation was selected (see Figure 1). The solid line in Figure 1 represents the model to which the data (i.e., the proportions of insanity evaluations for each year, with standard errors) were fitted. The probability that there was a difference between the model and the data (i.e., that the model did not fit the data) was very small ($p=.0048$). In order to assess the potential impact of the varying

⁶ The frequencies of insanity evaluations for the 7 years were 26, 31, 28, 27, 45, 53, and 5. The number of arrests in British Columbia for the corresponding years were 400,633; 502,610; 511,688; 515,063; 536,457; 536,023; and 43,501.

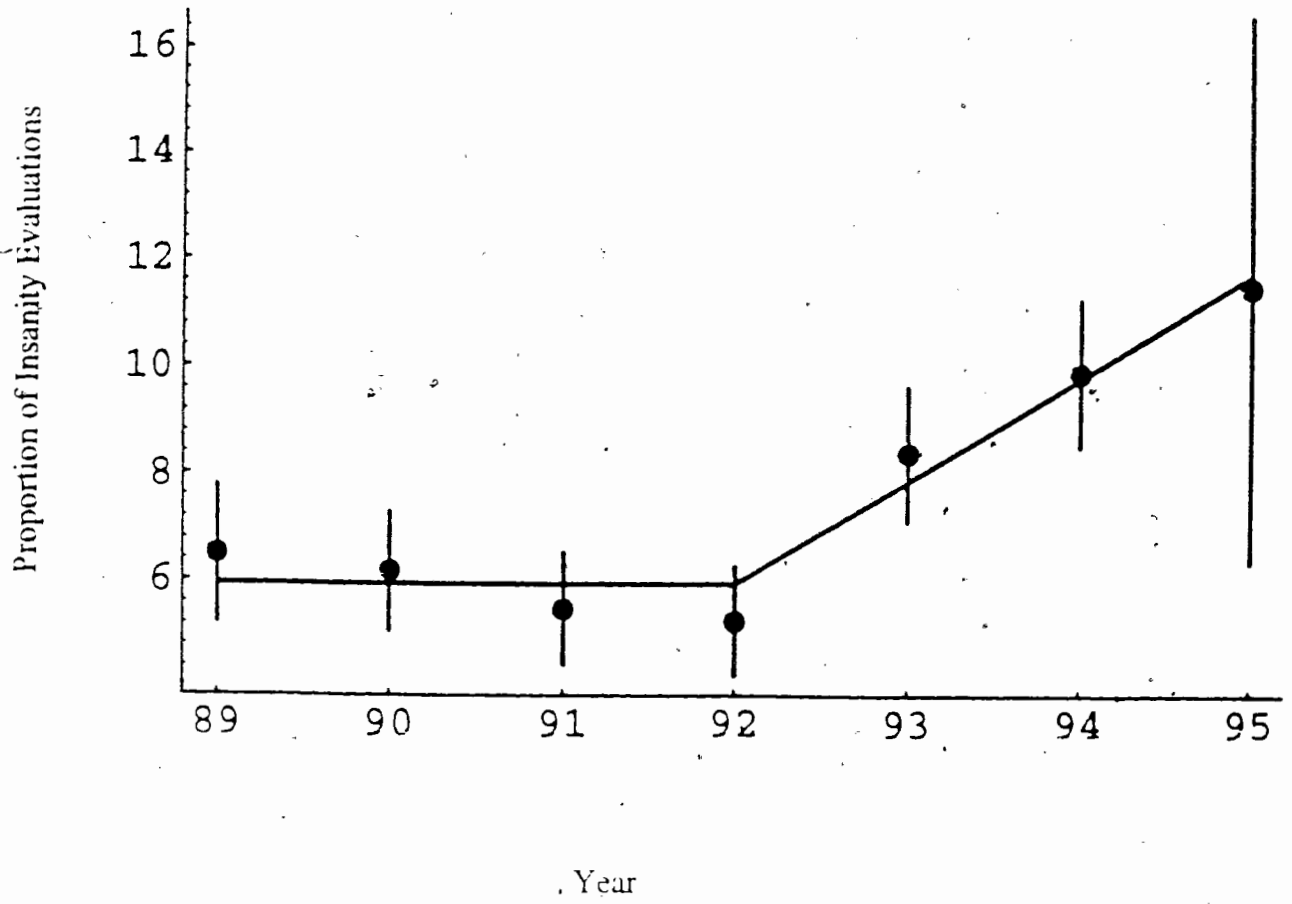
numbers of cases in each year (i.e., in some years the data covered fewer than 12 months), a second model was fitted using weights proportional to the reciprocals of the error variances. The result obtained was not appreciably different from that represented by the uncorrected model.

Hypothesis 2: Comparison of Acquittal Rates

To test the hypothesis that the insanity defence acquittal rate increased following the implementation of Bill C-30, the number of individuals found insane before and after Bill C-30 came into effect must be compared, while controlling for the number of insanity pleas entered. Accordingly, the number of NGR1 acquittees divided by the number of pre-Bill C-30 remands ($27/307=.088$) was compared to the number of NCRMD acquittees divided by the number of post-Bill C-30 remands ($76/522=.146$). Employing a test of the significance of the difference between independent proportions (as described by Ferguson, 1971, pp. 160-162) a z-score of 2.64 was obtained ($p<.05$), indicating that more defendants were found to be not criminally responsible after the enactment of Bill C-30 than before its introduction.

Figure 1

Model Depicting Plea Rates for the Years 1989 to 1995



Hypothesis 3: Comparison of Insanity Acquittee Demographics

Individuals found NGRI were compared to those found NCRMD with respect to age at index offence, gender, race (Caucasian vs. non-Caucasian), marital status (never married vs. ever married), and education (high school graduate vs. non-high school graduate). There were no significant differences in demographic profiles between the samples (see Table 1).

Table 1:

Demographics of Insanity Acquittees

	NGRI		NCRMD		<i>p</i> *
	n=27	%	n=76	%	
Age	<i>M</i> =33.97		<i>M</i> =33.20		.753
Gender					.107
Male	26	96.3	63	82.9	
Female	1	3.7	13	17.1	
Race					.145
Caucasian	25	92.6	60	78.9	
Non-Caucasian	2	7.4	16	21.1	
Marital Status					.248
Never Married	20	74.1	46	60.5	
Ever Married	7	25.9	30	39.5	
High school Graduate					.629
No	20	74.1	49	66.2	
Yes	7	25.9	25	33.8	

* Fisher's exact test, two-tail

Hypothesis 4: The Index Crimes of Insanity Acquittees

Individuals found NGRI were compared to those found NCRMD with respect to the type of crime for which they were found not criminally responsible. No significant differences were apparent between the percentage of crimes committed against persons before and after the enactment of Bill C-30 (see Table 2). Similarly, no differences between the samples were revealed with respect to psychopathology surrounding the index offence (i.e., diagnosis for court, presence of psychosis in the year prior to the index offence, psychiatric episode within which the index crime took place) (see Table 2).

Hypothesis 5: Comparison of Insanity Acquittees' Psychiatric and Criminal Histories

The mental health and criminal histories of NGRIs and NCRMDs were compared using t-tests (see Table 3). For the most part, there were no significant differences between the groups with respect to past contacts with the mental health or legal systems. However, individuals found NCRMD had significantly more prior suicide attempts ($t(96)=-4.36, p=.001$) than did defendants adjudicated NGRI. It is also of note that defendants found NCRMD had almost twice the mean number of prior convictions ($M=4.33, SD=7.12$) than did those found NGRI ($M=2.48, SD=3.59$). This difference approached but did not reach traditional significance levels ($p=.087$), likely because of the large variability in the number of convictions of post-Bill C-30 insanity acquittees.

Table 2:***Offence Psychopathology and Severity of Index Offences of Insanity Acquittes***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Psychotic Symptoms in Year Prior to Offence			.12	35	.903
NGRIs	2.23	1.18			
NCRMDs	2.20	.85			
Classification of Offence Related Episode			.80	100	.425
NGRIs	2.89	1.31			
NCRMDs	2.65	1.31			
	<u>NGRIs</u>		<u>NCRMDs</u>		<i>p</i> *
	n=27	%	n=76	%	
Diagnosis for Court					.6789
Psychotic	26	96.3	66	90.4	
Other	1	3.7	7	9.6	
Crime Against Persons					.5922
Yes	20	74.1	56	73.7	
No	7	25.9	20	26.3	

* Fisher's exact test, two-tail

Table 3:***Psychiatric and Criminal Histories of Insanity Acquittes***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Total # Inpatient Admissions			-0.51	101	.609
NGRI	5.11	4.18			
NCRMD	5.68	5.23			
Total # Days Admitted			-0.55	74	.584
NGRI	339.85	545.28			
NCRMD	464.55	956.77			
Age at First Onset of			1.02	58	.310
NGRI	2.77	.76			
NCRMD	2.57	1.03			
Time Since First Symptom*			-1.30	99	.197
NGRI	.69	1.22			
NCRMD	1.09	1.40			
Longest Time Symptoms			-0.86	99	.394
NGRI	1.15	1.29			
NCRMD	1.41	1.35			
Prior Suicide Attempt(s)*			-4.36	96	.001
NGRI	1.44	.75			
NCRMD	2.51	1.70			
Total # Prior Convictions			-1.73	89	.087
NGRI	2.48	3.59			
NCRMD	4.33	7.12			
Total # Prior Charges			-0.74	101	.459
NGRI	1.96	2.92			
NCRMD	2.67	4.63			

* These numbers represent categories (See coding forms in Appendices A and B).

Hypothesis 6: Remands Before and After Bill C-30

Individuals remanded before and after the implementation of Bill C-30, for an assessment of their mental state at the time of the alleged offence, were compared with respect to demographics, psychiatric history, past criminal involvement, and psychiatric circumstances surrounding the index crime. It was found that significantly more non-Caucasians were remanded for a mental status assessment subsequent to the implementation of Bill C-30 (29.1%) than prior to Bill C-30's enactment (16.1%, Fisher's exact test, 2-tail $p=.034$). No other significant differences between the samples were revealed (see Tables 4-6).

Hypothesis 7: Comparison of Remands' Index Crimes

The charges associated with defendants' remands for an assessment of mental status at the time of the crime were compared for individuals referred before and after the implementation of Bill C-30. Where the person was charged with more than one offence, the most serious offence was used. Offences were grouped into four categories (person crimes, property crimes, other criminal offences, traffic crimes) and also dichotomously as person crimes and other crimes. There were no significant differences between the pre-Bill C-30 remand group and the post Bill C-30 remand group with respect to the severity of their index offences (see Table 7).

Table 4:**Demographics of Remands**

	pre-Bill C-30		post-Bill C-30		p*
	n=87	%	n=128	%	
Age	M=32.85		M=34.78		.241
Gender					.178
Male	81	93.1	111	86.7	
Female	6	6.9	17	13.3	
Race					.034
Caucasian	73	83.9	90	70.9	
Non-Caucasian	14	16.1	37	29.1	
Marital Status					.3265
Never Married	52	60.5	68	53.1	
Ever Married	34	39.5	60	46.9	
High school Graduate					.065
No	62	74.7	70	61.4	
Yes	21	25.3	44	38.6	

* Fisher's exact test, two-tail

Table 5:***Psychiatric and Criminal Histories of Remands***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Outpatient Contacts*			.45	167	.653
pre-Bill C-30	3.02	.80			
post-Bill C-30	2.97	.80			
Inpatient Admissions*			.37	208	.715
pre-Bill C-30	2.41	1.34			
post-Bill C-30	2.34	1.32			
Age at First Onset of Symptoms*			-0.21	202	.831
pre-Bill C-30	3.12	1.33			
post-Bill C-30	3.16	1.27			
Time Since First Symptom Onset*			.27	200	.791
pre-Bill C-30	1.75	1.81			
post-Bill C-30	1.68	1.70			
Longest Time Symptoms Present*			.37	162	.713
pre-Bill C-30	2.24	1.76			
post-Bill C-30	2.13	1.81			
Total # of Prior Convictions			-0.88	213	.381
pre-Bill C-30	5.95	8.73			
post-Bill C-30	7.23	11.55			
Total # Prior Charges			-0.26	213	.799
pre-Bill C-30	2.78	4.58			
post-Bill C-30	2.97	5.69			

* These numbers represent categories (see coding forms in Appendices A and B).

Table 6:***Psychiatric Circumstances Surrounding Index Crime***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Psychotic Symptoms in Year Prior to Offence			1.38	180	.169
pre-Bill C-30	3.06	.89			
post-Bill C-30	2.86	1.10			
Classification of Offence Related Episode			-0.25	207	.802
pre-Bill C-30	1.70	1.56			
post-Bill C-30	1.76	1.72			
	pre-Bill C-30		post-Bill C-30		<i>p</i> *
	n=87	%	n=128	%	
Diagnosis for Court					.882
Psychotic	54	65.1	80	66.1	
Other	29	34.9	41	33.9	

* Fisher's exact test, two-tail

Table 7:**Severity of Remands' Index Offences**

	pre-Bill C-30		post-Bill C-30		p*
	n=87	%	n=128	%	
Category of Crime					.290
Persons	54	62.1	71	55.5	
Property	16	18.4	22	17.2	
Other	15	17.2	29	22.7	
Traffic	2	2.3	6	4.7	
Crime Against Persons					.206
Yes	54	62.1	71	55.5	
No	33	37.9	57	44.5	

* Fisher's exact test, two-tail

Hypothesis 8: Index Crimes of Acquittes vs. Remands

Type of index crime and presence or absence of a victim were compared for all insanity acquittees and all remands. These comparisons also were made for insanity acquittees and remands both before and after the implementation of Bill C-30. In other words, three comparisons were made; the first was between all insanity acquittees and all remands, the second was between the pre-Bill C-30 insanity acquittees and the pre-Bill C-30 remands, and the third was between the post-Bill C-30 insanity acquittees and the post-Bill C-30 remands.⁷ The results are presented in Table 8. As can be seen from Table 8,

⁷ Three individuals who were remanded pre-Bill C-30 were subsequently acquitted as NGRJ. Similarly,

when all insanity acquittees were compared to all remands, it was found that 73.8% of insanity acquittees' crimes were classified as crimes against the person, compared to 58.1% of remands' crimes (Fisher's exact test, 1-tail $p=.004$). Similarly, 72.3% of insanity acquittees' crimes involved a victim whereas only 58.1% of remands' crimes did (Fisher's exact test, 1-tail $p=.01$). These differences attained significance. Interestingly, for the pre-Bill C-30 comparisons, while NGRIs also committed a higher percentage of crimes against the person (74.1% vs. 62.1%), and had more crimes with victims (77.8% vs. 60.9%) than did pre-Bill C-30 remands, these differences were not significant (Fisher's exact test, 1-tail $p=.182$ and $p=.083$, respectively). Finally, for the post-Bill C-30 comparisons, NCRMDs committed a significantly higher percent of crimes against the person (73.7% vs. 55.5%, Fisher's exact test, 1-tail $p=.007$), and had significantly more crimes with victims (70.3% vs. 56.3%, Fisher's exact test, 1-tail $p=.033$) than did pre-Bill C-30 remands.

