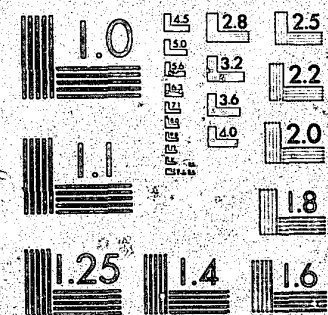


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The Dangerous Offenders in Canada

A Case Study

P. R. S. Koopman

The University of British Columbia

NCJRS

FEB 28 1986

Report for the **ACQUISITIONS** of Canada

April, 1985

TABLE OF CONTENTS

CHAPTER I: DANGEROUSNESS.....	1
Historical Overview.....	3
Definition.....	5
Prediction.....	10
Neuropsychology.....	10
Psychiatry and Psychology.....	14
Canadian Legislation.....	23
What are the Best Predictors?.....	29
Statistical and/or Actuarial Methods.....	29
Demographic Variables.....	31
Dispositional Variables.....	35
Situational and Environmental.....	42
CHAPTER II: THE STUDY.....	46
Parameters of the Present Study.....	48
The Sample.....	49
Structured Interviews.....	54
Testing...Ability Measures.....	55
Cognitive Measures.....	79
Personality Measures.....	84
CHAPTER III: RESULTS	
Demographic Data.....	90
Dispositional Variables.....	97
Situational Variables.....	115
The Effects of the Dangerous Offender Status & the Imposition of an Indeterminate Sentence.....	122
Treatment Received by the Dangerous Offenders..	126
CHAPTER IV: SUMMARY AND RECOMMENDATIONS	
Summary.....	129
Recommendations.....	140
BIBLIOGRAPHY.....	144

LIST OF TABLES

Table 1: Median Scores for Major Variables: Dangerous Offenders and Inmate Group.....90

Table 2: Percentage Dangerous Offenders and Inmate Group Using Various Structures.....101

Table 3: Summary of Correlations.....102

Table 4: Formal Language and Public Language Distribution of Scores.....104

Table 5: Type of Responding: Distribution of Scores.....104

Table 6: Social Class and Language Style.....105

Table 7: Comprehension Complexity: Distribution of Scores.....105

Table 8: Median Z Scores on Cognitive Measures for Dangerous Offenders, Inmate Group and Control Student Subjects.....106

Table 9: Median A Scores for Dangerous Offenders and Inmate Group on Three Language Measures.....107

Table 10: Language Level X Cognitive Level for the Dangerous Offender Group.....108

LIST OF FIGURES

Figure 1: A Case Study Approach to Prediction.....44

Figure 2: Diagrammatical Relationship Among Several Language Variables.....103

Figure 3: Model for Prediction of Dangerousness.....131

DEDICATION

The author realizes that a dedication is unusual in a scientific document, but believes that it is appropriate here because the three men to whom it is dedicated are examples of why this study needed to be done.

Robert Bottineau - Found not to be a Dangerous Offender and sentenced to five years, because the trial judge gave him a last chance as he believed that he was amenable to treatment.

In memorium - To Bob, No one could have tried harder to become a "good citizen." You never let down on your commitment to those who agreed to work with you, and you were about to show the community that their faith was rewarded - you were so close to being there.

Robert Robidoux - Found to be a Dangerous Offender; however, not given an indefinite sentence but received a definite sentence of seven years.

To Robbie, You live with the stigma, but are showing great courage in pursuing genuinely the treatment program that you have requested and are now receiving at the Regional Psychiatric Centre, Pacific. You have earned the respect of some who doubted you.

Mathew McDonald - Pleaded guilty to second degree murder in March, 1985 after almost a lifetime in prison.

To Matte, Your words to the court, "I know I done wrong, I took a life, but I'm a human being, not an animal...All them years in solitary, I didn't know what to do no more". Your treatment has begun at Kent Institution, but those of us who know you, realize that it is over 20 years late.

To the victims - Far from being ignored, your plight and its intolerability, makes the prevention of dangerous behaviours from being inflicted on other innocent citizens through more accurate prediction and treatment, the ultimate worth of this or any other study.

ACKNOWLEDGMENTS

The privilege of being invited to interview all of the Dangerous Offenders in Canada was afforded to this investigator through the initiation of this study by the Commissioner of Corrections who was at that time, Mr. Donald Yeomans. The need for this study was first recognized through the office of the Deputy Solicitor General, Mr. Fred Gibson who responded to the recommendations in the fine preliminary study of the Dangerous Offenders of Mrs. Lorraine Berzins. Your confidence in awarding the contract to this investigator is appreciated.

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To my research staff my warmest thank you: Mr. Eric Hampson, senior research assistant, for his scholarship on the language analysis and his unfailing assistance throughout the study; Mrs. Carolyn Cawker for her meticulous coding of transcripts and analysis for data entry; Mr. Fred Veltatzie for the preparation of the figural material.

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To the inmates, who were not Dangerous Offenders who gave of their time to help others - thank you; and to the Dangerous Offenders, may our combined efforts result in important advances in this very complex field.

Chapter I

DANGEROUSNESS

The diagnostic accuracy of assessing persons who may be dangerous is an extremely difficult task. The identification of those important variables contributing to the construct called dangerousness is an equally hazardous task.

Albeit, the prediction of dangerousness by a variety of individuals is being carried out. Often the assessment and predictions are made while the client is in an institution when, in fact, the purpose of the predictive evaluation is in relation to the individual's safety in the community.

The social importance attached to defining dangerousness, assessing who is dangerous and predicting who will be dangerous in the future, has occupied Western society for well over two hundred years. The problems we face today with this construct are undiminished by time and are as difficult ideologically as they ever were. Petrunik (1982) suggests that an approach stressing the influence of social control ideologies, interest group pressures, and pragmatic political adaptation to these factors, that he calls the politics of deviance, is a constructive way to look at the development of the social demands regarding the management of those considered dangerous.

In his discussion, Petrunik (1982) includes the work of Berger and Luckmann (1967) on the social construction of reality to the study of deviance, social problems and social control. In this approach definitions of deviance are treated "as products of a political process, as social constrictions usually implemented and legitimated by powerful and influential interests and applied to relatively powerless and subordinate groups and individuals...Decisions concerning what is the proper...designation [for a problem] and hence the appropriate agent of social control are settled by some type of political conflict...[The focus] is on [the] claims-making activities of...various interest groups...and...how one or another attains ownership of a given type of deviance or social problem and thus generates legitimacy for a deviance designation. Seen from this perspective, public facts, even those which wear a "scientific" mantle, are treated as products of the groups and organizations that produce or promote them rather than as accurate reflections of reality." This discussion leads him and us to investigate the ideological beginnings and history of our present working concept of dangerousness. We need to know how we arrived at our present legislation for the social control of violent and dangerous offenders in order that full understanding of the anticipated

and realized effects can influence informed change.

Historical Overview

Three major ideological notions have in combination been the most influential in forming public policy with regard to social deviance, especially violent deviance in Canada.

In the later part of the 18th century and well into the 19th century the utilitarian reformers who believed in the full responsibility of the individual and equality under the law influenced the protection of individual rights. The punishment was thought to be appropriately delivered if it was in direct proportion to the seriousness of the crime. The Just Desert and Modified Just Desert Models discussed by Monahan (1982) is a modern and increasingly popular form of sentencing. Monahan points out that, as appealing as this method is there are two major difficulties in its objective application. They are (1) The difficulty in establishing with full consensus the degree of seriousness of one crime over another. (2) In the modified desert model there is great difficulty in establishing the culpability of the individual. He concludes the article by offering a statement that the "only factors that can be used in sentencing are those whose existence and relationship to recidivism have been demonstrated to an acceptable standard of proof in a legal

proceeding." He addresses the purposes of the two models and his last statement with the recommendation of the following principle: "Within the range set by the seriousness of the crime committed, the severity of an offender's sentence shall be proportional to the degree he or she reliably and validly can be predicted to offend again."

With the rise of Positivism in the mid-19th century there arose the acceptance of pathology within the individual that made him not as responsible for his behaviour as he was under the prevailing mood of the early part of the century. Thus, pathological states resulting in criminal behaviour and the existence of the criminal mind gained strength. These persons were seen as requiring special sanctions and treatments appropriate to their differing mental needs. If dangerousness was a particular pathological state that could be identified and isolated in a person, then it could be treated similarly to other mental states requiring specific intervention rather than incarceration alone. This view is still the backbone of the psychiatric assessment of dangerousness.