Hypothesis 9: Criminal History of Acquittedes and Remands

Length of criminal history was compared for all insanity acquittees and all remands. This comparison also was made between the pre-Bill C-30 insanity acquittees and remands, and between the post-Bill C-30 insanity acquittees and remands. Results were similar for the overall group comparison and for the comparisons between remands and insanity acquittees before and after the implementation of Bill C-30. In all cases,

13 defendants-remanded post-Bill C-30 were subsequently found NCRMD. In order that the same individuals were not included in both the remand and the insanity acquittee groups, for all comparisons of remands and insanity acquittees these 16 individuals were removed from their respective remand samples.

remands had a significantly greater number of prior convictions than did insanity acquittees. There were no significant differences for number of prior charges (see Tables 9 & 10).

Table 8:

Index Crimes of Acquittees and Remands

	Offence Against a Person			Crime had a Victim		
	yes %	no %	<i>p</i> *	yes %	no %	<i>p</i> *
Total Sample			.003			.008
Acquittees	73.8	26.2		72.3	27.7	
Remands	57.3	42.7		57.3	42.7	
Pre-Bill C-30			.179			.081
NGRIs	74.1	25.9		77.8	22.2	
Remands	61.9	38.1		60.7	39.3	
Post-Bill C-30			.004			.023
NCRMDs	73.7	26.3		70.3	29.7	
Remands	53.9	46.1		54.8	45.2	

*Fisher's exact test, one-tail

Table 9:**Prior Convictions of Acquittees and Remands**

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Total Sample			-3.14	293	.001
All Acquittees	3.84	6.42			
All Remands	6.94	10.68			
Pre-Bill C-30			-3.14	103	.001
NGRIs	2.48	3.59			
Remands	6.19	8.79			
Post-Bill C-30			-2.30	187	.011
NCRMDs	4.33	7.12			
Remands	7.50	11.88			

Table 10:**Prior Charges of Acquittees and Remands**

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Total Sample			-0.86	300	.194
All Acquittees	2.48	4.25			
All Remands	3.01	5.43			
Pre-Bill C-30			-1.45	76	.076
NGRIs	1.96	2.92			
Remands	3.09	4.99			
Post-Bill C-30			-0.36	189	.359
NCRMDs	2.67	4.63			
Remands	2.95	5.75			

Hypothesis 10: Psychopathology of Acquittees and Remands

Psychiatric history, and psychopathology connected to the index offence, were compared for all insanity acquittees and all remands. These comparisons also were made between the pre-Bill C-30 insanity acquittees and remands, and between the post-Bill C-30 insanity acquittees and remands. With one exception, findings were similar, and significant, for comparisons within all groups (total sample, pre-Bill C-30, post-Bill C-30). In general, insanity acquittees had significantly longer psychiatric histories than did remands (see Tables 11-13). This was represented by more frequent prior inpatient hospitalizations, a longer length of time since the first occurrence of psychiatric symptoms, symptoms that persisted over a longer period of time, and an earlier age at the first exhibition of psychiatric symptomatology. With respect to this last variable (age at first onset of symptoms), the pre-Bill C-30 comparison was not statistically significant.

With respect to psychopathology related to the index offence, in all cases, the symptoms of insanity acquittees were significantly more severe than were those of remands (see Tables 14-16). In other words, compared to remands, insanity acquittees' psychiatric diagnoses more often involved psychosis, and more symptoms of thought disorder, delusions, and/or hallucinations were evidenced during the year prior to the index offence.

Finally, the psychiatric episode during which the index offence took place was more likely to represent the exacerbation of an underlying chronic condition for insanity acquittees than for remands.

Table 11:***Psychiatric Histories of All Acquittes and Remands***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Inpatient Admissions*			-3.43	296	.0005
All Acquittes	1.86	1.37			
All Remands	2.42	1.32			
Age at First Onset of			-3.82	263	.0005
All Acquittes	2.62	.97			
All Remands	3.15	1.34			
Time Since First Symptom*			-4.38	254	.0005
All Acquittes	1.00	1.36			
All Remands	1.82	1.77			
Longest Time Symptoms Present*			-5.02	247	.0005
All Acquittes	1.35	1.33			
All Remands	2.32	1.76			

* These numbers represent categories (see coding forms in Appendices A and B).

Table 12:***Psychiatric Histories of NGRIs and Pre-Bill C-30 Remands***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Inpatient Admissions*			-2.08	107	.020
NGRIs	1.81	1.17			
Pre-Bill C-30 Remands	2.42	1.35			
Age at First Onset of Symptoms*			-1.40	80	.082
NGRIs	2.77	.76			
Pre-Bill C-30 Remands	3.07	1.41			
Time Since First Symptom*			-3.40	64	.0005
NGRIs	.73	1.22			
Pre-Bill C-30 Remands	1.75	1.81			
Longest Time Symptoms Present*			-3.47	62	.0005
NGRIs	1.15	1.29			
Pre-Bill C-30 Remands	2.31	1.74			

* These numbers represent categories (see coding forms in Appendices A and B).

Table 13:***Psychiatric Histories of NCRMDs and Post-Bill C-30 Remands***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Inpatient Admissions*			-2.39	187	.004
NCRMDs	1.88	1.44			
Post-Bill C-30 Remands	2.42	1.30			
Age at First Onset of Symptoms*			-3.51	183	.0005
NCRMDs	2.57	1.03			
Post-Bill C-30 Remands	3.20	1.29			
Time Since First Symptom*			-3.18	177	.001
NCRMDs	1.09	1.40			
Post-Bill C-30 Remands	1.83	1.74			
Longest Time Symptoms Present*			-3.74	159	.0005
NCRMDs	1.41	1.35			
Post-Bill C-30 Remands	2.32	1.78			

* These numbers represent categories (see coding forms in Appendices A and B).

Table 14:**Index Offence Psychopathology of All Acquittees and Remands**

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Psychotic Symptoms in Year Prior to Offence			-6.89	273	.0005
All Acquittees	2.22	.94			
All Remands	3.05	.98			
Classification of Offence Related Episode			6.21	243	.0005
All Acquittees	2.72	1.31			
All Remands	1.64	1.60			
	Acquittees		Remands		<i>p</i> *
	n=100	%	n=199	%	
Diagnosis for Court					.00001
Psychotic	92	92.0	118	59.3	
Other	8	8.0	81	40.7	

* Fisher's exact test, one-tail

Table 15:

Offence Psychopathology of NGRIs and Pre-Bill C-30 Remands

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Psychotic Symptoms in Year Prior to Offence			-3.77	99	.0005
NGRIs	2.27	1.18			
Pre-Bill C-30 Remands	3.11	.89			
Classification of Offence Related Episode			4.05	51	.0005
NGRIs	2.89	1.31			
Pre-Bill C-30 Remands	1.66	1.52			
	NGRIs		Remands		<i>p</i> *
	n=27	%	n=84	%	
Diagnosis for Court					.0003
Psychotic	26	96.3	51	60.7	
Other	1	3.7	33	39.3	

* Fisher's exact test, one-tail

Table 16:***Offence Psychopathology of NCRMDs and Post-Bill C-30 Remands***

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Psychotic Symptoms in Year Prior to Offence			-5.62	171	.0005
NCRMDs	2.20	.85			
Post-Bill C-30 Remands	3.01	1.04			
Classification of Offence Related Episode			4.72	180	.0005
NCRMDs	2.65	1.31			
Post-Bill C-30 Remands	1.62	1.66			
	NCRMDs		Remands		<i>p</i> *
	n=73	%	n=115	%	
Diagnosis for Court					.00001
Psychotic	66	90.4	67	58.3	
Other	7	9.6	48	41.7	

* Fisher's exact test, one-tail

Hypothesis 11: Psychiatrists' Recommendations of Insanity

To explore the question of whether psychiatrists supported a finding of nonresponsibility more often subsequent to Bill C-30 taking effect, the number of individuals recommended as insane before and after the implementation of Bill C-30 must be compared, while controlling for the number of remands assessing mental status at the time of the crime both prior and subsequent to Bill C-30's enactment. Accordingly, the number of pre-Bill C-30 remands for whom psychiatrists supported an insanity defence,

divided by the total number of pre-Bill C-30 remands ($9/87 = .103$), was compared to the number of post-Bill C-30 remands for whom psychiatrists supported an insanity defence, divided by the total number of post-Bill C-30 remands ($36/128 = .281$). Employing a test of the significance of the difference between independent proportions (as described by Ferguson, 1971, pp. 160-162) a z-score of 3.18 was obtained ($p < .05$), indicating that psychiatrists' reports more often supported an insanity defence subsequent to Bill C-30's introduction.

DISCUSSION

Overall, the results support the contention that procedural changes set in motion by the enactment of Bill C-30 have had an effect on the workings of the insanity defence in British Columbia. As a number of hypotheses were investigated, each will be discussed in turn. Before addressing the hypotheses individually, however, some general limitations in the study's methodology must be addressed.

The first methodological limitation of the present research concerns the generalizability of findings from defendants who had inpatient contact with FPI to those seen solely as outpatients. As has been the experience of other researchers (e.g., Arboleda-Florez et al., 1995; Davis, 1994), the identification and accessing of outpatient files would have been time consuming and not necessarily accurate. Consequently, the scope of the present research was limited to individuals who spent time as inpatients at FPI. However, this introduced a potential bias because, due to the very changes instigated by Bill C-30, there almost certainly were different rates of inpatient contact for defendants adjudicated prior to the introduction of Bill C-30 than there were for defendants who went through the court system after the implementation of Bill C-30. To elaborate, before Bill C-30 came into effect, all insanity acquittees were automatically detained as inpatients (Davis, 1994), which meant that all individuals found NGRI in British Columbia spent some time at FPI before eventually graduating to outpatient (and, where relevant absolute discharge) status. Therefore, FPI records accurately identified all people found NGRI in British Columbia

prior to Bill C-30. This is not the case subsequent to the enactment of Bill C-30.

After the implementation of Bill C-30, in addition to the traditional disposition of inpatient detention (which still involves being hospitalized at FPI), defendants acquitted by reason of a mental disorder (NCRMDs) were availed of two further disposition options. Individuals found NCRMD may now be immediately absolutely discharged or may receive a conditional discharge. There currently exists no accessible accurate record of the number of defendants who have received absolute discharges. Of the acquittees who received conditional discharges, some of them nevertheless spent an initial period at FPI (often because disposition had been deferred by the courts to the Review Board and they were detained at FPI pending the Review Board's decision). These individuals were included in the present study. Other conditionally discharged NCRMDs were not processed through FPI, and instead became the immediate responsibility of an outpatient forensic clinic. While it is not clear exactly how many individuals fall into this category, in a study investigating the first year following the passage of Bill C-30 in British Columbia, Davis (1994) ascertained that 25% of defendants found NCRMD (i.e., 5 of 20) were followed, straight-away, as outpatients. This means that the present study likely underestimated by at least 25% (and conceivably by more, given the probable existence of individuals immediately absolutely discharged and the fact that several new outpatient forensic clinics have opened over the years) the number of individuals found NCRMD in British Columbia. Furthermore, the immediately absolutely and conditionally discharged defendants likely differ in potentially significant ways from those acquittees who were

initially detained as inpatients. Davis (1994) interviewed one individual who worked for the Review Board who opined that immediate release was especially likely where the defendant was not considered to pose a risk to the public and/or when they had committed a minor offence. However, from the archival data he collected (not including people absolutely discharged, about whom he was unable to obtain any information), Davis (1994) found some indication that less serious crimes were *not* overrepresented among the defendants receiving immediate community placement (i.e., some of them had "severe" crimes). Nevertheless, one expects there to be some differences between the groups, if not in terms of index offence then with respect to psychopathology, or at least the remission thereof. Therefore, while the NCRMDs included in the present study represent the general population of NCRMDs initially detained at FPI, it is not clear that findings generalize to the population of NCRMDs.

With respect to the representativeness of inpatients assessed regarding their mental status at the time of the alleged offence, before the introduction of Bill C-30 all insanity evaluations requested by the court or the Crown were conducted at FPI on an inpatient basis (Ogloff, 1991b). However, as Ogloff (1991b) suggested, defence lawyers wishing an opinion about the criminal responsibility of their clients probably contracted with forensic psychiatrists and/or psychologists in private practice to perform these assessments. Thus some, likely small, minority of individuals for whom mental status at the time of the crime was an issue may not have been assessed at FPI prior to Bill C-30 becoming law.

This situation endures subsequent to the implementation of Bill C-30. In other

words, after the enactment of Bill C-30, doubtless there continues to be a group of individuals whose defence lawyers send them for private (outpatient) assessments, and it is also likely that the numbers in this group have grown due to the increasing attractiveness of the insanity plea as a defence option (Roesch, Ogloff, & Hart, 1996). However, from Davis' (1994) work, there also arises the suggestion that, were there to be an augmentation in referrals to private practitioners from the defence, prosecution initiated referrals to Forensic Services likely also would increase since "the Crown generally wants an 'independent' report, and usually turns to Forensic Services for this purpose" (p. 208). Thus, overall, the practices of defence lawyers probably have not much changed post-Bill C-30, except perhaps in that they may have increased the number of referrals given for mental status assessments of defendants considering a plea of NCRMD, and there is reason to believe that these individuals would also be seen by Forensic Services.

What *has* changed since the introduction of Bill C-30, is that Forensic Services no longer conducts all assessments at FPI on an inpatient basis. Stated another way, for pre-Bill C-30 remands the main question is where defence counsel sent their clients for assessments. For post-Bill C-30 remands it is both where defence counsel sent their clients (addressed above) and how many defendants were given mental status assessments as outpatients rather than as inpatients. Davis (1994) looked at both pre-trial and pre-sentence remands for mental status assessments for the period between February 1992 and February 1993, and found that 6.1% (or 8 of 131) were conducted on an outpatient basis. Although pre-sentence assessments, which were not studied in the present research, make

up part of this figure, it likely remains an underestimate, because it does not include referrals to forensic outpatient clinics other than the Vancouver Clinic. Research conducted by Roesch et al. (1997), which looked at remands for assessments of fitness and/or mental status at the time of the crime between April 1992 and March 1994, did include information from other outpatient clinics. These investigators ascertained that, over the period they studied, 12% of remands were sent to outpatient clinics, but this figure includes some assessments that were solely for fitness to stand trial and so overestimates the percentage of outpatient referrals for mental status assessments. Consequently, it is probably safe to say that between 6% and 12% of the NCRMD evaluations requested occur on an outpatient basis. However, there may exist systematic differences between those defendants assessed as inpatients and those seen as outpatients (although Davis, 1994, reports no differences in type of index offence). Consequently, as was the case with the NCRMD sample, it may be said with some confidence that the present sample of post-Bill C-30 remands is representative of those defendants assessed as inpatients at FPI, but it is not clear that findings generalize to post-Bill C-30 remands as a whole.

A second potential methodological weakness of the present study arises from the reliance on archival material. As noted by Cook and Campbell (1979) the use of information that already has been compiled means that the investigator has little control over potential systematic variations, over time, in what information is collected and/or in how it is gathered (e.g., changes in instrumentation). With respect to the current study, the

data available in an individual's FPI file are, to some extent, a function of the process of gathering the information necessary to the writing of the assessment report for court. In other words, for most reports addressing mental status at the time of the alleged crime, an attempt was made to obtain information regarding the individual's family background, prior social functioning, psychiatric history (including past hospitalizations), and the like, but the actual acquisition of such information may be affected by a variety of such things as the defendant's willingness to sign a release of information form, the length of time that the defendant spends at FPI and/or his or her accessibility while there, and the peccadilloes of the attending psychiatrist (e.g., one psychiatrist routinely requested CPIC information while most others did not).

As long as the potential factors affecting acquisition of information are presumed to vary randomly, there is little cause for concern. However, the introduction of Bill C-30 has itself instigated some changes that may have had a systematic effect. For example, due to the requirements of Bill C-30, the overall length of time of a remand assessment has decreased (Roesch et al., 1997)⁸, which may affect the range and detail of information obtained. Furthermore, the forms used to refer defendants for mental status assessments have been revamped following Bill C-30, and also originate from a different source, namely, the courts themselves as opposed to Crown counsel (although the latter referral forms did not completely disappear post-Bill C-30 with the result that sometimes both

⁸ Roesch et al. (1997) report mean evaluation time for all evaluations i.e., including NCRMD and/or fitness as 19.7 days, while the corresponding pre-Bill C-30 number, from Ogloff's (1991b) study is 34 days.

forms were received). Moreover, there have been changes in staff at FPI over time, and the enactment of Bill C-30 increased the workload so as to necessitate the hiring of additional personnel.

The third methodological weakness of the present study is that time series analyses were not employed. Other researchers of the insanity defence (McGreevy et al., 1991; Ogloff et al., 1992) have commented on the necessity of controlling for general trends that may affect the frequency and success of the insanity plea, by employing time series analyses. However, Cook and Campbell (1979) indicate that in order to meaningfully statistically analyze a time series, at least 50 data points are required. It was not possible to disaggregate the data in the present study to meet this criterion (which may explain why Arbolèda-Florez et al., 1995 also employed before and after comparisons rather than time-series analyses in their study of the effects of Bill C-30 on insanity defence procedures in Alberta). Furthermore, as Cook and Campbell (1979) also point out, time-series analysis alone will not control for such threats to internal validity as the effects of history. A control group unaffected by the change being studied (a "no-treatment control group") is needed for that purpose. However, in the present situation, such a group is unobtainable since Bill C-30 was implemented on a Canada-wide basis (Davis, 1994).

With the aforementioned limitations in mind, a consideration of each of the 11 hypotheses in turn will now be undertaken.

Hypothesis 1: Comparison of Plea Rates

When researching the frequency with which the insanity defence is raised, it is

important to place in context the numbers obtained rather than solely providing absolutes. This is because extraneous conditions, such as an increase in the arrest rate, can increase the absolute, but not the proportional, number of defendants who use the insanity defence (Blau & Pasewark, 1994). For example, Pasewark et al. (1984) reported a significant increase in the number of insanity pleas entered in Wyoming over a six-year period, which witnessed three changes to insanity defence procedures, but found that this increase became non-significant when the crime rate was controlled for. Similarly, Callahan et al. (1992), suggested using a plea rate, defined as the number of insanity pleas per 100 indictments, to provide a context for the number of times the insanity defence is employed in any given time span.

Given the considerations addressed above, in the present study the insanity defence plea rate was operationalized as the number of insanity evaluations divided by the arrest rate, and it was hypothesized that the plea rate would increase post-Bill C-30. This hypothesis was supported, although much past research did not report comparable results. For example, as mentioned above, Pasewark et al. (1984) found no differences in the frequency with which the plea was raised, across three modifications to the insanity defence, after controlling for the crime rate. Likewise, McGreevy et al. (1991) reported that making the California insanity standard more stringent had no effect on the insanity plea rate, while Callahan et al. (1992) obtained similar results in Georgia, following the introduction of the GBMI option. Nevertheless, Packer (1985) found that there was a substantial increase in referrals for insanity evaluations following procedural changes to

the insanity defence in Michigan that included the elimination of automatic, indeterminate detention of defendants found NGRI. It is of note that the insanity defence alterations covered in Packer's (1985) work most resemble those effected by Bill C-30.

There are, however, methodological difficulties with the manner in which this hypothesis was tested, and they must be addressed. First, because it is difficult, if not impossible, to accurately identify cases in which the insanity defence was raised (see Callahan et al., 1991; Ogloff, 1991b), the number of referrals requesting an assessment for mental state at the time of the offence was used to approximate the plea rate. The logic of this procedure is supported in the literature (e.g., in their study of the insanity defence in Montana, Steadman et al., 1989 included cases in which either a plea was entered, or there had been a court ordered referral for a psychiatric assessment of criminal responsibility). Nevertheless, a problem with equating referrals for mental status evaluation with the raising of the insanity defence is that, even though it is unlikely that an insanity defence would be introduced without such an evaluation having been conducted, it does not therefore hold that all requests for assessments addressing the defendant's state of mind at the time of the alleged offence are the result of a true interest in that issue.

For example, with respect to pre-Bill C-30 remands, Ogloff (1991b) registered doubt that an insanity plea was actually raised in many of the cases where an assessment of mental state at the time of the crime was requested, because of the number of times (e.g., 88.6% in the sample he was investigating) that the attending psychiatrist put forth the opinion that the defendant did not meet the criteria for an insanity defence. Ogloff (1991b)

went on to question the motives behind many petitions for details about an accused's criminal responsibility, noting that in 1989, 123 of the 267 referrals to FPI (i.e., 46%) requested information about mental status at the time of the crime. He concluded that it was "unlikely that the insanity defence was seriously being considered in so many cases" (p. 32). Therefore, it seems likely that the pre-Bill-C-30 proportions overestimate the true rate at which the insanity defence was raised in British Columbia.

It appears, however, that a similar situation may exist in British Columbia subsequent to the implementation of Bill C-30. Davis (1994) interviewed participants who had knowledge of insanity defence procedures by virtue of their involvement with the courts, the Provincial Review Board, or Forensic Psychiatric Services. Several of these individuals alluded to the practice of requesting as much information as possible when sending a defendant for an assessment, in effect meaning that boxes on the referral sheet were ticked simply because they were there. In addition, many of his participants predicted that the number of remands for an NCRMD assessment would increase post-Bill C-30, as Crown counsel attempted to obtain information that would be useful to them should defence lawyers actually raise the plea (Davis, 1994). Roesch et al.'s (1996) interviewees also brought up the issue of remands (for fitness and/or mental status assessment) that were not made for the purpose that was stated on the referral form (e.g., using the remand process to "buy time" for preparing the case, or to obtain psychiatric treatment for the accused).

A better sense of the situation regarding unnecessary referrals post-Bill C-30,

however, can be gained by looking at figures comparable to those presented by Ogloff (1991b). In the two years after Bill C-30 was implemented (fiscal years 1992-93 and 1993-94) the attending psychiatrist did not support the defence of NCRMD in 61.1% (compared to 88.6% for Ogloff, 1991b) of the cases where a request was made for mental status at the time of the alleged offence (Roesch et al., 1997). This implies that the plea is being recommended more frequently after Bill C-30 than before it, and supports the notion that requests for evaluation of mental status may be less frivolous subsequent to the passage of Bill C-30. Furthermore, combined figures for fiscal years 1992-93 and 1993-94 indicate that 38.7% of referrals to Forensic Services (240 of 620) requested information about mental status (Roesch et al., 1997), compared with 46% in Ogloff's (1991b) pre-Bill C-30 study. This represents a slight decrease in referrals for assessment of criminal responsibility. Thus while it is likely that the post-Bill C-30 proportions continue to overestimate the true rate at which the insanity defence was raised in British Columbia, it does not appear to be the case that so-called "frivolous" referrals were made more often after the introduction of Bill C-30 than before it. Accordingly, there is good reason to believe that the obtained increase in rate of requests for insanity evaluations is not simply the result of indiscriminate referral practices, a finding that is interesting even if one does not believe that the frequency with which assessments of criminal responsibility are requested reveals anything about the rate with which the plea is raised in court.

A second point to weigh with respect to this hypothesis is that because the present study looked only at inpatient referrals (as detailed in the discussion of the overall

methodological weaknesses of the present study, see above), outpatient referrals for mental status evaluations were not included. Thus, regardless of how good or bad a representation of plea rates remands for assessment of criminal responsibility are (and there is no reason to think that outpatient referrals would be any more representative of pleas actually entered than are inpatient referrals), in the present study the number of such remands reported subsequent to the implementation of Bill C-30 is an underestimate. This implies that the observed increase in referrals for assessment of criminal responsibility subsequent to the introduction of Bill C-30 likely is even greater than reported.

Hypothesis 2: Comparison of acquittal rates

When studying changes in the success of the insanity defence, simply reporting the frequency of insanity acquittals across a number of years leaves the meaning of any changes found open to diverse interpretations, since variations in such things as the frequency with which the plea is raised may affect the absolute, but not the proportional, number of defendants who are acquitted (Blau & Pasewark, 1994). To control for the effects of such extraneous conditions, Callahan et al. (1992), suggested using an acquittal rate, defined as the number of acquittals divided by the number of pleas entered.

Consequently, in the present study, the acquittal rate was operationalized as the number of insanity acquittals divided by the number of insanity evaluations, and it was hypothesized that the insanity defence acquittal rate would increase subsequent to the implementation of Bill C-30. This was found to be the case. Interestingly, Bradford (1995) reported that in Ottawa, post-Bill C-30, there also was a substantial increase in the number of people

found not criminally responsible. Unfortunately, this finding cannot be considered to be reliable, first because Ottawa represents only a fraction of the population of Ontario and thus could be anomalous, and second because there does not appear to have been any control for the number of defendants raising the defence. It is of further note that the only American study that looked at insanity defence modifications that were similar to those implemented by Bill C-30 (Packer, 1985) did not report an increase in insanity acquittals although, as previously mentioned, a greater number of defendants did raise the plea. Most other American researchers (Boardman et al., 1996; McGreevy et al., 1991; Pasewark et al., 1984) also have not reported any effect of altering the insanity defence on the rate of subsequent acquittals. In this respect, Callahan et al. (1992) are unusual in that they found that the acquittal rate in Georgia decreased following the introduction of the GBMI option, the intent of which was to lower the frequency of NGRI verdicts.

In any event, there exist a number of difficulties with the way in which this hypothesis was investigated, and these must be delineated: First, the potential pitfalls inherent in equating referrals for insanity evaluations with the number of insanity pleas raised was addressed under hypothesis 1. Therefore, they will not be re-visited here, although they must be kept in mind.

Second, since the plea rates before and after Bill C-30 are proportions, changes in either the numerator (insanity acquittals) or the denominator (insanity evaluations) will affect the rate, and, consequently, the comparison. Therefore, it becomes important to demonstrate that the numbers in the numerators and denominators both before and after

Bill C-30 accurately reflect what they are supposed to. With respect to the numerators, as previously mentioned, it is known that in the years prior to the implementation of Bill C-30 the number of insanity acquittals equaled the number of people admitted to FPI.

Although this did not continue to be the case after Bill C-30 was introduced, the fact that absolutely discharged (and some outpatient) NCRMDs are not captured in the post-Bill C-30 figure serves only to reduce a difference that could have been even greater (as long as the denominators do not change). In other words, the larger the post-Bill C-30 numerator becomes (and it could be as much as 25% higher considering the research covered at the start of the section), the more substantial is the difference between pre- and post-Bill C-30 proportions, provided that the denominators are accurate.

With respect to the denominators, as previously discussed, prior to the enactment of Bill C-30 the only referrals for criminal responsibility that likely were missed by counting inpatient admissions to FPI were those made by defence lawyers to mental health professionals in private practice (and even then, some of these individuals also may have been referred to FPI by Crown counsel). Subsequent to the implementation of Bill C-30, it was estimated that not more than 12% of the referrals for assessment of mental status at the time of the alleged crime would have been conducted on an outpatient basis.

Therefore, the denominator of the post-Bill C-30 proportion could be up to 12% higher than it is. However, since the numerator could be up to 25% higher, it is unlikely that the overall effect of excluding outpatient referrals would be to reduce the post-Bill C-30 acquittal rate. Consequently, it not only appear that the numbers in both the pre- and post-

Bill C-30 numerators and denominators are representative, but also that the difference found in the plea rate proportions may also generalize to defendants not assessed as inpatients at FPI.