The social defense approach also in effect since the turn of the 20th century emphasizes the protection of society by preventing victims through accurate identification and confinement of dangerous

persons for extensive periods until they are assessed by mental health professionals as no longer violent. The bifurcation trend in the United States is an outgrowth of this approach; that is, that serious and violent crimes will receive long or indeterminate sentences in prison, and less serious crimes will be given alternatives to confinement. The serious offenders are seen as requiring special handling, most likely segregation from society for its protection because the individual is seen as having little hope for substantial change before a sufficiently long period has passed and ample opportunity to "burn out" has taken place.

It is as though with the birth of every new thought or ideology through history we have added to our repertoire, but have not replaced or eliminated any existing theories. We now live with a curious amalgam of all the preceding social control attempts with fresh terminology that make them seem innovative.

Definition

The "politics of deviance" as described by Petrunik and others has influenced what society defines as dangerous. There are many possible definitions of this term, some based on individual concerns, some professional categorizations and some legal in explication. The influence of societal pressures on who and what is considered dangerous

cannot be underestimated at any level.

The Concise Oxford Dictionary defines danger as "liability or exposure to harm, risk, or peril." Individual differences exist among us as to what situations and who we would personally include within this definition. The level of fear created within us appears to be a critical determiner as to what is considered dangerous. While this is true of the individual rater of dangerousness it is also true of society collectively. Dangerous situations such as "acid rain" arouse less fear on a day to day basis than a spectacular mass murder will create. This is not because the absolute destruction is more, quite the contrary; but because the crime is more immediate and concrete and the fear potential of the public is tapped directly.

Dangerousness resident within individuals has been consistently chosen by policy makers for special legislation. Also only certain kinds of dangerous behaviours have been isolated for attention. These are violent acts against other persons, nonconsensual sexual acts and long term patterns of offending. Dangerousness as a product of mental illness is treated in a separate manner; however, the assessment methodologies that are used to assess dangerousness and success in treatment of mentally ill offenders continues to have primary influence on the procedures

used by mental health professionals who are asked to make decisions about the dangerousness of persons who have committed violent acts, indulged in illegal sexual practices, or who have long records of offending. The reasons for the persistence of these assessment procedures among professionals in the face of criticisms of reliability and validity established through careful research is important to explore as a separate issue.

The reasons why these three types of dangerous behaviours have been selected for special attention rather than other dangerous behaviours such as dangerous driving, seems to be rooted again in the fear potential aroused by these offenders in the public and the pressure brought on policy makers to develop specific sanctions regarding the persons found guilty of performing the behaviours.

B.L. Kozol, Director of Psychiatry at the Massachusetts Department of Mental Health (1972) states that "We conceive the dangerous person as one who has actually inflicted or attempted to inflict serious physical injury on another person; harbours anger, hostility, and resentment; enjoys witnessing or inflicting suffering; lacks altruistic and compassionate concern for others; sees himself as a victim rather than as an aggressor; resents or rejects authority; is primarily concerned with his own satisfaction and with the relief of his own

discomfort; is intolerant of frustration or delay of satisfaction; lacks control of his own impulses; has immature attitudes toward social responsibility; lacks insight into his own psychological structure; and distorts his perception of reality in accordance with his own wishes and needs." On dangerousness he continues: "The essence of dangerousness appears to be a paucity of feeling - concern for others. The offender is generally unaware that his behaviour inflicts suffering on others. The potential for injuring another is compounded when this lack of concern is coupled with anger. These elements, anger and a paucity of feeling - concern for others, may be of remote or recent origin, they may be global or selective, and, in many patients, they can be traced back several years. Deeply ingrained or nurtured by circumstances, these components seem to facilitate the situation that leads to the final assaultive acting out - an unconscious self-fulfilling prophecy".

This definition places primary emphasis on the assessment of the offender and not the offence. In a Just Desert model this would render decision making very difficult. Another variable missing in this definition of dangerousness is any reference to future dangerous behaviour. It of course can be argued that any behaviour which is part of a person's

personality, that remains unchanged, will likely persist and be acted out, given similar circumstances in the future. The definition does emphasize to a greater extent than many, the psychological characteristics of dangerous people. This is something that is very appealing to mental health professionals trained to use symptoms to identify disturbed mental states. However, defining dangerousness in this manner has serious limitations: (1) It restricts dangerous behaviours to physical acting out but does not include psychological harm to the victim as well. (2) It removes free will from the offender's control and describes him in terms much like the definition of the character disorder now called antisocial personality disorder. (3) It does not refer to amenability to treatment and seems to imply a static personality configuration unresponsive to change or intervention. (4) By default it leaves mental health professionals, especially psychiatrists, as the basic determiners of who is dangerous even though the ramifications of these decisions are usually legal, not dynamically attuned to treatment. (5) Most importantly, it does not tell us just what kind of acts these people perform that qualify them as dangerous (eg. sexual, weapons related, etc.) It implies that it is how he is that causes the action to take place, and how he feels about it that is

important to know rather than what he does. (6) The recognition of actuarial and situational variables as worthy of inclusion is completely absent in this definition and thus appear not to be viewed as important determiners in considerations of dangerousness. (7) The reader is left without direction as to how these symptoms are to be assessed (ie. through interview, records, psychological tests etc.) Are there a variety of sources that are desirable to pursue or are certain sources maximally reliable? (8) There should be specific direction with regard to whether and how predictive decisions can be made.

Prediction

Neuropsychology.

Recently, many studies point to neuropsychological correlates of violent behaviour, particularly among offenders. A leader in this field has been Yeudall (1977) who utilized a neuropsychological test battery to distinguish certain neuropsychological impairments among personality disorders in criminal subjects. He found that 91% of the psychopaths showed significant impairment. The localization of the dysfunction was in the temporal and frontal regions of the brain, with the psychopaths showing a greater incidence of dominant or left hemisphere dysfunction. He states

that behaviourally this means that, "While generally not affecting psychometric intelligence (as in WAIS IO), it is well established that damage to the frontal lobes results in a reduction in: 1) the ability to formulate plans and intentions; 2) the ability to evaluate the consequences of one's actions; 3) intellectual functioning involving abstract reasoning and concept formation; 4) the ability to sustain attention, concentration or long-term goal motivated activities; and 5) the effectiveness of language to regulate behaviour in terms of foresight or future behaviour. It also results in an increase in: 1) distractibility, impulsivity and disinhibition; 2) psychopathic behaviours concomitant with a lack of guilt, shame or remorse, and periodic-affective disorders such as mania and depression; and 3) sensitivity to alcohol.

Dysfunction of the left temporal lobes can result in disturbances in: 1) the comprehension of the written or spoken word and other language related activities such as reading, writing, spelling and arithmetic; 2) verbal memory; 3) logical and analytic thinking involving sequential processing of information; and 4) verbal auditory perception, resulting in hallucinations...In addition, dysfunction of the limbic portions of the temporal lobes, particularly the amygdaloid nuclei, can result

in increased aggressive and/or sexual behaviours which often tend to be episodic in nature.

The above mentioned behavioural correlates for dysfunction of temporal and frontal lobes, especially of the latter brain region, suggest (to the author, at least) obvious parallels with the behaviours and dynamics of the habitual criminal." The characteristics of neurological impairment 1-4 listed above, when matched with the behavioural symptoms of dangerous people suggested by Kozol, show a remarkable level of agreement. This kind of corroboration is the sort of information that we need to increase our predictive accuracy when we examine individuals. When two sources that use very different methods and instrumentation achieve a high level of overlap, confidence is created in the combined data.

Other neuropsychological studies have also provided evidence of abnormal brain function in habitual and violent offenders. (Marceau, Reddon, Yeudall and Schoppflocher, 1982; Spellacy, 1978; Yeudall & Davies, 1982 and Yeudall, Fedora, Fedora & Wardell, 1981). Spellacy (1978) compared 40 violent and 40 nonviolent male prisoners on a 31 variable neuropsychological test battery and the MMPI. The two groups differed significantly on both their responses to neuropsychological tests and the MMPI. Subjects could be classified correctly as violent or nonviolent with 95% accuracy by use of the

neuropsychological test battery alone. The MMPI alone correctly classed 79%. He concludes that, "The relative behavioral impairment seen on neuropsychological tests is interpreted as part of a general pattern of poor intellectual integration and cortical inhibition associated with the presumed greater prevalence of brain dysfunction in samples of violent persons. Simple and rather specific perceptual, cognitive, and psychomotor tests, such as found in neuropsychological assessment batteries, add significantly to the identification of potentially violent persons and appear more powerful for this purpose than personality inventories."

The inclusion of neuropsychological measures as one form of objective psychological assessment should be given serious consideration when assessing an individual for qualities of dangerousness or predicting the presence of a long lasting pattern of dangerous behaviour. Brain function, while measured indirectly through neuropsychological tests, does reflect the internal physiological state of the brain, and as such is probably a more stable and reliable measure of the behaviour patterns of an individual than those assessments based on subjective interviews and inconsistent interpretation of existing historical data alone. As such it becomes one source of important predictive data.

Psychiatry and Psychology

The use of psychiatric opinion for assessment and release of offenders is still very common today in spite of little support for its reliability and validity.

Halleck (1969:11) notes: "Research in the area of dangerous behaviour (other than generalizations from case materials) is practically nonexistent. Predictive studies which have examined the probability of recidivism have not focussed on the issue of dangerousness. If the psychiatrist or any other behavioural scientist were asked to show proof of his predictive skills, objective data could not be offered."

Mullen and Reinehr (1982) found no relationship between clinical predictions of dangerousness and outcome at a four year interval. They concluded that they were not satisfied that dangerousness was an identifiable personality dimension. As proof of their view they offer, "No investigator has been able to show agreement between judges or other instruments which purport to predict it."

Ottawa, April 26, 1984" Justice Minister Mark MacGuigen today released a study which suggests there is little evidence that psychiatrists can predict with any substantial degree of certainty the future dangerous conduct of persons who could be

sentenced as dangerous offenders under the current provisions of the Criminal Code...The study concludes that it is virtually impossible for psychiatrists testifying at trial to make accurate long-term predictions on the likelihood of offenders to commit violent acts. Psychiatrists normally do not know, at the time of trial, in which institution the offender will serve his sentence. Therefore, psychiatrists cannot take into account critical environmental factors that influence behaviour, such as the type of medical and other treatment programs available. Clinical findings show that mental health experts tend to overpredict the incidence of future violent behavior. The study was completed by Christopher Webster and Bernard Dickens, of the Centre of Criminology at the University of Toronto. This study also reviews comprehensively the literature on prediction of violent behaviour, the effects of indeterminate sentences, and makes recommendations regarding legislative change with regard to dangerousness."

If these studies are accepted, and they appear to have few if any dissenters, why does the dangerousness concept persist, and why are psychiatrists continuing to diagnose and assess clients for dangerousness proceedings?

Steadman, in Madden and Lion, (1976) says, "It is

an astounding paradox to see the steady publication of research data over the past five to ten years showing the inabilities of predictors of dangerousness to make accurate estimations and simultaneously to observe state legislators and groups producing or recommending criminal and mental health codes and procedures which rely so heavily on the predictive concept."

There is judicial reluctance to exclude psychiatric evidence even though the American Psychiatric Association has made public statements regarding the problems of assessment and prediction. Petrunik (1982) suggests that while dangerousness legislation is ineffective, unjust, and unworkable, governments continue to recommend its enactment because while it is not instrumental in effect it does serve a symbolic function. There seems to be important face validity regarding this symbolic function such that the judiciary and legislators continue to have people such as psychiatrists and other mental health professionals make these decisions regarding dangerousness rather than trusting them to the more "impersonal" approach of statistical probability statements. Psychiatrists are scapegoated in this respect by society in that they are mandated this role and this responsibility whether they choose it or not.

In Petrunik's article (1982) he offers the

observations of Merton and Nisbet, (1971) to explain this breach of logical behaviour. They indicate that societal concerns reflect certain consistent patterns of perception and definition that help the continuance of the status quo in the face of contrary research. They refer to "the social perception of social problems." In addition, "Popular perceptions are no safe guide to the actual magnitude of a social problem. Pervasive social problems that seldom have dramatic and conspicuous manifestations are apt to arouse smaller public attention than problems less serious, even when judged by the beholder's own values, that erupt in the spotlight of public drama."

They emphasize the perceptual significance of social distance. A serious offence that occurs to someone known by the community is seen as more important than a national disaster among strangers. The authors also indicate that there are widespread beliefs about the relationship between mental disorder and violence. There continues to be easy acceptance of the idea that mentally ill persons are often violent, even though this is very rarely true. The public is not bothered by the false positives identified by the mental health profession. They are much more likely to be concerned when one dangerous person is mistakenly let out of jail than if many more persons are wrongly retained. There is a

pervasive belief that psychiatrists can identify and treat persons that others are not prepared to try to understand.

Webster (1984) says that it is as much that we ask the wrong questions of psychiatrists as it is that they cannot answer the questions as we phrase them. For example he says that we should ask good practitioners what clues they rely on to form their opinions. What kind of patients are the most predictable? What specific kinds of future violent action is or is not likely to be expected from which kinds of patients? How good are patients themselves at predicting their own future violent conduct? To what extent is our +0.20 correlation an overestimate of clinical acumen attributable, not to clinical opinion per se, but to the use of background information of the kind normally provided to psychiatrists in police reports? Webster suggests that one way to satisfy these questions is for clinicians to "become more research minded in establishing and checking specific predictions for and with their particular forensic psychiatric patients."

But what are the specific problems that face clinicians when they try to predict dangerousness in their clients? Why is it that they aren't already asking themselves the preceding questions?

An amalgam of Webster (1984), Monahan (1981), and this investigator's problem lists follows:

1- There is wide variation in the accuracy of individual psychiatrists. Some are much more effective than others, but as a group they are not superior predictors of dangerousness as compared to other mental health professionals. There is also the inescapable fact that clinicians often find what they are looking for - in this case, dangerousness.

2-In addition to difficulty in reaching agreement on the definition of dangerousness it must be realized that dangerousness is a composite of a variety of factors. It is a multivariate concept and is neither linear nor composed of a single factor. There is also a lack of correspondence between legal decision-making procedures and clinical decision-making methodologies.

3-Clinicians are often not aware of what has influenced their judgment. They have impressions of the content and the sequence of their reasoning but that may not have been what it was at all. These professionals have less knowledge about their own cognitive processes than they think they have.

4-There is an over-emphasis on the trait characteristics of the individual at the expense of a

thorough and detailed analysis of the physical and social environments in which the behaviour occurs. Inappropriate traits are often singled out for attention and important but more subtle traits (eg. cognitive disorders) are not fully investigated.

5-There is a reliance on illusory correlates such as mental illness. What can be assessed readily and/or accurately is not necessarily what is important. Statements regarding predictors used are often extremely vague, which makes them even harder to check as to their predictive accuracy.

6-Violence is actually a rare event. This makes base rates difficult to establish, and prediction with its reliance on probability statements more problematic. There are difficulties in testing the accuracy of predictions as either people must be released who are thought to be dangerous or there has to be a naturally occurring event like that reported as the Baxtrom study in 1966. Likewise, if a man is incarcerated and becomes violent it may be the result of a self-fulfilling prophecy. If he does not become violent it may be either that he never would have been violent or because he is confined in an environment other than that which in the past elicited violence from him. Unfortunately, we may never know which is true and this lack of knowledge is important to our accurate

predictive capabilities.

7-When research findings are used there is a tendency to make predictions for the individual based on information yielded from group data. Experimental analyses with random assignment, control group design and statistical treatment are important to discover essential configurations in our data bases, but are not directly usable for diagnosis or prediction in the individual case. Most researchers also point to a need for cross-validation of patterns or configurations of selected predictor variables.

8-The attitudes and values of the assessor are often more critical than realized. The presence of countertransference especially to sex offenders is not unusual.

9-There is confusion of confidence with accuracy among clinicians. This situation is aggravated when the clinical assessment is based on limited behaviour samples. Sometimes there is no face-to-face interview. However it is also true, that as the amount of information increases, there seems to be a tendency for clinicians to become more susceptible to reacting to spectacular isolated pieces of information. The alternative is that large amounts of information must be organized and reduced to the least possible number of common factors and

then systematically interpreted. This is an awesome task especially when there still are questions about what are the critical variables that make up the concept of dangerousness.

10-Clinical assessments often take place at a time when the client is under great stress (eg. prior to dangerous offender proceedings) in a setting other than that to which we need to predict his present and future probabilities of dangerous behaviour. This is true whether this future environment will be as a result of release from prison or a particular institution where he will be incarcerated.

11. There is a tendency for psychiatrists and other mental health professionals to overpredict dangerousness. It could be a societal based fear of committing false negative diagnoses and releasing dangerous people, or because a man may be dangerous in the situation that brought him before the courts, but he is not dangerous in all situations, or in fact, in the majority of the situations that he may encounter. If the psychiatrist is not looking for situationally based violence then he will likely predict that because a man has been violent in the past and he is still the same person, then he will be violent in the future. These issues coupled with the unique operational definitions of dangerousness

employed by individual clinicians tend to result in an unacceptably high number of false positive identifications.

THE CANADIAN LEGISLATION

The Ouimet Report as cited by Price (1970:242) states that "a more systematic use of procedures to identify and isolate the dangerous offender could well provide that measure of public acceptance of reform proposals that would lead to a gradual modification of the severity of sentences imposed on the offender population as a whole." The effect that this report had in terms of how its purposes were interpreted in subsequent legislation is partially answered by the Dangerous Offender Legislation of 1977. The difficulties inherent in separating the dangerous offender from the offender with violent offences who is not believed to be dangerous has not been addressed directly. There seems to have been an optimistic hope that psychiatrists would take on the task of refining the diagnostic and predictive procedures while engaged in the task of providing evidence to the court in dangerous offender proceedings.