A third caution about the present finding is that the pre- and post-Bill C-30 plea rates were obtained by summing the number of insanity acquittees and remands for mental status assessments for the years prior and subsequent to Bill C-30's introduction and then comparing the resultant proportions. This procedure effectively turned a series of observations into a single before and after comparison, potentially obscuring any trend that already existed prior to the implementation of Bill C-30, and leaving the finding vulnerable to some of the threats to internal validity delineated by Cook and Campbell (1979). One likely rival interpretation of the observed increase in acquittal rates is that something other than Bill C-30 (e.g., the *Chaulk* decision) caused the increase in the number of defendants adjudicated as NCRMD (the threat of history). This threat is impossible to rule out, given the design of the present study, since there is a potentially limitless source of competing explanations. Alternately, it is possible that acquittal rates in the three years prior to the introduction of Bill C-30 were unusually low and the apparent increase post-Bill C-30 was simply a regression to the mean. The present data do not cover enough years, either before or after Bill C-30, to allow for the discounting of this threat.

Hypothesis 3: Comparison of Insanity Acquittee Demographics

It was postulated that there would be no differences, before and after the implementation of Bill C-30, in the demographics of individuals found not criminally

responsible. This hypothesis was supported, as no differences were found between defendants acquitted as NGRI and those adjudicated NCRMD with respect to age at the time of the offence, gender, race, marital status, or level of education. This finding is not surprising since, conceptually, systematic changes in such variables would not be expected, given that the insanity defence pertains to the defendant's mental state at the time of the crime rather than to his or her demographic profile (Steadman et al., 1983). Comparable results also have been well documented in the literature. Packer (1985) reported no differences in the age, gender, or race of defendants successfully pleading insanity following changes to both the wording of, and the procedures surrounding, the insanity defence in Michigan. Similarly, McGreevy et al. (1991) reported no differences in gender, ethnicity, marital status, or education between individuals found insane before and after a change to the insanity defence standard in California that rendered it less lenient. Finally, Callahan et al. (1992) did report an increase in the mean age of, and in the percentages of female and non-Caucasian, defendants found NGRI subsequent to the introduction of the GBMI option in Georgia, but these changes did not attain statistical significance.

Hypothesis 4: Comparison of Acquittes' Index Crimes

It was predicted that because Bill C-30 broadened the disposition options of individuals found NCRMD, thereby doing away with automatic detention, the percentage of less serious index crimes would be greater for post-Bill C-30 insanity acquittees than for those acquitted prior to Bill C-30's inception. It also was expected that the degree and

type of defendants' psychopathology associated with the index offence would not differ before and after Bill C-30. The first part of this hypothesis (re index crimes) was not supported, notwithstanding the belief, espoused by many of the individuals employed by or associated with British Columbia's Forensic Psychiatric Services and interviewed by Davis (1994), that the plea would be used for less serious crimes after Bill C-30.

Prior research addressing the effect on index crimes of modifications to the insanity defence has produced mixed results. McGreevy et al. (1991) found no differences in the severity of the index offences of insanity acquittees before and after a reform to the insanity defence standard in California. However, immediately after a reform introducing the GBMI verdict in Georgia, Callahan et al. (1992) recorded a significant decrease in the number of NGRI defendants acquitted of violent offences. Unfortunately, this finding becomes hard to interpret in light of the observation that two years after the reform the number of acquittals for violent crimes rose once more. Interestingly, given the similarity to the situation in Canada after Bill C-30, a Michigan study (Packer, 1985) reported that the percentage of less serious index crimes increased in the wake of procedural modifications to the insanity defence that eliminated automatic indeterminate detention of defendants found NGRI, a discovery that clearly is different from the one described here.

One plausible explanation of the present finding of no difference in index offence severity is that defendants who committed less serious offences were more likely to be immediately discharged to the community, either absolutely or with conditions, and thus were not included in this study. However, Davis' (1994) research provided some

indication that less serious crimes were *not* overrepresented among defendants receiving immediate community placement. Another feasible interpretation, suggested by Davis' (1994) interviews with defence lawyers, is that they continued to be leery about employing the plea for lesser crimes, perhaps due to uncertainty about the actual operation of the new discharge procedures. A third possibility is that the more flexible disposition options for defendants found NCRMD actually encouraged defence to raise the plea in cases where the crimes were *more* serious than previously (Davis, 1994). However, the present comparison of pre- and post-Bill C-30 index crimes did not reveal *any* differences in the profiles of defendants' index offences. Finally, it may be that the implementation of Bill C-30 prompted almost no modification in the manner in which defendants with less serious crimes are handled. Ogloff's (1991b) interviews with individuals familiar with the actual operation of insanity defence procedures suggested that, at least prior to the enactment of Bill C-30, charges often were stayed for defendants who evidenced a mental disorder, did not appear to be at risk for future violence, and had committed less serious crimes. These defendants, then, would never enter the system as insanity acquittees, having been diverted before that stage of the proceedings was reached. Although this issue was not expressly investigated in the present study, informal observations made while collecting file information suggest that this practice has continued subsequent to the introduction of Bill C-30.

* The second part of this hypothesis (re index offence psychopathology) was supported. No differences were found between pre- and post-Bill C-30 insanity acquittees

with respect to the category of psychiatric diagnosis that went to court (psychotic vs. not psychotic), the exhibition of psychotic symptoms in the year prior to the index offence, or the nature of the episode within which the index offence took place (e.g., exacerbation of a chronic mental health condition, new syndrome superimposed upon a prior mental illness, etc.). It is worth remarking that the few studies found that addressed the impact of insanity defence reform on defendants' diagnoses reported fluctuations in the composition of the diagnoses of insanity acquittees. McGreevy et al. (1991) observed a decrease in the proportion of diagnoses of schizophrenia amongst defendants found NGRI following a change to the wording of the insanity defence standard in California, but noted that there was a concomitant increase in diagnoses reflecting major mental illnesses such as other types of psychosis and affective disorders. Conversely, Callahan et al. (1992) reported, subsequent to the introduction of the GBMI verdict in Georgia, that while there was no change in the percentage of insanity acquittees diagnosed as schizophrenic, there was a moderate, but not statistically significant, augmentation in the proportion of individuals receiving one of the personality disorders as a primary diagnosis. Considering that the forensic personnel interviewed by Davis (1994) suggested that the insanity defence might be introduced more frequently, post Bill C-30, for defendants diagnosed as personality disordered, it is noteworthy that the aforementioned finding was not paralleled in the present research.

Hypothesis 5: Comparison of Insanity Acquittes' Psychiatric and Criminal Histories

It was hypothesized that there would be no significant differences in the criminal

and mental health histories of defendants who successfully pleaded insanity prior to the introduction of Bill C-30 and those who did so subsequent to Bill C-30's enactment. This indeed was found to be the case, with the exception that, compared to NGRIs, NCRMDs had significantly more prior suicide attempts, and a greater number of prior convictions (although this did not reach traditional significance levels). The only other study located that investigated the effect on mental health and criminal histories of changes to the insanity defence (McGreevy et al., 1991) found no differences in these variables for defendants adjudicated NGRI before and after the insanity standard in California was modified.

With respect to the apparent increase, post-Bill C-30, in the number of past suicide attempts of insanity acquittees, it may be that this information was not recorded consistently across time periods in the FPI files. To elaborate, as mentioned before, data contained in the FPI files is, to a certain extent, influenced by the interests of the attending psychiatrist. Given the post-Bill C-30 emphasis on releasing defendants who do not appear to pose a danger to self or others, it may be that acquittees' history of past suicide attempts has become more relevant. In other words, in attempting to determine whether or not the individual is at risk, subsequent to the introduction of Bill C-30 the staff at FPI may be routinely searching out information about prior suicide attempts, with the result that it is more often recorded in the patient charts than it was previously. This would suggest that it is not that the post-Bill C-30 insanity acquittees are more suicide-prone than their pre-Bill C-30 counterparts, but rather that the accuracy with which these events

is recorded has improved. Alternatively, it is possible that occurrences at FPI itself (e.g., a change in policy, a desire to reduce FPI-based suicide attempts, the reorganization of personnel, etc.) prompted past suicidal behaviour to be more thoroughly documented. Finally, it is also feasible that the observed difference in frequency of prior suicide attempts represents a true shift in the past behaviours of insanity acquittees, perhaps because the combination of deinstitutionalization and a paucity of hospital beds has led to a more shallow security net in recent years (i.e., people who in the past might have been admitted to hospital are instead being left to their own devices and then getting to a point of crisis, to which they respond by attempting suicide).

The other change obtained post-Bill C-30 was an increase in the number of prior convictions of individuals found NCRMD as compared to those found NGRI. This may reflect a greater willingness to consider the defence for a wider range of defendants than previously occurred, although were this so then changes also might have been expected in such variables as seriousness of the index offence or number of past psychiatric hospitalizations, which was not the case. Another possibility has to do with the length of time that an individual's record of past convictions is maintained on the CPIC system. If information is deleted after a certain time interval, then since NGRIs were adjudicated longer ago than were NCRMDs, the CPIC records of some NGRIs, notably those requested recently because they were not already available on the individual's chart, may actually under-report the number of prior convictions.

Hypothesis 6: Remands Before and After Bill C-30

It was expected that the characteristics of individuals who raised the insanity defence subsequent to the implementation of Bill C-30 would be different from those of defendants pleading insanity before Bill C-30's introduction, especially with respect to diagnosis, and mental health and criminal histories. However, with the exception that more non-Caucasian defendants were found to have been remanded for insanity evaluations after Bill C-30's inception than before it, this hypothesis was not supported.

The finding that there were few changes to the profiles of insanity pleaders subsequent to insanity defence reform, however, is largely in agreement with the prior literature. Pasewark et al. (1984) studied the demographic characteristics of defendants who raised the insanity defence across several revisions (to procedures and/or wording) of the insanity defence in Wyoming over a six-year period. They reported no significant changes in the age, sex, race, marital status, or education of NGRI evaluatees. They also observed no differences in the frequency of prior inpatient admissions, or in the number of past criminal charges. Similarly, in California no changes were noted in the demographic profiles, number of past psychiatric hospitalizations, extent of previous involvement in the criminal justice system, or psychiatric diagnoses of defendants raising the insanity plea after the standard was altered from the ALI test to a modified version of the McNaughtan rules (McGreevy et al., 1991). Likewise, Callahan et al. (1995) compared the demographic profiles and the psychiatric diagnoses of insanity pleaders before and after a reform intended to abolish the insanity defence in Montana and found that they remained the

same. Only Callahan et al. (1992) observed significant differences in the ages, diagnoses, and percentage of women and non-Caucasians, in their group of insanity pleaders subsequent to (as contrasted to preceding) the introduction of GBMI legislation in Georgia. It is of interest that Callahan et al.'s (1992) finding that more non-Caucasians raised the plea subsequent to the reform also extended to more non-Caucasians being acquitted by reason of insanity. In the present study, although the percentage of non-Caucasian insanity acquittees increased threefold subsequent to the implementation of Bill C-30, the difference was not statistically significant, likely due to the small pre-Bill C-30 sample size.

Hypothesis 7: Comparison of Remands' Index Crimes

With respect to the index offences of insanity pleaders, it was postulated that, post-Bill C-30, the defence no longer would be raised only for defendants accused of more serious crimes. This was not found to be the case. Similar to the results in the present study, of the prior research that investigated the index crimes of defendants who raised the insanity plea, all reported that changes to the insanity defence (including modifying the standard and/or altering procedures) had no effect on the seriousness of the offences that prompted the assessment for criminal responsibility (Callahan et al., 1995; McGreevy et al., 1991; Pasewark et al., 1984). However, none of these studies covered modifications that rendered less negative the consequences of being found not guilty on account of insanity, as Bill C-30 has done.

One possible explanation for the present finding is that the post-Bill C-30

defendants accused of having committed the less serious crimes were assessed as outpatients and thus were not included in this study. This interpretation likely is untenable, however, because, as discussed at the beginning of this section, it appears that between only 6% (Davis, 1994) and 12% (Roesch et al., 1997) of individuals were assessed as to their mental status at the time of the alleged offence at locations other than FPI. Furthermore, Davis (1994) reported no differences in the index crimes of defendants sent to FPI and those seen in the community.

An alternate possibility is that defendants who committed non-violent crimes were diverted out of the criminal justice system, thereby being omitted from the present sample. Ogloff (1991b) reported that prior to Bill C-30 the charges often were stayed for those defendants accused of less serious crimes and not considered to be at risk for acting out dangerously in the community. Unfortunately, comparable information was not available for the post-Bill C-30 remand group, although it certainly was the impression of the present researcher that Crown counsel's practice of staying proceedings, following consultation with the attending psychiatrist at FPI, to allow defendants to obtain help through the mental health system continued. Nevertheless, such files were coded in the present research. Therefore, in order to address the research question at hand, one would need to show not only that diversions *increased* after Bill C-30's introduction, but also that they occurred prior to the individual's arrival at FPI (or, perhaps, disproportionately for outpatient remands). It does not seem likely that this occurred.

Hypothesis 8: Index Crimes of Acquittedes vs. Remands

It was hypothesized that the crimes of insanity acquittedes, both before and after the implementation of Bill C-30, would be more severe and would more often involve a victim than those of defendants raising the insanity defence. For both the overall and the post-Bill C-30 comparisons of acquittedes and defendants this indeed was so. Interestingly, the pre-Bill C-30 remands and acquittedes were similar with respect to these variables. In other words, the index crimes of acquittedes and pleaders unexpectedly were comparable prior to the enactment of Bill C-30, while subsequent to Bill C-30 there was an unanticipated shift in the relationship between acquittedes and pleaders with respect to the seriousness of their index crimes.

The first question to be addressed is why the crimes of acquittedes and pleaders were not found to be different prior to Bill C-30. It may be that the pre-Bill C-30 crimes of acquittedes and pleaders were similar because defendants who committed less serious crimes were diverted out of the criminal justice system, leaving only those defendants charged with more serious crimes facing the possibility of being found NGRI. However, were this the case it would argue for the existence of a *difference* between groups, because defendants whose charges were stayed during the course of their mental status evaluations nevertheless were included in the study. Alternately, there may have been no differences in severity of index crimes between acquittedes and pleaders because defendants who committed less serious offences pre-Bill C-30 simply were not considered for an insanity defence due to the negative disposition consequences.

The second question to be addressed is why the crimes of acquittees and pleaders were different subsequent to the implementation of Bill C-30, when they had not been so before. One possibility is that acquittees charged with less severe crimes were more likely to be given an immediate conditional or absolute discharge, with the result that a study such as the present one, that compared only inpatients, included a group of acquittees inadvertently selected for more serious offences. However, at least two problems with this contention can be identified. First, it might equally be expected that the remands accused of less serious crimes also would be dealt with as outpatients. Second, work by Davis (1994) suggests that the index crimes of insanity acquittees and pleaders seen as outpatients do not differ from those of their respective counterparts receiving inpatient treatment and/or evaluation. Another possibility is that the post-Bill C-30 expansion of the disposition options resulted in defence lawyers becoming more willing to consider an insanity plea for clients accused of less serious crimes. In other words, it could be that, post-Bill C-30, defendants with a greater range of crimes were sent for evaluations, although only those charged with the more serious crimes were eventually found NCRMD. However, were this to be happening, one would expect to have observed discrepancies in the composition of the index crimes of pre- and post-Bill C-30 remands. Such a difference was not found (see discussion of hypothesis 7).

On a different note, it has been suggested that the charges brought against defendants may over-represent the gravity of their crimes (Ogloff 1991b). However, unless a systematic bias existed, over time, in how charges were laid against those

eventually acquitted by reason of insanity and those not relieved of criminal responsibility, this potential problem should apply equally to all groups.

Finally, a consideration of previous studies comparing insanity acquittees to insanity pleaders with respect to severity of index offences revealed that almost all have observed that the index crimes of insanity acquittees were more violent (Callahan et al., 1992; Callahan et al., 1995; McGreevy et al., 1991; Rice & Harris, 1990). The only exception was Smith and Hall (1982), who reported no differences between groups in the percentage of offences committed against persons. At the same time, reforms to insanity defence procedures were found to have no effect on the relationship between acquittees and pleaders with respect to index crimes (Callahan et al., 1992).

Hypothesis 9: Criminal History of Acquittees and Remands

It was expected that successful insanity pleaders, as compared to those who were not successful with the defence, would evidence a less lengthy criminal history. It was not expected that the enactment of Bill C-30 would affect this relationship. This hypothesis was supported in that acquittees had fewer prior convictions than did remands, a relationship that was not affected by the introduction of Bill C-30. However, no differences were obtained between the comparison groups with respect to past charges. It should be noted, however, that while both charges and convictions are somewhat unreliably recorded in the CPIC system, and consequently in the present research, this is especially true for charges. Subsequent to the implementation of the Freedom of Information Act, many, but not all, RCMP jurisdictions stopped providing information

about prior charges. This means that information regarding past charges may be incomplete and/or missing. Turning to past studies, it is noted that insanity acquittees consistently were found to have had less involvement with the criminal justice system than insanity pleaders, although the measure of criminality varied. To wit, some researchers reported that their sample of acquittees had fewer convictions (Boardman et al., 1996), others noted fewer past charges amongst their acquittee cohorts (Rice & Harris; Smith & Hall, 1982), while still others recorded fewer previous arrests (Callahan et al., 1991).

Hypothesis 10: Psychopathology of Acquittees and Remands

It was hypothesized that, both before and after Bill C-30, individuals who were acquitted due to insanity, as compared to unsuccessful insanity pleaders, would evidence more severe psychopathology, as represented by a longer treatment history and greater mental disorder (including more serious diagnoses) surrounding the index offence. This hypothesis was supported. It must be kept in mind, however, that (a) the diagnostic process can be unreliable (Pasewark et al., 1984), (b) changes in personnel can affect the psychiatric diagnoses assigned (Pasewark et al., 1984), and (c) some psychiatrists may prefer some diagnoses over others and therefore employ them more often (Davis, 1994). Moreover, it has been observed that the information obtained from FPI records regarding past inpatient admissions may not be valid (Ogloff, 1991b). In other words, some variability would be expected across files with respect to the accuracy and completeness of the information contained therein. At the same time, in order for any of these possible sources of unreliability to account for the present results, one would have to posit that

there were systematic differences between insanity acquittees and pleaders with respect to the assignment of diagnoses and/or the accuracy of information contained in their charts. This does not seem plausible. Furthermore, the present findings are in keeping with those of other researchers. To elaborate, a number of investigations have documented that insanity acquittees received more diagnoses of schizophrenia (or psychosis, and/or other major mental illnesses) than did defendants who unsuccessfully pleaded insanity (Callahan et al., 1992; Callahan et al., 1991; McGreevy et al. 1991; Rice & Harris, 1990). In addition, this pattern was found not to be affected by reforms to insanity defence procedures (Callahan et al., 1992). It also has been observed that acquittees evidenced greater psychopathology surrounding the index offence (Boardman et al., 1996) and a greater amount of previous treatment (Boardman et al., 1996; Callahan et al., 1991; Smith & Hall, 1982) than did pleaders.

Hypothesis 11: Psychiatrists' Recommendations of Insanity

It was proposed that the frequency with which the insanity defence was supported by forensic evaluators increased post-Bill C-30, which was found to be the case. It is interesting to speculate that this elevation may explain, in part or in whole, the post-Bill C-30 rise in the acquittal rate, given that it has been suggested that the most powerful predictor of a successful insanity defence is a recommendation of nonresponsibility on the part of the examining psychiatrist (Smith & Hall, 1982; Steadman et al., 1983). It also is expectable that psychiatrists' recommendations supporting (or not supporting) an insanity defence bid may be influenced by changes to the insanity standard and/or to the

procedures surrounding the defence (Steadman et al., 1983), providing that forensic examiners keep abreast of changes effected by legislation and/or case law (and there are studies to suggest that they do not, e.g., Heinbecker, 1986; Roesch et al., 1996; Rogers, Turner, Helfield, & Dickens, 1988).

Interestingly, Roesch et al. (1996) reported that the majority of their interviewees (from Forensic Psychiatric Services) believed that, following Bill C-30's enactment, psychiatrists more frequently were recommending that the defendants they assessed be found not criminally responsible, largely because the "pool of potential NCRMD acquittees had increased" (p. 16). It is also of note that it struck the present researcher that a number of the psychiatrists' letters to court specifically made reference to the issue of moral vs. legal wrong, although this suggests that the increase in support may already have occurred *before* Bill C-30, as a consequence of the broadening of the word wrong in the aftermath of the *Chaulk* decision (1990). This possibility cannot be ruled out due to the manner in which the comparisons were made: The pre- and post-Bill C-30 rates of support were obtained by summing the number of remands for whom psychiatrists supported an insanity defence, dividing by the total number of remands for the years prior and subsequent to Bill C-30's introduction, and then comparing the resultant proportions. This procedure effectively turned a series of observations into a single before and after comparison, potentially obscuring any trend that already existed prior to the implementation of Bill C-30, and leaving the finding vulnerable to some of the threats to internal validity delineated by Cook and Campbell (1979) and outlined in hypothesis 3.

Implications of Research and Future Directions

The present research suggests that, as predicted, Bill C-30 has had the effect of increasing the use and success of the insanity defence in British Columbia. Also as hypothesized, recommendations, on the part of forensic psychiatrists, supporting a finding of criminal non-responsibility were found to multiply following Bill C-30's implementation. Comparisons of the profiles of insanity acquittances pre- and post-Bill C-30 and insanity pleaders pre- and post-Bill C-30 revealed few differences. Defendants found not criminally responsible preceding and subsequent to the enactment of Bill C-30 were similar with respect to demographic characteristics, index crimes, diagnosis and psychopathology related to the index offence, number of previous inpatient hospitalizations, and frequency of previous arrests. Similarly, defendants sent to FPI, before and after Bill C-30's introduction, for an assessment of criminal responsibility, had comparable diagnoses, index crimes, mental health and criminal histories, and demographic backgrounds (with the exception that more non-Caucasians were remanded post-Bill C-30). Thus, despite their increased numbers, individuals found NCRMD do not appear to be less appropriate candidates for acquittal than were those adjudicated NGRI. Correspondingly, post-Bill C-30 referrals for insanity evaluations, while also on the rise, appear to continue to be fitting, which suggests that some suitable referrals may not have been made prior to Bill C-30's taking effect, perhaps due to the more onerous consequences then associated with being found NGRI.

It could be argued that the present research did not cover enough time post-Bill C-

30 for any changes precipitated by its enactment to take effect. It certainly has been suggested (e.g., Luckey & Berman, 1979; Packer, 1985) that irregularities occur during the first year following the implementation of a new procedure, which may warrant the exclusion of these data from analyses, and Bradford (1995) has commented, with respect to Bill C-30, that its effects were not experienced in Ottawa until approximately two years after its implementation. At the same time, other studies (e.g., McGreevy et al., 1991; Reichlin et al., 1990; Steadman et al., 1989) also have selected for study the three years prior to and the three years following a modification of insanity defence procedures. Most importantly, it is clear that some changes *were* observed within the time frame included in this study, implying that the length of coverage was adequate.

Although the present study's findings are interesting, the methodological limitations addressed at the start of this section raise some question as to their validity. As with all research, replication of the present results, preferably employing an enhanced methodology, is required. Consequently, future studies should consider expanding the cohorts compared to include all post-Bill C-30 insanity pleaders and acquittees, not just those assessed as inpatients. In addition, though admittedly expensive and time consuming, the identification of a sample of defendants who could be documented to have actually raised the insanity defence in court would be immensely useful. This group could then be compared to the remand sample to see whether the profiles of remands really do approximate those of true pleaders. In a similar vein, there is a need for the identification of NCRMD acquittees who received immediate absolute discharges, so that they can be

included in future studies. It also would be of benefit to expand the number of years included for comparison so as to make possible the employment of time series analyses. Furthermore, the longer term effects of Bill C-30 should be tracked, in order to ascertain whether or not the trends observed to date endure. Finally, although Bill C-30 was implemented Canada-wide, it does not necessarily follow that its effects have been consistent across provinces. Consequently, research addressing the impact of Bill C-30 needs to be undertaken in other provinces, especially in light of a comment by Steadman (1985) that including a single jurisdiction in a study of insanity defence reform is tantamount to conducting research employing a "sample size of one" (p. 71). Moreover, given the potential variance introduced by differences in the way variables may be operationalized across studies, investigations spanning two or more provinces conducted over the same time period by the same researcher(s) especially are needed.

REFERENCES

- Arboleda-Florez, J., Crisanti, A., & Holley, H. (1995). The effects of changes in the law concerning mentally disordered offenders: The Alberta experience with Bill C-30. *Canadian Journal of Psychiatry*, *40*, 225-233.
- Bazelon, D.L. (1994). Psychiatrists and the adversary process. *Scientific American*, *230*, 18-23.
- Blau, G., & Pasewark, R. (1994). Statutory changes and the insanity defense: Seeking the perfect insane person. *Law & Psychology Review*, *18*, 69-108.
- Bradford, J.M. (1995). Mentally disordered offenders and the law. *Canadian Journal of Psychiatry*, *40*, 223-224.
- Boardman, A., Stafford, K., & Ben-Porath, Y. (1996, February). A comparative investigation of insanity acquittees and unsuccessful insanity evaluatees. Paper presented at the biennial conference of the American Psychology Law Society, Hilton Head, South Carolina.
- Bumby, K. (1993). Reviewing the guilty but mentally ill alternative: a case of the blind pleading the blind. *Journal of Psychiatry & Law*, *21*, 191-220.
- Callahan, L., Robbins, P., Steadman, H., & Morrissey J. (1995). The hidden effects of Montana's "abolition" of the insanity defense. *Psychiatric Quarterly*, *66*, 103-117.
- Callahan, L., Steadman, H., McGreevy, M., & Robbins, P. (1991). The volume and characteristics of insanity defense pleas: An eight-state study. *Bulletin of the American Academy of Psychiatry & Law*, *19*, 331-338.
- Cook, T.D., & Campbell, D.T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Boston: Houghton Mifflin Company.
- Davis, S.P. (1994). *Exploring the impact of Bill C-30 on the handling of mentally disordered offenders*. Unpublished doctoral dissertation, Simon Fraser University.
- Davis, S. (1992). Changes to the Criminal Code provisions for mentally disordered offenders and their implications for Canadian psychiatry. *Canadian Journal of Psychiatry*, *38*, 122-126.

Dix, G.E. (1984). Criminal responsibility and mental impairment in American criminal law: Response to the Hinckley acquittal in historical perspective. In D. N. Weisstub (Ed.), *Law & mental health: International perspectives*, (Vol 1, pp. 1-44). New York: Pergamon Press.

Durham v. United States (1954). *Federal Reporter*, 214, F.2d. 862-876.

Ferguson, G.A. (1971). *Statistical analysis in psychology & education*. New York: McGraw-Hill Book Company.

Finkel, N. (1988). *Insanity on trial*. New York: Plenum Press.

Finkel, N. (1989). The insanity defense reform act of 1984: Much ado about nothing. *Behavioral Sciences & the Law*, 7, 403-419.

Finkel, N. (1990). De facto departures from insanity instructions: Toward the remaking of common law. *Law & Human Behavior*, 14, 105-122.

Finkel, N. (1991). The insanity defense: A comparison of verdict schemas. *Law & Human Behavior*, 15, 533-555.

Finkel, N., & Fulero, S. (1992). Insanity: Making law in the absence of evidence. *Medicine & Law*, 11, 383-404.

Finkel, N., & Handel, S. (1988). Jurors and insanity: Do test instructions instruct? *Forensic Reports*, 1, 65-79.

Finkel, N., & Handel, S. (1989). How jurors construe "insanity". *Law & Human Behavior*, 13, 41-59.

Finkel, N., Shaw, R., Bercaw, S. & Koch, J. (1985). Insanity defenses: From the jurors' perspective. *Law & Psychology Review*, 9, 77-92.