Just what does the new Dangerous Offender legislation provide that the legislation of the 1940s did not include in the Habitual Offender provisions and the specific designation of Dangerous Sexual

offender in the 1960 amendments to the Criminal Code did not anticipate?

Several points should be highlighted in this legislation now that the foregoing discussion has demonstrated the legal, ideological, and historical roots of Part XXI and the mental health practitioners dilemma with regard to assessment and prediction of dangerousness.

1-First and second degree murder are excluded as qualifying offences. This is likely because of the substantive sentences already accruing to these offences, not because they are seen as evidence of lesser dangerousness. Yet the question remains, why would a person convicted of assault causing bodily harm be seen as more deserving of the label of dangerous offender as opposed to someone who committed first degree murder? There may also be encouragement for an accused person to plead guilty to second degree murder rather than chance manslaughter and the possibility of dangerous offender proceedings.

2-Predictions of behaviour in the future are essential to the finding of dangerousness in the individual (ie. "likely to endanger the life or safety of another person...or likely to inflict severe psychological damage upon another person...and

a likelihood of his causing death or injury to other persons, or inflicting severe psychological damage upon other persons, through failure in the future to restrain his behaviour, ...any behaviour by the offender, associated with the offence for which he has been convicted, that is of such a brutal nature as to compel the conclusion that his behaviour in the future is unlikely to be inhibited by normal standards of behavioural restraint...has shown a failure to control his sexual impulses and a likelihood of his causing injury pain or other evil to other persons through failure in the future to control his sexual impulses."

Thus, the defendant to be found a dangerous offender must be sentenced as much for what he hasn't done but may do, as for what he has just been found guilty of doing.

3-The court is required to "hear evidence of at least two psychiatrists and all other evidence that, in its opinion, is relevant, including the evidence of any psychologist or criminologist called as a witness by the prosecution or offender." The reliance on mental health professionals to present evidence regarding the dangerousness of an individual within the provisions of Part XXI, at present and in the future, is directly specified in spite of the multiplicity of problems associated with

this kind of decision-making.

4-One of the differences in the 1940 and 1960 legislation was the change in terminology of sexual psychopath to dangerous sexual offender. The newer legislation of 1977 regarding the sentencing of offenders as dangerous offenders appears to include aspects of both. Dangerous offender as a category has come to be used almost synonymously with psychopath or sexual psychopath. Further, the outcome that most of these persons are detained in prison for indeterminate sentences lends further support to the notion that they are seen as needing longer and more variable sentences in order to demonstrate change through treatment or by maturing out of the particularly violent aspects of their personalities. Unfortunately, as will be shown later in this paper the underlying and often explicitly stated diagnosis of psychopath or the newer definition of antisocial personality disorder, with its very pessimistic prognosis has been counterproductive to this aim.

Sexual offenders and/or persons who are diagnosed as anti-social personality disorders (psychopaths) are focussed upon more directly as dangerous persons than all other possible etiological conditions. This is in spite of the fact that there is little agreement on either of these mental conditions or their relationship to violent and

dangerous behaviour.

5- Provision is made for a parole review after the first three years in custody and "not later than every two years thereafter." The impression of this statement is that with improvement in behaviour pattern the offender may be released sooner than if he were to have received a substantive sentence. This requires, however, that provisions are made for rehabilitation in whatever manner most appropriate for each offender sentenced under Part XXI. It is immediately apparent that there is a disparity between the societal demands for protection from this person for a long period and the promise of rehabilitative treatment and the incentive of early release dependant on successful performance for the offender. This also assumes that programs that can accomplish these changes in behaviour will be provided in the institutions to which the offenders are sent. It assumes that reassessment will be ongoing so as to detect positive change when it occurs, and that there is sincere commitment to release when dangerousness is no longer at issue for the offender.

Petrunik (1982) indicates that history has not shown this type of legislation to be heavily used, and states that as of the spring of 1982, the new legislation has been used only seven times. As will be seen in this study, since 1977 to August of 1984,

44 successful applications for dangerous offender have been brought forward. There is also evidence of increasing escalation of its usage, probably a result of heightened societal concern for the protection of victims' rights and the belief that severe punishment is an effective deterrent for violent crimes. Petrunik (1982) ends his article by saying, "In the end, whether we decided to retain or abolish legislation based on the dangerousness standard, ultimately the question is a moral one and a social policy one: Where do we draw the line in establishing a balance between individual rights and social protection? Since it appears unlikely negatives will continue to be regarded as too many and since it appears unlikely that false positives can ever be greatly reduced from their present level without increasing the number of false negatives, false positive rates well above fifty per cent may simply be the price we pay for legislation more demonstrably symbolic in its effects than instrumental in reducing violence against individuals."

The remainder of this study will explore whether we have to accept this high price, or can we do better?

WHAT ARE THE BEST PREDICTORS?

Accepting the reality that despite all the problems stated thus far in this paper regarding, 1) Definition, 2) Identification, and 3) Prediction of dangerous behaviour, mental health professionals are still required in a variety of clinical situations and in law to perform these functions. This is especially true with regard to the requirements of Part XXI.

We must then, turn our attention to establishing through a search of the current knowledge, what we do know from studies and clinical practice that will give us the best available data to make the most informed decisions. Clinical opinion, as the most frequently used limited decision-making device, has been highlighted to this point, but what about other possible sources and techniques?

Statistical and/or Actuarial Methods

Meehl (1954) contrasts statistical and clinical methods as: "The mechanical combining of information for classification purposes, and the resultant probability figure with an empirically determined relative frequency, are the characteristics that define the actuarial or statistical type of prediction. Alternatively, we may proceed on what seems, at least, to be a very different path. On the

basis of interview impressions, other data from the history and possibly psychometric information of the same type as in the first sort of prediction, we formulate, as in psychiatric staff conference, some psychological hypotheses regarding the structure and dynamics of this particular individual....This type of procedure has been loosely called the clinical or case study method of prediction."

Steadman and Cocozza (1979) ask the question, "Would a statistical model based on information on the background and characteristics of the defendants, which could have been available at the point where the clinical decision was made, be superior to the clinical predictions made by the psychiatrists.?"

They conducted a study comparing the accuracy of statistical prediction and clinical opinion and concluded, "This study like all others that have been completed comparing clinical and statistical predictions in the areas of violence, parole violations, and psychopathology (Wenk, 1972; Steadman and Cocozza, 1974; Sines, 1970; Sawyer, 1966) found that statistical prediction in almost every instance was superior to clinical prediction.

Findings suggested that further specification in the settings for which prediction of violence are made must be introduced before the potential value of statistical predictions can be estimated.

They conclude "...the development of models of

statistical predictions seems preferable to the continued use of clinical predictions which consistently overpredict who will be violent." Monahan (1981), summarizes, "Statistical prediction differs from clinical prediction both in the kinds of data it employs and in the methods it uses to convert the data into a prediction. Statistical prediction uses lower order, often demographic, variables and combines them by means of automatic, mathematical rules. Clinical prediction, by contrast, is less precise about the predictor variables used and may choose different predictors for different cases. These factors are then transformed into a prediction in a subjective or intuitive way.

I. Demographic Variables

Statistical prediction depends on a variety of what this study will refer to as demographic variables. They consist of:

A. Predictor Variables - those variables singled out from all possible variables present as most relevant to what is being predicted. Monahan says that one cannot hope to predict what has not yet been defined. A few, but relevant predictor variables, are preferable to the confusing consideration of many variables of limited predictive capacity. The study to follow discusses new possibilities within the realm of predictor

variables, and suggests ways to test their effectiveness.

B. Criterion Variables - with regard to prediction, are those statements that delineate behaviours that have been predicted to occur or not to occur as well as specifying direction. These are the acts one includes in the definition of what one is predicting. Often our prediction rates are low because we are not clear as to exactly what we are prepared to say will happen. What will it look like if it occurs or it does not occur?

C. Cut-off Points - Decisions must be made with regard to cut off points on variables where degrees of severity, frequency or prevalence are involved. The effects on false positive and false negative identification will be in direct relationship to the establishment of cut-off points that are either too high or too low with regard to individual predictor variables or a composite of predictor variables.

D. Base Rates- Monahan (1981) "It is clear that knowledge of the appropriate base rate is the most important single piece of information necessary to make an accurate prediction." Base rates are the statistical prevalence of a behaviour or constellation of behaviours in a particular group usually within a particular time period.