Gelinas, L. (1994). The new rights of persons held in psychiatric institutions following the commission of a criminal offence: The criminal code revised and corrected. *Canada's Mental Health*, 42, 10-16.

Golding, S., Eaves, D., & Kowaz, A. (1989). The assessment, treatment and community outcome of insanity acquittees: Forensic history and response to treatment. *International Journal of Law & Psychiatry*, 12, 149-179.

Golding, S., & Roesch, R. (1987). The assessment of criminal responsibility: A historical approach to a current controversy. In I. B. Weiner & A. K. Hess (Eds.), *Handbook of forensic psychology*, (pp. 395-436). New York: Wiley.

Greenberg, D., & Gratzner, T. (1994). The impact of the charter of rights and freedoms on the mental disorder provisions of the criminal code. *Canada's Mental Health*, 42, 6-9.

Greenland, C. (1979). Crime and the insanity defense, an international comparison: Ontario and New York state. *Bulletin of the American Academy of Psychiatry & Law*, 7, 125-138.

Heinbecker, P. (1986). Two year's experience under Utah's *mens rea* insanity law. *Bulletin of the American Academy of Psychiatry & Law*, 14, 185-191.

Hermann, D. (1983). *The insanity defense*. Springfield, Ill.: Charles C. Thomas.

Hoyer, G., Eaves, D., & Enwright, W. (1995). Approaches toward insanity acquittees: Comments on recent or proposed amendments to the criminal codes of Canada and Norway. *International Journal of Law & Psychiatry*, 18, 71-82.

Insanity Defense Work Group (1983). American Psychiatric Association statement on the insanity defense. *American Journal of Psychiatry*, 140, 681-688.

Luckey, J.W. & Berman, J.J. (1979). Effects of a new commitment law on involuntary admissions and service utilization patterns. *Law & Human Behavior*, 3, 149-161.

McGreevy, M., Steadman, H., & Callahan, L. (1991). The negligible effects of California's 1982 reform of the insanity defense test. *American Journal of Psychiatry*, 148, 744-750.

Milliken, A. (1985). The insanity defense. *Canadian Journal of Psychiatry*, 30, 323-328.

Moran, R. (1981). *Knowing right from wrong*. New York: The Free Press.

Moran, R. (1985). The modern foundation for the insanity defense: The cases of James Hadfield (1800) and Daniel McNaughtan (1843). *Annals of the American Academy of Political & Social Sciences*, 477, 31-42.

Norwood, S., Nicholson, R., Enyart, C., & Hickey, M. (1992). Insanity acquittal in Oklahoma: Recommendations for program planning and social policy. *Forensic Reports*, 5, 5-28.

Ogloff, J. (1991a). A comparison of insanity defense standards on juror decision making. *Law & Human Behavior*, 15, 509-531.

Ogloff, J. (1991b). The use of the insanity defence in British Columbia: A qualitative and quantitative analysis. Ottawa, Ontario: Technical Report, Department of Justice.

Ogloff, J., Schweighofer, A., Turnbull, S., & Whittemore, K. (1992). Empirical research regarding the insanity defense: How much do we really know? In J. Ogloff (Ed.), *Law and psychology: The broadening of the discipline*, (pp. 171-207). Durham, South Carolina: Carolina Academic Press.

Orchard, B. (1984). The defense of insanity. *Health Law in Canada*, 4, 57-62.

R. v. McNaughtan (1843), 10 Cl. & Fin. 200, 8 E.R. 718 (H.L.).

Packer, I. (1985). Insanity acquittals in Michigan 1969-1983: the effects of legislative and judicial changes. *The Journal of Psychiatry & Law*, 13, 419-434.

Pasewark, R., Randolph, R., & Bieber, S. (1984). Insanity plea: Statutory language and trial procedures. *The Journal of Psychiatry & Law*, 12, 399-422.

Perr, I. (1992a). Religion, political leadership, charisma, and mental illness: The strange story of Louis Riel. *Journal of Forensic Sciences*, 37, 575-584.

Perr, I. (1992b). The trial of Louis Riel: A study in Canadian psychiatry. *Journal of Forensic Sciences*, 37, 845-852.

Quen, J. (1983). Psychiatry and the law: Historical relevance to today. In L. Freedman (Ed.), *By reason of insanity: Essays on psychiatry and the law*, (pp. 153-166). Wilmington, Delaware: Scholarly Resources.

Rappeport, J.R. (1992). Current status of the insanity plea. *Psychiatric Annals*, 22, 550-555.

Reichlin, S., Bloom, J., & Williams, M. (1990). Post-Hinckley insanity reform in Oregon. *Bulletin of the American Academy of Psychiatry & Law*, 18, 405-412.

Reiss, J.A. (1989). *Support for the insanity defense: A study of the relationship between belief in a just world, opinions about mental illness, and attitudes toward the insanity plea*. Unpublished masters thesis, Simon Fraser University.

Rice, M.E., & Harris, G.T. (1990). The predictors of insanity acquittal. *International Journal of Law & Psychiatry*, 13, 217-224.

Roberts, C., Golding, S., & Fincham, F. (1987). Implicit theories of criminal responsibility: Decision making and the insanity defense. *Law & Human Behavior*, 11, 207-232.

Roesch, R., Ogloff, J., & Hart, S. (1996). Remands and assessments of fitness to stand trial and criminal responsibility in British Columbia: The impact of the Criminal Code changes. Ottawa, Ontario: Technical Report, Department of Justice.

Roesch, R., Ogloff, J., Hart, S., Dempster, R., Zapf, P., & Whittemore, K. (1997). The impact of Canadian Criminal Code changes on remands and assessments of fitness to stand trial and criminal responsibility in British Columbia. *Canadian Journal of Psychiatry*, 42, 509-514.

Rogers, J. (1982). Characteristics of persons committed to Oregon's psychiatric security review board. *Bulletin of the American Academy of Psychiatry & Law*, 10, 155-164.

Rogers, R. (1986). *Conducting insanity evaluations*. New York: Van Nostrand Reinhold Company.

Rogers, R., Turner, R.E., Helfield, R., & Dickens, S. (1988). Forensic psychiatrists' and psychologists' understanding of insanity: Misguided expertise? *Canadian Journal of Psychiatry*, 33, 691-695.

Sales, B., & Hafemeister, T. (1984). Empiricism and legal policy on the insanity defense. In L. Teplin (Ed.), *Mental health and criminal justice*, (pp. 253-278). Beverly Hills, California: Sage Publications.

Sauer, R.H. & Mullens, P.M. (1976). The insanity defense: M'Naghten vs. ALI. *Journal of the American Academy of Psychiatry & the Law*, 4, 73-75.

Savitsky, J.C., & Lindblom, W.D. (1986). The impact of the guilty but mentally ill verdict on juror decisions: An empirical analysis. *Journal of Applied Social Psychology*, 16, 686-701.

Simon R.J. (1967). *The jury and the defense of insanity*. Boston: Little, Brown & Company.

Simon, R.J. (1983). The defense of insanity. *The Journal of Psychiatry & Law*, 11, 183-201.

Simon R.J., & Aaronson, D. (1988). *The insanity defense*. New York: Praeger Publishers.

Smith, G., & Hall, J. (1982). Evaluating Michigan's guilty but mentally ill verdict: An empirical study. *University of Michigan Journal of Law Reform*, 16, 77-114.

Steadman, H. (1985). Empirical research on the insanity defense. *Annals of the American Academy of Political & Social Sciences*, 477, 58-71.

Steadman, H., Callahan, L., Robbins, P., & Morrissey, J. (1989). Maintenance of an insanity defense under Montana's "abolition" of the insanity defense. *American Journal of Psychiatry*, 146, 357-360.

Steadman, H., Keitner, L., Braff, J., & Arvanites, T. (1983). Factors associated with a successful insanity plea. *American Journal of Psychiatry*, 140, 401-405.

Swaminath, R., Norris, P., Komer, W., & Sidhu, G. (1993). A review of the amendments to the Criminal Code of Canada (mental disorder). *Canadian Journal of Psychiatry*, 38, 567-570.

Verdun-Jones, S. (1979). The evolution of the defences of insanity and automatism in Canada from 1843 to 1979: A saga of judicial reluctance to sever the umbilical cord to the mother country? *University of British Columbia Law Review*, 14, 1-73.

Verdun-Jones, S. (1989). Mental disorder and the criminal process. In *Criminal law in Canada* (pp. 186-213). Toronto, Ontario: Harcourt Brace Jovanovich.

Verdun-Jones, S. (1994). The insanity defence in Canada: Setting a new course. *International Journal of Law & Psychiatry*, 17, 175-189.

Walker, N. (1985). The insanity defense before 1800. *Annals of the American Academy of Political & Social Sciences*, 477, 25-30.

Weiner, B.A. (1985). The insanity defense: Historical development and present status. *Behavioral Sciences and the Law*, 3, 3-35.

Wettstein, R.M., Mulvey, E.P., & Rogers, R. (1991). A prospective comparison of four insanity defense standards. *American Journal of Psychiatry*, 148, 21-27.

Wilson, L.D. (1992). Bill C-30: An analysis of the legislative response to R. v. Swain. *Health Law Review*, 1, 3-11, 15, 21, 28.

Zonana, H., Wells, J., Getz, M., & Buchanan, J. (1990). Part I: The NGRF registry: Initial analyses of data collected on Connecticut insanity acquittees. *Bulletin of the American Academy of Psychiatry and the Law*, 18, 115-128.

Appendix A
NGRI/NCRMD Coding Form
Coding Form for Insanity Acquittees

A. Identification

1. Identification Number |__|__|__|__|__|__| 001-006
2. Coder, |__| 007 .
3. Date Coded |__|__|__|__|__|__| 008-013
 d d m m y y

B. Demographics

1. Date of Birth |__|__|__|__|__|__| 014-019
 d d m m y y
2. Gender of Patient |__| 020 .
 1. Male 2. Female
3. Ethnicity/Racial Origin |__| 021 .
- | | |
|---|--|
| 1. Caucasian
2. Native Indian
3. East Indian
4. Asian | 5. African
6. North American Black
7. Other_____ |
| 4. Marital Status (at offence) __ 022 . | |
| 1. never married
2. married/common-law
3. divorced/separated | 4. widowed
5. other_____ |
9. Unknown
5. Education (at offence)
- a. Highest grade completed (in *|__|__| 023-024
 years, pre post-secondary)

b. Post-secondary education |__| 025

- | | |
|-------------------------|--------------------|
| 1. n/a | 6. some university |
| 2. some vocational/tech | 7. B.A. |
| 3. voc/tech certificate | 8. M.A. or Ph.D. |
| 4. some college | 9. unknown |
| 5. college diploma | |

c. Other Information

1. Psychiatric Diagnosis

(From psychiatric report that went to court/trial)

a. Primary ICD-9 Diagnosis |__||__|__|. |__| 026-029

b. Category of above coded mental illness |__| 030

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other _____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

c. Psychiatric recommendation re mental status |__| 031

- | | |
|----------------------------------|----------------------|
| 1. direct support NGRI/NCRMD | 5. unable to respond |
| 2. indirect support NGRI/NCRMD | 6. not addressed |
| 3. direct not support NGRI/NCRMD | 7. other |
| 4. indirect not support | 9. unknown |

d. Psychiatric recommendation re fitness (if applicable) |__| 032

- | | |
|----------------------|------------------|
| 1. fit | 4. not addressed |
| 2. unfit | 5. other |
| 3. unable to respond | 9. unknown |

2. Trial Disposition |__| 033

- | | |
|---------|----------|
| 1. NGRI | 2. NCRMD |
|---------|----------|

3. Trial Disposition Matches
Psychiatric Recommendation re
Mental Status

|_|_| 034

- | | |
|--------------------|-------------------|
| 1. yes, directly | 4. no, indirectly |
| 2. yes, indirectly | 5. N/A |
| 3. no, directly | |

D. Dates

1. OIC/NCRMD Admission Date to
FPI

|_|_|_|_|_|_|_|_|_|_| 035-040

d d m m y y

2. Remand Cycle 1

a. Remand Admiss.

|_|_|_|_|_|_|_|_|_|_| 041-046

d d m m y y

b. Remand Disch.

|_|_|_|_|_|_|_|_|_|_| 047-052

c. Unfit Admiss.

|_|_|_|_|_|_|_|_|_|_| 053-058

d. Unfit Disch.

|_|_|_|_|_|_|_|_|_|_| 059-064

3. Remand Cycle 2

a. Remand Admiss.

|_|_|_|_|_|_|_|_|_|_| 065-070

d d m m y y

b. Remand Disch.

|_|_|_|_|_|_|_|_|_|_| 071-076

c. Unfit Admiss.

|_|_|_|_|_|_|_|_|_|_| 077-082

d. Unfit Disch.

|_|_|_|_|_|_|_|_|_|_| 083-088

4. Remand Cycle 3

a. Remand Admiss.

|_|_|_|_|_|_|_|_|_|_| 089-094

d d m m y y

b. Remand Disch.

|_|_|_|_|_|_|_|_|_|_| 095-100

c. Unfit Admiss.

|_|_|_|_|_|_|_|_|_|_| 101-106

d. Unfit Disch.

|_|_|_|_|_|_|_|_|_|_| 107-112

5. Date of Absolute Discharge (if
applicable)

|_|_|_|_|_|_|_|_|_|_| 113-118

d d m m y y

E. NCRMD Information

1. Status of NCRMD |__| 119
1. Started off at FPI
2. Admit from Community (breach, decompensation)
2. Date Found NCRMD (in court) |__|__|__|__|__|__| 120-125
d d m m y y
3. Court Disposition |__| 126
1. detain in custody 4. deferred to review board
2. conditional discharge 5. N/A or Unknown
3. absolute discharge
4. Date of Review Board Hearing |__|__|__|__|__|__| 127-132
(if disposition deferred)
d d m m y y
5. Review Board Disposition (if |__| 133
applicable)
1. detain in custody 3. absolute discharge
2. conditional discharge 4. N/A or Unknown
6. Following Review Board |__| 134
Conditional Discharge (if
applicable) Patient Actually:
1. remained in hospital
2. was discharged (within several months of disposition)
7. Date of Conditional Discharge |__|__|__|__|__|__| 135-140
from FPI
d d m m y y
(code only if patient started off at FPI)

F. OIC/NCRMD Charges

1. Most Serious Charge

a. Date of Offence	__ __ __ __ __ __ d d m m y y	141-146
b. Type of Offence	__ __ __	147-149
c. Type of Weapon	__	150
d. Victim	__	151
e. Number of Victims	__ __	152-153

2. Second Most Serious Charge

a. Date of Offence	__ __ __ __ __ __ d d m m y y	154-159
b. Type of Offence	__ __ __	160-162
c. Type of Weapon	__	163
d. Victim	__	164
e. Number of Victims	__ __	165-166

3. Third Most Serious Charge

a. Date of Offence	__ __ __ __ __ __ d d m m y y	167-172
b. Type of Offence	__ __ __	173-175
c. Type of Weapon	__	176
d. Victim	__	177
e. Number of Victims	__ __	178-179

4. Fourth Most Serious Charge

a. Date of Offence	__ __ __ __ __ __ d d m m y y	180-185
b. Type of Offence	__ __ __	186-188
c. Type of Weapon	__	189
d. Victim	__	190

- e. Number of Victims |__|__| 191-192
- G. Outpatient and Inpatient Admissions
1. Number of Outpatient Admissions Before NGRI/NCRMD Offence |__| 193
4. None
3. Little history (e.g. 1-2 admissions)
2. Some history (e.g. 3-5 admissions)
1. Rather frequent history (e.g. 6-9 admissions)
0. Frequent history (e.g. 10 or more admissions)
9. Unknown/No information
2. Number of Uncodeable Inpatient Admissions |__|__| 194-195
(i.e. none of the information necessary is available, but there is firm mention of previous admissions)
3. Last Codeable Inpatient Admission Prior to NGRI Offence *
- (Code last admission prior to OIC/NCRMD offence first; then others in reverse chronological order.)
- a. Admission Date 1 |__|__|__|__|__|__| 196-201
d d m m y y
- b. Discharge Date 1 |__|__|__|__|__|__| 202-207
- c. Category of Discharge Diagnosis: 1 |__| 208
1. psychotic disordered 5. organic (not psychotic)
2. other major disordered 6. other_____
3. personality disordered 7. no diagnosis
4. substance abuse 9. unknown
- d. Was pathology at last prior admission essentially the same as that shown at time of OIC/NCRMD offence? |__| 209
1. Yes 2. No

4. Next Prior Admission

a. Admission Date 2 |_|_|_|_|_|_|_| 210-215
d d m m y y

b. Discharge Date 2 |_|_|_|_|_|_|_| 216-221

c. Category of Discharge |_| 222
 Diagnosis 2

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

5. Next Prior Admission

a. Admission Date 3 |_|_|_|_|_|_|_| 223-228
d d m m y y

b. Discharge Date 3 |_|_|_|_|_|_|_| 229-234

c. Category of Discharge |_| 235
 Diagnosis 3

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

6. Next Prior Admission

a. Admission Date 4 |_|_|_|_|_|_|_| 236-241
d d m m y y

b. Discharge Date 4 |_|_|_|_|_|_|_| 242-247

c. Category of Discharge |_| 248
 Diagnosis 4

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

7. Next Prior Admission

a. Admission Date 5 |_|_|_|_|_|_|_| 249-254
d d m m y y

b. Discharge Date 5 |_|_|_|_|_|_|_| 255-260

c. Category of Discharge
Diagnosis 5

|__| 261

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

8. Next Prior Admission

a. Admission Date 6

|__|_|_|_|_|_|_|_| 262-267
d d m m y y

b. Discharge Date 6

|__|_|_|_|_|_|_|_| 268-273

c. Category of Discharge
Diagnosis 6

|__| 274

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

9. Next Prior Admission

a. Admission Date 7

|__|_|_|_|_|_|_|_| 275-280
d d m m y y

b. Discharge Date 7

|__|_|_|_|_|_|_|_| 281-286

c. Category of Discharge
Diagnosis 7

|__| 287

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

10. Next Prior Admission

a. Admission Date 8

|__|_|_|_|_|_|_|_| 288-293
d d m m y y

b. Discharge Date 8

|__|_|_|_|_|_|_|_| 294-299

c. Category of Discharge
Diagnosis 8

|__| 300

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other_____ |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

11. Next Prior Admission

- a. Admission Date 9 |_|_|_|_|_|_|_|_|_| 301-306
 d d m m y y
- b. Discharge Date 9 |_|_|_|_|_|_|_|_|_| 307-312
- c. Category of Discharge |_| 313
 Diagnosis 9
- | | |
|---|---|
| 1. psychotic disordered
2. other major disordered
3. personality disordered
4. substance abuse | 5. organic (not psychotic)
6. other _____
7. no diagnosis
9. unknown |
|---|---|

12. Next Prior Admission

- a. Admission Date 10 |_|_|_|_|_|_|_|_|_| 314-319
 d d m m y y
- b. Discharge Date 10 |_|_|_|_|_|_|_|_|_| 320-325
- c. Category of Discharge |_| 326
 Diagnosis 10
- | | |
|---|---|
| 1. psychotic disordered
2. other major disordered
3. personality disordered
4. substance abuse | 5. organic (not psychotic)
6. other _____
7. no diagnosis
9. unknown |
|---|---|

13. Next Prior Admission

- a. Admission Date 11 |_|_|_|_|_|_|_|_|_| 327-332
 d d m m y y
- b. Discharge Date 11 |_|_|_|_|_|_|_|_|_| 333-338
- c. Category of Discharge |_| 339
 Diagnosis 11
- | | |
|---|---|
| 1. psychotic disordered
2. other major disordered
3. personality disordered
4. substance abuse | 5. organic (not psychotic)
6. other _____
7. no diagnosis
9. unknown |
|---|---|

14. Next Prior Admission

- a. Admission Date 12 |_|_|_|_|_|_|_|_|_| 340-345
 d d m m y y
- b. Discharge Date 12 |_|_|_|_|_|_|_|_|_| 346-351

d. Category of Discharge |__| 352
 Diagnosis 12

- | | | |
|---------------------------|----|-------------------------|
| 1. psychotic disordered | 5. | organic (not psychotic) |
| 2. other major disordered | 6. | other_____ |
| 3. personality disordered | 7. | no diagnosis |
| 4. substance abuse | 9. | unknown |

15. Next Prior Admission

a. Admission Date 13 |__|__|__|__|__|__| 353-358
d d m m y y

b. Discharge Date 13 |__|__|__|__|__|__| 359-364

c. Category of Discharge |__| 365
 Diagnosis 13

- | | | |
|---------------------------|----|-------------------------|
| 1. psychotic disordered | 5. | organic (not psychotic) |
| 2. other major disordered | 6. | other_____ |
| 3. personality disordered | 7. | no diagnosis |
| 4. substance abuse | 9. | unknown |

16. Next Prior Admission

a. Admission Date 14 |__|__|__|__|__|__| 366-371
d d m m y y

b. Discharge Date 14 |__|__|__|__|__|__| 372-377

c. Category of Discharge |__| 378
 Diagnosis 14

- | | | |
|---------------------------|----|-------------------------|
| 1. psychotic disordered | 5. | organic (not psychotic) |
| 2. other major disordered | 6. | other_____ |
| 3. personality disordered | 7. | no diagnosis |
| 4. substance abuse | 9. | unknown |

17. Next Prior Admission

a. Admission Date 15 |__|__|__|__|__|__| 379-384
d d m m y y

b. Discharge Date 15 |__|__|__|__|__|__| 385-390

c. Category of Discharge |__| 391
 Diagnosis 15

- | | | |
|---------------------------|----|-------------------------|
| 1. psychotic disordered | 5. | organic (not psychotic) |
| 2. other major disordered | 6. | other_____ |
| 3. personality disordered | 7. | no diagnosis |
| 4. substance abuse | 9. | unknown |

18. **Number of Inpatient Hospitalizations Before, NGRI/NCRMD Offence** |__| 392

- 4. None
- 3. Little history (e.g. 1-2 admissions)
- 2. Some history (e.g. 3-5 admissions)
- 1. Rather frequent history (e.g. 6-9 admissions)
- 0. Frequent history (e.g. 10 or more admissions)
- 9. Unknown/No information

I. *Psychiatric History*

1. **Earliest Age of Onset of any Psychiatric Symptoms** |__| 393

- 5. No psychiatric symptoms
- 4. Over 30 years old
- 3. 21 to 30 years old
- 2. 16 to 20 years old
- 1. 10 to 15 years old
- 0. under age 10
- 9. Unknown/No information

2. **Length of Time Since First Occurrence of Hallucinations or Delusions** |__| 394

- 4. No such symptoms or none prior to one week ago
- 3. One or more of these symptoms first occurred between one week and six months ago
- 2. First occurrence of any of these symptoms was over six months ago but less than two years ago
- 1. First occurrence of any of these symptoms was between two and five years ago
- 0. Had one or more of these symptoms prior to five years ago
- 9. Unknown/No information

3. **What is the Longest Period that SEVERE Psychiatric Symptoms Have Ever Persisted More or Less Continuously (at least once per week)** |__| 395

- 4. 0 to 4 weeks
- 3. Over 4 weeks, less than six months
- 2. Six months to one year
- 1. Over one year to two years
- 0. Over two years
- 9. Unknown/No information

4. **What is the Longest Period that ANY Psychiatric Symptoms, Including Moderate or Severe, Have Ever Persisted More or Less Continuously** |__| 396
(at least once per week)
4. 0 to 4 weeks
 3. Over 4 weeks, less than six months
 2. Six months to one year
 1. Over one year to two years
 0. Over two years
 9. Unknown/No information
5. **Presence of Thought Disorder, Delusions or Hallucinations in the Year Prior to OIC/NCRMD Offence** |__| 397
4. None of any of the above
 3. Minimal presence of any or all of the above
 2. Moderate amount of any or all of the above
 1. Relatively severe and/or continuous presence of any or all of the above
 0. Severe and/or continuous presence of any or all of the above
 9. Unknown/No information
6. **Presence of Depression, Hypomania or Mania in the Year Prior to OIC/NCRMD Offence** |__| 398
4. None of any of the above
 3. Minimal presence of any or all of the above
 2. Moderate amount of any or all of the above
 1. Relatively severe and/or continuous presence of any or all of the above
 0. Severe and/or continuous presence of any or all of the above
 9. Unknown/No information
7. **Number of Suicide Attempts by Patient Prior to OIC/NCRMD Offence** |__| 399
1. None
 2. One attempt
 3. Two attempts
 4. Three or more attempts
 5. Unknown/No information

8. **Classification of Condition
Prior to OIC/NCRMD Offence**

|__| 400

0. The person evidences no psychiatric symptoms currently and has no psychiatric history.
1. The current episode of illness has lasted less than five years and developed in a person who was relatively free of psychiatric symptoms for at least the two months preceding the episode. There may have been previous episodes of illness but with little residual pathology; e.g. recurrent depressions, second episode of acute psychosis.
2. The current episode has lasted less than five years and is a new syndrome that is superimposed on preexisting psychopathology of another type; e.g. chronic alcoholic develops a depression, some mildly depressed develops a manic episode.
3. The current episode of illness has lasted less than five years and is apparently an exacerbation of an ongoing chronic condition; e.g. acute exacerbation of schizophrenia or alcoholism, chronically depressed man develops an episode of severe depression.
4. Chronic condition with numerous exacerbations or cycling so that it is nearly impossible to determine when this episode began.
5. Ill with essentially the same condition for more than five years and only entering a treatment facility now or being evaluated now for some reason unrelated to a change in psychopathology.
9. Unknown/No information

J. *Drug/Alcohol/Weapons History*

1. **Was the Patient Under the
Influence of Alcohol or Drugs
When OIC/NCRMD offence was
Committed**

|__| 401

1. Yes
2. No
9. Unknown/No information

2. **Has the Patient Ever Committed a Crime While Under the Influence of Alcohol or Drugs (Exclude OIC/NCRMD Offence)**

1. Yes
2. No
9. Unknown/No information

3. **Has the Patient Ever Committed a Crime in Which He Used or Threatened to Use a Weapon in His Possession at the Time (Include OIC/NCRMD Offence)**

1. Yes
2. No
9. Unknown/No information

K. **Past Offence Data From CPIC**

1. **Does the Patient have any Criminal Convictions Prior to the NGRI/NCRMD Offence?**

1. Yes
2. No
9. Unknown/No information

2. **Number of Prior Convictions for:**

a. Murder, Manslaughter, Attempted Murder

b. Sexual Offences

c. Assault, Kidnapping

d. Driving Assaults

e. Robbery

f. Offensive Weapons

g. Property Offences

h. Public Order/Nuisance Offences

i. Theft

j. Drug Offences

__ __	405-406
__ __	407-408
__ __	409-410
__ __	411-412
__ __	413-414
__ __	415-416
__ __	417-418
__ __	419-420
__ __	421-422
__ __	423-424

Appendix B

Coding Form for Remands

Remand Coding Form

A. Identification

- 1. Identification Number |_|_|_|_|_|_|_| 001-006
- 2. Coder |_| 007
- 3. Date Coded |_|_|_|_|_|_|_| 008-013
d d m m y y

B. Status

- 1. Range in study |_| 014
 1. Pre Feb/92 (NGRI range) 2. Post Feb/92 (NCRMD range)

C. Demographics

- 1. Date of Birth |_|_|_|_|_|_|_| 015-020
d d m m y y
- 2. Gender of Patient |_| 021
 1. Male 2. Female
- 3. Ethnicity/Racial Origin |_| 022
 1. Caucasian 5. African
 2. Native Indian 6. North American Black
 3. East Indian 7. Other _____
 4. Asian 8. Unknown
- 4. Marital Status (at offence) |_| 023
 1. never married 4. widowed
 2. married common-law 5. other _____
 3. divorced separated 9. unknown
- 5. Education (at offence)

1. Highest grade completed (in years, pre post-secondary) |_|_|_| 024-025

b. Post-secondary education

026

- 1. n/a
- 2. some vocational/tech
- 3. voc/tech certificate
- 4. some college
- 5. college diploma
- 6. some university
- 7. B.A.
- 8. M.A. or Ph.D.
- 9. unknown