While our data are incomplete, we do know the rates of particular kinds of crimes for certain

classes of offenders. As this information has shown itself to be the single best predictor of dangerous behaviour it is amazing that better data are not being systematically collected and also that existing data is not used to a greater extent by those who are charged with predicting danger. It is, of course, true that for some of the offences, especially among those brought to dangerous offender proceedings there are difficulties in establishing base rates because the incidence is low for that behaviour, making prediction riskier. We also do not have Canadian base rates generally and there is reason to believe that the demographic variables, were they to be available, would be different from those of the United States that are presently used.

The study by Kahneman and Tversky (1973) reported by Monahan found that people often ignored base rates in making statistical predictions when case-specific information was present. This was true even if the information was likely unreliable. The more "personal" aspects of case-specific information seems to give it face validity that it may well not deserve. The objective and more accurate statistical data are resorted to only when other information is not available resulting in better predictions. This happens probably because mental health professionals are trained and oriented to obtaining information

from individuals in an interview session and competency is seen as a skill in getting the right information. There is an investment in the information so collected, while the statistical data could be collected by a clerk or computer totally devoid of the trained art of the interview and assessment.

Shapiro (1977) defines anchoring as using the base rate of a condition as one's first estimate of the probability of the conditions being present in the individual case. Subsequently the clinician will use additional patient specific information to individualize his or her probability estimate around the anchor point. In addition he says, "Clearly, inaccuracy in prediction can be due either to use of an incorrect anchor point or to failure to individualize appropriately. Skill in these two aspects of prediction is acquired differently. A correct anchor-point probability may be obtained either through knowledge of the literature or by extensive clinical experience. Ability to individualize assessments to the unique characteristics of the patient is primarily a function of experience."

There is no reason to see clinical and statistical methods as contradictory or competing, rather they both supply important data and should when used wisely augment and corroborate one another.

Clinical data, so gathered, will be referred to in this report as dispositional or case specific information as opposed to demographic or actuarial data.

II. Dispositional Variables

The next set of variables to be collected are the case specific data. These variables tell us about unique characteristics of this individual that could contribute to dangerous behaviour. It is within these parameters that the Clinical Psychiatrist and Clinical Psychologist make their contributions.

The experienced psychiatrist is able to contribute to the integration of the data via the exemplary clinical evaluation with appropriate time allotted. Conducted in a one to one situation, using finely tuned clinical skills, the full use of biographical and collateral data and a sensitive use of the transference to identify the presence of clinical pathology the psychiatrist gathers data available in no other way.

The clinical psychologist using both interview skills and a variety of particularly chosen psychological measures can augment the data base resulting in the elicitation of a number of essential variables.

III. Situational and Environmental Variables

Demographic and dispositional variables are often the only variables measured or collected. While there is enormous variability in what is chosen to be measured one still is left with an assessment of the individual in isolation of his environment. To establish the presence of a demographic or dispositional variable one has only to establish a relationship between predictors and criterion as they refer to fixed or relatively stable aspects of the person's character. Unfortunately, the result of the comparison is usually a low correlation between predictor variables and criterion variables (ie. we have not been able to accurately predict what this person will do). In addition to problems introduced through inappropriate variable selection and inaccurate or unreliable measurement, the variance due to environmental and situational variables contributes to a major source of missing and important predictive data.

An ecological or environmental approach stresses that all aspects of a person's life, must be considered as valid sources of important information necessary to a prediction of how a person will react. In essence, a person's behaviour is determined by a variety of factors external to him that interact with those that are unique to his character.

Situational predictors demand that both a

statistical relationship between a given situation and dangerous behavior, and the probability that the individual will, in fact, encounter that situation be established.

Monahan (1981), says that, "It is the interaction of dispositional and situational variables that holds the greatest promise for important predictive accuracy. Ideally, it eventually might be possible to make differential predictions of the sort that individuals with dispositional characteristics of type N would have X probability of violent behavior, if they resided in environment type A, and Y probability if they resided in environment type B."

We know from Monahan (1981) that sources of heightened probabilities of violence can be family environment, peer environment, job environment, availability of victims, weapons, and alcohol. These are important to assess routinely as situational variables that are often determinants in whether violence will occur or not for this person at this time.

Steadman's (1982) research established the dynamics of violent situations that most often were present when the greatest amount of violence took place. The situations were usually outside the home, late at night, strangers were involved, as well as a

third party. Alcohol and drugs were used by one or both parties.

In defining a "situation" we must be aware of the demographic and dispositional variables of the person at the same time. A situation of importance for one person may have no impact on another person with an equally violent behaviour pattern. We must obtain a profile of the kinds of situations in which the individual has experienced violent behaviour. The analysis of the critical variables present or missing is essential to the creation of the "model situation" in which violence will probably occur for this person. This is also the first step to the systematic manipulation of the environment in order to prevent the individual's exposure to violence prone situations.

We must be concerned not only with the situations themselves or the dynamic aspects of these situations, but we must also be aware of the probabilities that a given individual will encounter the situation in the environment where he will be interacting. Monahan (1975), says that, "Rather than attempting to identify and modify violence-prone persons, energy could be expended in the attempt to identify and modify situations conducive to violence."

With regard to controllable factors in the environment Steadman asks the questions: "Will the

living situation be the same as was associated with prior violent incidents? Will the activity pattern of work and recreation be replayed? Is there any indication of differences in alcohol and drug use, which are closely related in themselves to other contextual factors? If little or no change is associated with these or other relevant factors, can release or non-committal be conditional on such change?" Part XXI seems to address this later concern in part through setting the indeterminate sentence for most men designated as dangerous offenders. Whether this sentence facilitates the intent of the legislation will be discussed in the study that follows.

Two issues remain that need to be introduced. First, any schema that is developed where criteria for prediction of dangerousness have been studied and analyzed, must be subjected to extensive cross-validation on all relevant groups and individuals to whom we hope to generalize. Second, treatment in the form of situational and environmental manipulation must be considered systematically for the dangerous offender, especially the amenability of the person and the appropriateness of the treatment, if we are to determine the lastingness of the dangerousness prediction. This subject will be analyzed in the next sections.

Assessment Sequence

The best sequence is probably one where the relevant base rate is sought first, then anchor points identified and data are sought for each of them; this is followed by pursuing on an individual basis other predictor variables that we will call dispositional or case-specific variables. Situational variables and their interactions with dispositional variables will be collected and interpreted last. In this way a multiple sieve plan is followed, where a maximum of relevant data are retained at each step. This approach relieves the problems associated with using group data to predict for the individual. Dispositional and situational data are used to refine and make relevant the data to the single case.

A. Demographic data that has been demonstrated to have good predictive potential includes:

- age
- sex
- educational level
- socioeconomic status
- marital status
- residential stability
- offence type
- delinquency
- age of first adult offence
- record of violence

- escalation of violence
- severity of violence

B. Dispositional variables arising from clinical and empirical studies including this author's work, that appear to be important with regard to dangerous and violent behaviour are as follows:

1) - Mental illness - while there is a low correlation with violence it may be important in the differential diagnosis of other problems.

2) - Personality disorders - unsocialized, inadequate, anti-social, psychopathic personalities or other affective states are frequently cited as correlating positively with violence and dangerous behaviour.

3) - Mental handicaps - ie. general mental ability - again there is a low relationship with violence, but the importance is that of differential diagnosis.

4) - Neurological and/or physical impairment - medical and neurological data is seen by many researchers as increasingly important to prediction and differentiation.

5) - Cognitive dysfunction - process dysfunction, language competence, and relational thinking abilities are emerging as important variables.

6) - Alcoholism and drug abuse are almost universal symptoms with regard to demographic, dispositional and environmental factors in violence and dangerous behaviour.

7) - Motivation (declared and actual intentions), internal inhibition (over-controlled, impulsive etc.), and habit strength (amount and importance of reinforcement of patterns of violent behaviours over time), are included by some researchers of dangerousness.

8) Physical Features - Berzins (1984) noted the possible importance of the physical appearance of the clients to their designation in her recent study.

It has been suggested by this author that dispositional variables or case-specific information about a single individual could as well be called predispositional variables in that they constitute the bottom line which determines how situations and life events will be perceived and reacted to by the person.

C. Situational and Environmental Variables

What defines a situation will be specific to the individual and will involve an interaction of the dispositional variables just mentioned and certain environmental variables of significant historic violence potential for this person. In assessing environmental variables for violence potential

important areas to define and describe are:

- a. Environmental support systems
 - 1. Family
 - 2. Peers
 - 3. Employment
- b. Sources of heightened probabilities
 - 1. availability of victims
 - 2. availability of weapons
 - 3. availability of alcohol and drugs
 - 4. sexual history

The assessment model that follows uses this framework for definition, data collection, discussion and recommendations.