D. Dates

1. Remand Cycle

a. Remand admission date 027-032
d d m m. y y

b. Remand discharge date 033-038

c. REFERRAL FORM assessment request (if applicable)

i. Fitness 039

ii. Mental Status 040

iii. Other 041

d. LEGAL FORM assessment request (if applicable)

i. Fitness 042

ii. Mental Status 043

iii. Other 044

e. Psychiatric recommendation re mental status 045

- 1. direct support NGRI NCRMD
- 2. indirect support NGRI NCRMD
- 3. direct not support NGRI NCRMD
- 4. indirect not support
- 5. unable to respond
- 6. not addressed
- 7. other
- 9. unknown

f. Psychiatric recommendation re fitness (if applicable) 046

- 1. fit
- 2. unfit
- 3. unable to respond
- 4. not addressed
- 5. other
- 9. unknown

g. Primary ICD-9 Diagnosis
(from psychiatric report that went to court/trial)

|_|_|_|_|_|_|_|_|_|_|_|_| 047-050

h. Category of above coded mental illness

|_|_| 051

- | | |
|---------------------------|----------------------------|
| 1. psychotic disordered | 5. organic (not psychotic) |
| 2. other major disordered | 6. other |
| 3. personality disordered | 7. no diagnosis |
| 4. substance abuse | 9. unknown |

|_|_|_|_|_|_|_|_|_|_|_|_| 052-057

2. Date of Fitness Admission (if applicable)

d d m m y y

3. Date of NGRI/NCRMD admission (if applicable)

|_|_|_|_|_|_|_|_|_|_|_|_| 058-063

d d m m y y

4. Trial Disposition Matches Psychiatric Recommendation re Mental Status

|_|_| 064

- | | |
|--------------------|-------------------|
| 1. yes, directly | 4. no, indirectly |
| 2. yes, indirectly | 5. N/A |
| 3. no, directly | |

E. Remand (Mental Status) Related Charges

1. Most Serious Charge

a. Date of Offence

|_|_|_|_|_|_|_|_|_|_|_|_| 065-070
d d m m y y

b. Type of Offence

|_|_|_|_|_|_|_|_|_|_|_|_| 071-073

c. Type of Weapon

|_|_|_|_|_|_|_|_|_|_|_|_| 074

d. Victim

|_|_|_|_|_|_|_|_|_|_|_|_| 075

e. Number of Victims

|_|_|_|_|_|_|_|_|_|_|_|_| 076-077

f. Disposition at Trial

|_|_|_|_|_|_|_|_|_|_|_|_| 078

- | | |
|---------------|--------------------------------|
| 1. guilty | 5. dropped/withdrawn/dismissed |
| 2. not guilty | 6. other |
| 3. NGRI NCRMD | 9. unknown |
| 4. stayed | |

2. Second Most Serious Charge

- | | | |
|-------------------------|-----------------------|---------|
| a. Date of Offence | _ _ _ _ _ _ _ _ _ _ _ | 079-084 |
| | d d m m y y | |
| b. Type of Offence | _ _ _ _ _ | 085-087 |
| c. Type of Weapon | _ _ _ | 088 |
| d. Victim | _ _ _ | 089 |
| e. Number of Victims | _ _ _ | 090-091 |
| f. Disposition at Trial | _ _ _ | 092 |
- | | |
|---------------|--------------------------------|
| 1. guilty | 5. dropped/withdrawn/dismissed |
| 2. not guilty | 6. other |
| 3. NGRI/NCRMD | 9. unknown |
| 4. stayed | |

3. Third Most Serious Charge

- | | | |
|-------------------------|-----------------------|---------|
| a. Date of Offence | _ _ _ _ _ _ _ _ _ _ _ | 093-098 |
| | d d m m y y | |
| b. Type of Offence | _ _ _ _ _ | 099-101 |
| c. Type of Weapon | _ _ _ | 102 |
| d. Victim | _ _ _ | 103 |
| e. Number of Victims | _ _ _ | 104-105 |
| f. Disposition at Trial | _ _ _ | 106 |
- | | |
|---------------|--------------------------------|
| 1. guilty | 5. dropped/withdrawn/dismissed |
| 2. not guilty | 6. other |
| 3. NGRI/NCRMD | 9. unknown |
| 4. stayed | |

4. Fourth Most Serious Charge

- | | | |
|----------------------|-----------------------|---------|
| a. Date of Offence | _ _ _ _ _ _ _ _ _ _ _ | 107-112 |
| | d d m m y y | |
| b. Type of Offence | _ _ _ _ _ | 113-115 |
| c. Type of Weapon | _ _ _ | 116 |
| d. Victim | _ _ _ | 117 |
| e. Number of Victims | _ _ _ | 118-119 |

f. Disposition at Trial |__| 120

- | | |
|---------------|--------------------------------|
| 1. guilty | 5. dropped/withdrawn/dismissed |
| 2. not guilty | 6. other |
| 3. NGRI/NCRMD | 9. unknown |
| 4. stayed | |

5. Fifth Most Serious Charge

a. Date of Offence |__|__|__|__|__|__| 121-126
d d m m y y

b. Type of Offence |__|__|__| 127-129

c. Type of Weapon |__| 130

d. Victim |__| 131

e. Number of Victims |__|__| 132-133

f. Disposition at Trial |__| 134

- | | |
|---------------|--------------------------------|
| 1. guilty | 5. dropped/withdrawn/dismissed |
| 2. not guilty | 6. other |
| 3. NGRI/NCRMD | 9. unknown |
| 4. stayed | |

F. Psychiatric History

1. Earliest Age of Onset of any Psychiatric Symptoms |__| 135

5. No psych symptoms
4. Over 30 years old
3. 21 to 30 years old
2. 16 to 20 years old
1. 10 to 15 years old
0. under age 10
9. Unknown/No information

2. Past Psychotic Symptoms |__| 136
 Prior to Remand offence)

1. Yes
2. No
9. Unknown/No information

3. **Length of Time Since First Occurrence of Psychotic Symptoms**

|__| 137

4. No such symptoms, or none prior to one week before remand offence
3. One or more of these symptoms first occurred between one week and six months before remand offence
2. First occurrence of any of these symptoms was over six months before remand offence but less than two years before remand offence
1. First occurrence of any of these symptoms was between two and five years before remand offence
0. Had one or more of these symptoms prior to five years before remand offence
9. Unknown/No information

4. **What is the Longest Period that SEVERE Psychiatric Symptoms Have Ever Persisted More or Less Continuously**
(at least once per week)

|__| 138

4. 0 to 4 weeks
3. Over 4 weeks, less than six months
2. Six months to one year
1. Over one year to two years
0. Over two years
9. Unknown/No information

5. **What is the Longest Period that ANY Psychiatric Symptoms, Including Moderate or Severe, Have Ever Persisted More or Less Continuously**
(at least once per week)

|__| 139

4. 0 to 4 weeks
3. Over 4 weeks, less than six months
2. Six months to one year
1. Over one year to two years
0. Over two years
9. Unknown/No information

6. **Presence of Thought Disorder, Delusions or Hallucinations in the Year Prior to Remand Offence** |__| 140
4. None of any of the above
 3. Minimal presence of any or all of the above
 2. Moderate amount of any or all of the above
 1. Relatively severe and/or continuous presence of any or all of the above
 0. Severe and/or continuous presence of any or all of the above
 9. Unknown/No information
7. **Presence of Depression, Hypomania or Mania in the Year Prior to Remand Offence** |__| 141
4. None of any of the above
 3. Minimal presence of any or all of the above
 2. Moderate amount of any or all of the above
 1. Relatively severe and/or continuous presence of any or all of the above
 0. Severe and/or continuous presence of any or all of the above
 9. Unknown/No information
8. **Number of Outpatient Admissions Before Remand Offence** |__| 142
4. None
 3. Little history (e.g. 1-2 admissions)
 2. Some history (e.g. 3-5 admissions)
 1. Rather frequent history (e.g. 6-9 admissions)
 0. Frequent history (e.g. 10 or more admissions)
 9. Unknown/No information
9. **Number of Inpatient Hospitalizations Before Remand Offence** |__| 143
4. None
 3. Little history (e.g. 1-2 admissions)
 2. Some history (e.g. 3-5 admissions)
 1. Rather frequent history (e.g. 6-9 admissions)
 0. Frequent history (e.g. 10 or more admissions)
 9. Unknown/No information
10. **Suicide Attempt(s) Prior to Remand Offence?** |__| 144
1. Yes
 2. No
 9. Unknown No information

11. **Classification of Condition
Prior to Offence**

145

0. No psychiatric symptoms present (substance abuse per se should not be coded as a psychiatric symptom).
1. The current episode of illness has lasted less than five years and developed in a person who was relatively free of psychiatric symptoms for at least the two months preceding the episode. There may have been previous episodes of illness but with little residual pathology; e.g. recurrent depressions, second episode of acute psychosis:
2. The current episode has lasted less than five years and is a new syndrome that is superimposed on preexisting psychopathology of another type; e.g. chronic alcoholic develops a depression, some mildly depressed develops a manic episode.
3. The current episode of illness has lasted less than five years and is apparently an exacerbation of an ongoing chronic condition; e.g. acute exacerbation of schizophrenia or alcoholism, chronically depressed man develops an episode of severe depression.
4. Chronic condition with numerous exacerbations or cycling so that it is nearly impossible to determine when this episode began.
5. Ill with essentially the same condition for more than five years and only entering a treatment facility now or being evaluated now for some reason unrelated to a change in psychopathology.
9. Unknown/No information

3. *Drug/Alcohol/Weapons History*

1. **Was the Patient Under the
Influence of Alcohol or Drugs
When remand offence was
Committed**

146

1. Yes 2. No 9. Unknown/No information

2. **Has the Patient Ever Committed
a Crime in While Under the
Influence of Alcohol or Drugs
(Exclude remand Offence)**

147

1. Yes 2. No 9. Unknown/No information

3. **Has the Patient Ever Committed a Crime in Which He Used or Threatened to Use a Weapon in His Possession at the Time (Include remand Offence)** 148

1. Yes 2. No 9. Unknown/No information

H. *Past Offence Data From CPIC*

1. **Does the Patient have any Criminal Convictions Prior to the Remand Offence?** 149

1. Yes 2. No 9. Unknown/No information

2. **Number of Prior Convictions for:**

a. Murder, Manslaughter, Attempted Murder	<input type="checkbox"/>	<input type="checkbox"/>	150-151
b. Sexual Offences	<input type="checkbox"/>	<input type="checkbox"/>	152-153
c. Assault, Kidnapping	<input type="checkbox"/>	<input type="checkbox"/>	154-155
d. Driving Assaults	<input type="checkbox"/>	<input type="checkbox"/>	156-157
e. Robbery	<input type="checkbox"/>	<input checked="" type="checkbox"/>	158-159
f. Offensive Weapons	<input type="checkbox"/>	<input type="checkbox"/>	160-161
g. Property Offences	<input type="checkbox"/>	<input type="checkbox"/>	162-163
h. Public Order/Nuisance Offences	<input type="checkbox"/>	<input type="checkbox"/>	164-165
i. Theft	<input type="checkbox"/>	<input type="checkbox"/>	166-167
j. Drug Offences	<input type="checkbox"/>	<input type="checkbox"/>	168-169

3. Does the Patient have any Criminal Charges Prior to the Remand Offence? 170
1. Yes 2. No 9. Unknown/No information
4. Number of Prior Charges for:
- | | | |
|---|---|---------|
| a. Murder, Manslaughter, Attempted Murder | <input type="checkbox"/> <input type="checkbox"/> | 171-172 |
| b. Sexual Offences | <input type="checkbox"/> <input type="checkbox"/> | 173-174 |
| c. Assault, Kidnapping | <input type="checkbox"/> <input type="checkbox"/> | 175-176 |
| d. Driving Assaults | <input type="checkbox"/> <input type="checkbox"/> | 177-178 |
| e. Robbery | <input type="checkbox"/> <input type="checkbox"/> | 179-180 |
| f. Offensive Weapons | <input type="checkbox"/> <input type="checkbox"/> | 181-182 |
| g. Property Offences | <input type="checkbox"/> <input type="checkbox"/> | 183-184 |
| h. Public Order/Nuisance Offences | <input type="checkbox"/> <input type="checkbox"/> | 185-186 |
| i. Theft | <input type="checkbox"/> <input type="checkbox"/> | 187-188 |
| j. Drug Offences | <input type="checkbox"/> <input type="checkbox"/> | 189-190 |

Appendix C
Reliability Data

*Table 17:**Reliability Data for Insanity Acquittees*

	Percent Agreement		Kappa
	Exact	Within One	
Age			.94
Gender			1.00
Caucasian			1.00
Married			1.00
High school			1.00
Diagnosis Category			1.00
Index Crime Category			1.00
Past Convictions			.87
Past Charges			.81
Total # Past Convictions	84.2	94.7	.81
Total # Past Charges	89.5	94.7	.86
Inpatient	78.9	100.0	.72
Outpatient	47.4	68.4	.31
Age at Onset of Symptoms	94.7	100.0	.92
Time Since 1st Symptom	89.5	100.0	.84
Longest Time Symptoms Experienced	63.2	95.0	.44
Psychotic Symptoms	63.2	95.0	.51
Suicide Attempt	89.5	100.0	.79
Offence-Related Episode Classification	84.2	94.7	.74

*Table 18:**Reliability Data for Remands*

	Percent Agreement		Kappa
	Exact	Within One	
Age			1.00
Gender			1.00
Caucasian			1.00
Married			1.00
High school			1.00
Diagnosis Category			1.00
Index Crime Category			.88
Past Convictions			1.00
Past Charges			.83
Total # Past Convictions	69.2	84.6	.66
Total # Past Charges	61.5	80.8	.54
Inpatient	84.6	100.0	.80
Outpatient	54.17	91.6	.27
Age at Onset of Symptoms	96.0	100.0	.94
Time Since 1st Symptom	88.0	100.0	.82
Longest Time Symptoms Experienced	86.4	95.4	.82
Psychotic Symptoms	73.1	96.2	.63
Offence-Related Episode Classification	84.6	96.2	.79