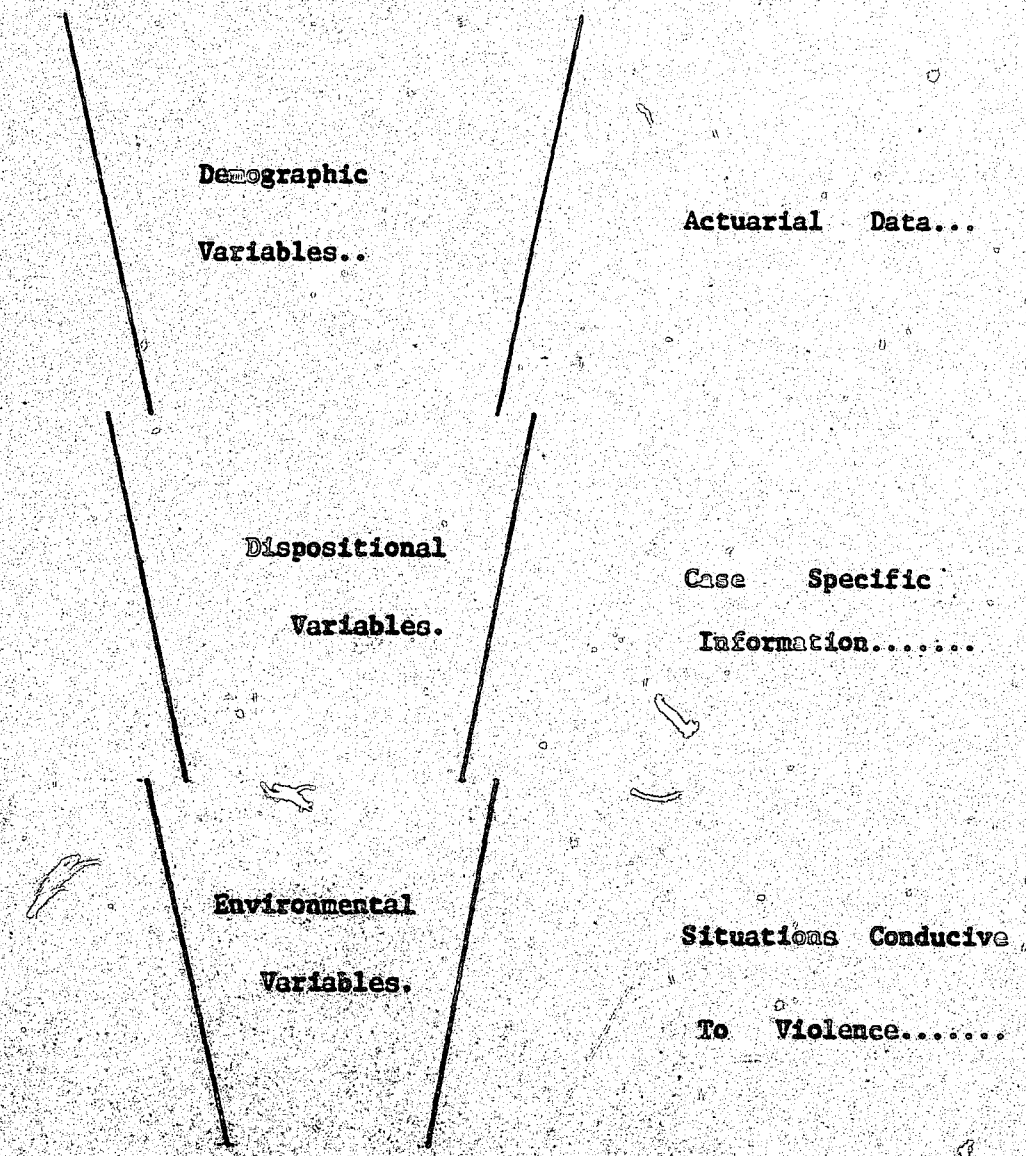


Figure 1: Model for A Case Study Approach to the Prediction of Dangerousness

In the model just presented, clinical and statistical predictors are combined within the three categories of variables resulting in a true ecological approach to data collection and decision-making about the dangerousness of a particular individual. As there are no direct measures of dangerousness our goal should be to collect information on as many of the predictors as possible in order to obtain enough relevant data to effect the best possible prediction given the present state of our knowledge in this field.

Chapter II

The Study

Title: Dangerous Offenders Case-by-Case Study of Offenders Sentenced Under Part XXI of Criminal Code

In December 1983 the beginnings of this study began to take place. An ongoing study of Dangerous Offenders, by Ms. Lorraine Berzins of the Policy Branch of the Solicitor General's Office, had pointed out in a preliminary report that a large number of the subjects tended to have poor verbal skills, difficulties in communication, problems of social isolation and some history of learning disability. In a recent study (Cognitive Disorders and Syntactical Deficiencies in the Inmate Populations of Federal Penitentiaries in Canada, March 1983) this author found that some inmates manifesting behaviour patterns similar to those observed by Berzins in the Dangerous Offender population suffered from cognitive dysfunction. Behaviour patterns in the two groups were in fact very similar: low impulse control, lack of insight and empathy, inability to predict outcomes such as consequences of actions, inability to learn in usual ways, etc. It was also seen as significant that 81% of the Koopman subjects had committed violent crimes.

Koopman concluded that these inmates tended to act impulsively because their actions were not

governed by rational decision-making, which requires a certain level of language development. Such a process disorder was also identified in the language patterns of some inmates who appeared to be quite articulate. It was postulated that if in fact it could be determined that the Dangerous Offender population had similar problems, this finding could help to account for many of the observations noted in relation to offence pattern, basis of selection for designation and problems with treatment and other program experiences.

Further it was believed that the techniques for the identification, diagnosis and remedy of cognitive disorders among inmates developed by Koopman could have important implications for:

1. the development of reliable predictors of dangerous behaviour on the part of some offenders entering or leaving the penitentiary system;
2. the development and implementation of effective methods of dealing with cognitive disorders which limit the effectiveness of current treatment and program approaches;
3. the identification of cognitive dysfunction in young offenders early in their delinquency and the provision of remedial programming specific to their needs.

Parameters of the Present Study

With the foregoing interests in mind a contract for the present study was struck at the initiation of Mr. Fred Gibson, Deputy Solicitor General through the office of Mr. D. R. Yeomans, who was at that time, Commissioner of the Correctional Service of Canada to be supervised by Mr. R. Watkins Director of Psychological Services Offender Programs. The contract specified the following to be specifically addressed:

"Interview in depth and test, using cognitive language and personality measures, all 41 inmates now designated as dangerous offenders.

Interview in depth and test a selected number of inmates against whom dangerous offender proceedings have been conducted but who were not found to be dangerous offenders

Interview in depth and test a selected number of inmates in the general penitentiary population who have not been classified as dangerous offenders

Review carefully the available court transcripts of the inmates mentioned above, to determine what information was emphasized, and

Recommend specific remedial programs for each dangerous offender and make general program suggestions for dangerous offenders where it can be

established that the presence of a process dysfunction is a consideration

The report is to be suitable for publication and credible to the scientific community and the legal profession and should contain the following:

a) identification procedures for offenders who may be or may become dangerous

b) assessment procedures for dangerousness

c) the kinds of information needed and the manner in which it can be best brought to the court for decision making in dangerous offender proceedings and what further research may be required in order to do so."

This was the agreement upon which the study was structured and completed.

The Sample

For the first time in the research career of this author, the entire population of a defined target group was included in a study.

Beginning in June 1984 all dangerous offenders sentenced since the legislation of 1977 under Part XXI of the Criminal Code were located and personally contacted by this investigator. Only two offenders could not be interviewed on a one-to-one basis. In both cases the reason was mental disorder. One of the inmates was, in fact, brought to interview, but was unable to respond, appeared to be hallucinating, and

was very fearful. It was felt that there was no reason to continue, as the validity of all information would be in question. The second subject was not able to be brought for interview as he was in an extreme emotional state and had been for some time.

The remaining 42 inmates were all assessed by this investigator by means of an open-ended structured interview and the administration of a sequence of tests. Abiding by the time and scheduling restraints of the various institutions and the varying needs and characteristics of the inmates, the amount of testing and interview time per inmate averaged approximately two hours.

Group 1 The interview schedule of the Dangerous Offenders by region and institution was as follows:

Ontario: Kingston Institution	19
Regional Treatment Centre	2
Penetanguishene	1
Warkworth Institution	4
Millhaven Institution	3
Atlantic: Dorchester	1
Prairies: Prince Albert	8
Pacific: Mountain Institution	2
Regional Psychiatric Centre	3
Total:	43

Group 2 Unsuccessful Dangerous Offender applications were more difficult to research as they were few in number, some people had been paroled and one, a woman refused to cooperate, feeling it could jeopardize her already tenuous position. They were a very diverse group as it was and only one (a client for whom this researcher acted for the defense in his dangerous offender hearing, and later as therapist) will be discussed in detail. The people located were distributed as follows regionally:

Unsuccessful Dangerous Offender Applications by Region:

NWT	1
Ontario	7
B.C.	1

There may be other applications within the provincial system that were unsuccessful that we were unable to locate. Every effort was made to find all persons for whom application had been made, but it was not possible within the time and the physical restraints present. However, it is the opinion of this investigator that there was little in common that could be said of these people. The small number also makes any kind of general statement risky as well. A synopsis of the varieties of reasons for judgement given by the court is as follows:

a. The court expressed doubt with regard to likelihood of future dangerous conduct

b. There was insufficient evidence to satisfy requisite burden of proof on dangerous offender application

c. Procedural reasons were given

d. The court exercised its discretion not to find him a dangerous offender notwithstanding that the crown had proved requisite sections of 688

e. The accused was found to be a danger, but was given a last chance

f. The accused was found to be a danger, but he was given a last chance because seen as amenable to treatment.

Group 3 Forty two inmates were identified who had never had dangerous offender proceedings brought against them, but who had a history of violence in past offences. A number of these people were identified by institution personnel and some were clients in the author's private practice in forensic psychology in Vancouver, British Columbia. These people were interviewed and tested using the same procedures and instruments for the Dangerous Offenders. Comparative data will be presented in the results sections, particularly as it relates to group 1.

Group 4 Thirty one university third year students were administered the tests of language and

cognition to establish an external standard to compare to the normative standards of the developmental and standardized measures.

Sources of Information Additional sources of information were sought in order to gain data to adequately assess as many predictor variables as possible. These sources included:

a- Court transcripts - all transcripts for the dangerous offenders were not available, but through the concerted effort of the secretary to the project 38 were located and coded for the information needed.

b- Reasons for judgment were received for all of the Dangerous Offenders, and all of the unsuccessful applications

c- General institution file information was read and coded for each inmate who participated in the study

d- Psychology file information, including past testing data was read and coded where it was available.

e- Medical file information, this was sought when available and pertinent

f- Additional information from the inmates' own files, or their lawyers, was sometimes supplied

Release forms were provided by the investigator and signed by the inmates in order to obtain access to most of the above information. Inmates in all groups were extremely cooperative in allowing this investigator information needed for the completeness of the study.

Structured Interviews

Each man was seen alone in a face-to-face interview that preceded testing. The purpose of my visit was explained by outlining briefly the salient features of the case study. All Dangerous Offenders spoken with were very receptive to the presence of someone who was looking at the Dangerous Offender legislation and who was prepared to talk with them and try to understand their particular situation. They were, of course, hopeful that their cooperation might have some positive influence on future decisions regarding them.

While the questions were very open-ended, the topics covered were carefully prescribed. The content of their responses and any additional information they volunteered was far-ranging and freely offered. This investigator was pleased with the forthcomingness of their participation, and often felt that additional interview time would have been desirable. In several instances inmates came back several times because they wanted to share additional information. The interview was not taped as this was seen as possibly affecting the openness of response; however notes were taken and the content was integrated with the other sources of information. These interviews also offered the best insight into each man. This investigator believes that while

statistical information is vitally important, the case specific information provided by a face-to-face interview adds not only unique data for each man, but brings into focus the humanness that each possesses in his own way. It is impossible to consider a man a statistic when he is intensely trying to help you understand him and his situation.

Testing

A. Ability Measures

Any measures that existed in the files were recorded and used in the overall analysis. In addition, all inmates in groups 1 and 3 were administered the Test of Non-Verbal Intelligence, as it is an ability measure that does not depend on language (vocabulary), education or familiarity with testing. It also provides a good framework for looking at a person's problem solving abilities at a symbolic level and his flexibility in changing thinking strategies among six testing formats.

Reliability coefficients in excess of .90 were established by the authors of this test. Internal reliability of Forms A and B was in the low 90s at all age levels appropriate for this study. Concurrent validity was established at a high level with other accepted criterion measures.

B. Language Measures

Language will be treated in this study with specific emphasis, as it is the contention of this investigator that language is the key to cognitive dysfunction and personality disorder. The importance of language analysis in the inmate with violence potential is a major aspect of the present investigation and will constitute a "study within a study."

Assessing the quality of language - The quality of language may be assessed in two ways: by tests, criterion-referenced or standardized; or by an analysis of language samples supplied in normal dialogue or in a written account of a series of events. Criterion-referenced tests establish a level of performance that a subject is expected to reach, and standardized tests are supplied with norms which enable the investigator to compare the attainments of one person with those of another in the appropriate group. Criterion-referenced and standardized tests must be given under prescribed conditions; there is little room for a free-ranging session and examination in some depth of a candidate's capacity for language: specific facts are furnished and a succinct and standard response is required; the questions tend to limit the answers that may be given. It is otherwise with the language sample. The

candidate is free to speak or to write as much or as little as he wishes in a truly individual account, and the examiner can remain silent for the voluble, and encourage the reticent in a conversation which, when properly conducted, can reflect more accurately and more fully than can any other means, the quality of a person's language.

The need to assess competence in language is prompted by a recognition that the foundations of intellectual activity are to be found in the logical structure of speech (Vygotsky, 1934). Without language, it is impossible for one to express concepts; and it is the sharing of concepts by a significant number of people, so that the group, in general, subscribes to similar or not too divergent opinions, that builds a coherent society. It would be rash to claim that the inability to express and share similar views is the major issue in all cases of deviant behaviour, but the literature is replete with studies which suggest that a high proportion of delinquents of all ages lack significant linguistic skills. The implication is obvious: the competence of the individual in language must be at least equal to the demands that life makes upon that person. If this is not so, there is increasingly a chance that the problems of any number of days will go unsolved, or they will become the crucial elements in a series

of inappropriate decisions which are made out of frustration rather than from sound premises. If the language initially codes thought, it follows that faulty language caused by perceptual dysfunction can inhibit clear thinking and consequently appropriate solutions. The problem, then, becomes one of distinguishing levels in mastery of the various components of adult language and, by so doing, assessing its efficiency as a means of communication.

Assessment

If phonology is in question, there are acceptable ways of making an assessment. There are ways of measuring semantic skills; but there are no undisputed approaches toward the measurement of syntactical competence, and it would seem to be syntax that ultimately determines the quality of language and the degree to which it is capable of meeting the demands of everyday life. The ability to speak coherently and accurately and to understand equally well the facts, intent, and implications of what others say is the essence of comprehension.

Complex thoughts demand a certain complexity of structure in language, for in no other way can the subtleties be conveyed to the listener. Equally, the ability to decode the speech of others is a sine qua non for the comprehension of their utterances. Such assertions do not strain credulity. The problem that arises in this matter concerns the

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actual assessments that one is called upon to make, for complexity, as applied to language, has rarely been defined, and this omission is signalled by the absence of an adequate scale and a clear statement of what is being measured in the instance of adult language. Crystal (1976) recognizes this difficulty:

"Current linguistic theory has no coherent explanation for syntactic complexity, and any attempt to assert that some structures are "more basic" or "more complex" than others on intuitive grounds soon lands us in difficulty, if anything other than the most elementary sentence-building processes are being investigated [p.26]"

At the same time, the pragmatic and sensible view that Crystal later expounds should be considered if one is tempted to throw out all procedures which appear to be applicable only to children's language:

"We have no theoretical reason for using the child developmental scale in relation to adults. Our arguments are pragmatic; we have found no viable alternative, and by using it satisfactory progress in the pupil's use of syntax has been achieved [p. 32]"

The suggestion of conflict in these two references need not be a source of frustration if one is prepared to see consistency, not in all elements of these statements, but only among a few. Thus, "elementary sentence-building processes" are to be found in the language of adults, as one develops a sense of what is, by common consent, elementary or more advanced. It is also possible to discern some similarities among the constructions painfully put

together by the inarticulate adult and those early utterances of the child; yet no one would risk saying, without some qualification, that one speaks as does the other. Any statement by the adult is made from a fund of experience which is normally much more varied than that of any child. There is accordingly a hidden context, which in the mind of the speaker lends a unique connotation to his utterance. Really to understand what he is saying, the listener must know at least something of this background. It may be assumed in these circumstances that a child's statements are the more literal. An additional reason for caution in the application of these developmental scales to the language of older subjects is the risk of generalizing to an unjustified degree the findings from children's speech to that of adults.

One may make a gross assessment of adult language by using Crystal's analysis (see Koopman 1983) as long as the sample does not qualify above stage V or stage VI. Beyond this point, the scaling becomes very subjective, embracing such variables as discourse structure, which includes sentence-connecting devices, the controlling of emphasis through word-order, the more skilful use of intonation, and the learning of the irregular forms of some verbs and nouns; syntactic comprehension, as opposed to the mere production of syntactic patterns;

and the appreciation of style in discourse. Of these discourse structure and style are not sufficiently discriminating without being broken down into observable and measurable behaviours, and syntactic comprehension is a term which confuses structure and process. The only solution to this problem of assessing these largely subjective issues is to define them within manageable limits.

Discourse structure is defined as the organization of the underlying matrix of verbal devices that lends shape to any oral or written composition. It is not directly susceptible to measurement, but an ordinal scale may be applied to the number and complexity of its constituent items: sentence-connecting devices, verbs, nouns, and other form classes. In speech, articulation, enunciation, and intonation should be included.

The implied definition of style offered by Crystal *et al* (1976) is somewhat more circumscribed than is customary in a discussion of adult language. The definition now adopted embraces the three interacting characteristics—(sentence-connecting devices, word-order patterns controlling the distribution of emphasis, and the use of intonation to control the relationship between the various parts of the sentence), and every other feature of a person's mode of verbal composition. Style is the

total reflection of a person's position, intellect, and capacity for self-expression.

Syntactic comprehension, as has been stated above, is not a useful term. As a consequence, syntax will be assessed as structure that exhibits varying degrees of complexity, and comprehension is defined as the capacity for remembering the characters, locations, and events in a narrative, and as the ability to comment accurately on the motives of, and the parts played by, these characters in a sequence of operations. Complexity in this context reflects the level of conceptual thinking which invests the processing of information.

The power of syntactical structures derives from the relationship of one word with another, of one phrase with the next, and of subordinate clause with main clause in a sequential and temporal context. The word has more than semantic and phonological properties. Even when standing alone, it has syntactical potential, for it is the smallest unit that can function as a sentence.

Words function in noun-phrases, verb-phrases, and in a miscellaneous group exhibiting in the main adverbial, prepositional, and adjectival characteristics. As with the smallest components, two aspects must be recognized when the phrase or clause by construction; that each has a particular function in relation to the main sentence or to the

paragraph. A failure to appreciate this latter function will inevitably distort comprehension.

The phrase is a group of words which implies a thought, but does not contain a finite verb. Thus, an adverbial phrase will contain information about the time or place of an action, the reason for it, the conditions pertaining to it, and the manner of its completion. The noun, adjectival, and prepositional phrases function as do the corresponding form-classes or parts of speech.

The clause elaborates the main sentence much as the corresponding phrase does, but it contains a finite verb. Without its introductory pronoun or adverb, it could stand alone as a coherent and complete expression of thought.

Some authorities regard two clauses joined by a co-ordinating conjunction as a complex sentence. In this research, the term compound sentence is the preferred description for such forms, provided there is a common subject for two verbs.

The assessing of language is essentially the establishing of levels of complexity, particularly in the syntactical component and in comprehension. In syntax, complexity is defined as the degree to which a kernel sentence of the form NP (noun phrase) - VP (verb phrase) is developed by obligatory and optional transformations, and

ultimately is integrated with other sentences to form a coherent statement. In comprehension, complexity refers to the competence of the individual in the processing of information, which by definition involves cognition and memory. In this instance, cognition is not synonymous with intellect, but is an aspect of it. It is "the identification of particulars, where each 'particular' is an item of information; a product of a certain kind, (Guilford, 1973 p. 636)."

Before any assessment can be made in any of the components discussed so far, certain linguistic behaviours must be demonstrated. As indicated already syntactical complexity implies the hierarchial development of an utterance. The word becomes a phrase; to the phrase is added a finite verb, and the thought is complete, or demands attachment to, or embedding in, some attendant structure. The problem is one of determining order of difficulty, and to the present, no scale has won general acceptance. The literature does not encourage one to believe that further seeking in the direction of sentence-building will be any more fruitful now than it has been in the past. The progressive elaboration of the sentence NP-VP does not guarantee more efficient communication, and the only justification for examining syntactical structure is to establish its part in ensuring that any verbal

statement accurately conveys intent. This is not to say that phrases and clauses which enrich the content of the passage are irrelevant. They obviously supply additional information; but the mere counting of clauses without regard to the variety of content proves nothing.

Levels of comprehension will also be signalled by particular forms of behaviour. If information is understood, the receiver of it should be able to discuss not only time, place, and conditions as they affect the chief characters, but also supply answers at various levels, some derived from a mere skimming of the material, others the result of some consideration of deeper issues. Schroder, Driver, and Streuffert (1967) suggest a useful scheme for distinguishing different levels in the processing of information. They state:

The same objective stimulus may be mediated by more differentiated conceptual structures...The number of dimensions is not necessarily related to the integrative complexity of the conceptual structures, but the greater the number of dimensions, the more likely is the development of integratively complex connections or rules. p. 7"

In effect, this statement is in accord with the view of comprehension presented in this study. The "content variables" described by Schroder et al (1967) provide the information that should be assessed in scoring for comprehension complexity. Content variables furnish data about the

"acquisition, direction, and magnitude of responses, attitudes, norms, needs, and so on. From this standpoint, we are interested in what and how much a person learns, how long it is remembered, what attitudes or needs he holds, and how intense they are [p.4]"

A third variable that demands special attention is the verb. It is the most potent form-class in any sentence. The concepts of subject and object and any reference to the semantic relations between them are indefinable without this constituent, which also signals who or what initiates the action and who is affected in the process that is described by the manner and temporal setting intrinsic to the verb-form. The power and influence of this constituent, and the nuances which can be so succinctly conveyed by it, make it an indispensable variable in any device purporting to measure the quality and complexity of language. One finite verb may describe several actions or states, and a single occurrence can be portrayed by a number of verbs. Much depends on the context, and the mood, prejudices, and intentions of the speaker or writer.

Competence in language implies an ability to use and to interpret complex structures defined as sentences containing any tense, mood, or voice in the verbs, and exhibiting a variety of subordinate clauses that contribute to the quality of the

statement. Complexity is not necessarily a function of length of discourse, but a certain minimum number of sentences is required as its vehicle. Much will depend on the subject-matter. If a story is to be retold, all essentials must be contained in the paraphrase, and if understanding is to be tested by a demonstrated appreciation of, or solution to, a problem, the responses must reflect in style and comprehensiveness the issues that have been raised.

These component measures (number of sentences, the variety of subordinate clauses, significant elaborations of the noun-phrase or verb-phrase, and classification of the verbs) constitute the relevant syntactical and semantic variables on which an acceptable interval scale can be based. Comprehension complexity is similarly scored from the most rudimentary interpretation to an objective and complete examination of the issues raised.

Language may also be assessed on an ordinal scale which implies social and economic characteristics. Bernstein (1959, 1962) supplies two dichotomies, one setting out the qualities for formal language and public language, and the other for those typical of middle-class and working-class language. In this research, an intermediate or borderline score was recognized in the two classifications. The scores are not appropriate for combining with the intervals

in statistical analysis, but the categories they represent provide additional descriptive information about an individual's language.

The ultimate set of variables by which to assess the quality of language was selected after multiple regression analysis and investigation of the literature. Schemes of measurement, such as those by Bernstein (1959, 1962) and Lee and Canter (1971), have been modified for the purposes of this study, but the essential qualities of each have been retained. The variables chosen were:

1. Total number of sentences, scored differentially for:

- a) simple sentences
- b) compound sentences

Score 2. A direct object or an indirect object

Score 3. An indirect and a direct object in the same sentence

Score 4. Elaboration of the NP, including pluralization and consequent inflection of the verb.

Score 5. Elaboration of the VP; use of modifiers in the form of adverbs and adverbial phrases; the compound sentence defined as a sentence with one subject and two predicates;

Score 6. Questions by inversion of the subject and the verb and the insertion of obligatory do in present and past tense; insertion of the negative transformation

Score 7. Wh questions - questions that begin with wh (e.g. where, what, who etc.)

2. Complex Sentences:

Score 8. Presence of any subordinate clause embedded or attached (once only): Additional

marks as follows for the categories of subordinate clauses (no restrictions on the number of instances for which this mark may be awarded).

Sub-clause:

noun clause object or complement:	1 mark
adjectival clause:	2 marks
adverb. of time:	3 marks
adverb. of reason:	4 marks
adverb. of condition	5 marks
adverb. of place and other modifying clauses	6 marks
noun clause subject:	7 marks
phrases in apposition:	8 marks

3. Score for verbs:

uninflected verb: copula	1 mark
is + verb + ing	2 marks
-s and -ed; irregular past; auxiliary; participles: infinitive without complements.	3 marks
can, will, may + verb; obligatory do + verb; emphatic do + verb. Infinitive with complements.	4 marks
could, should, would, might + verb:	
must, shall, will + verb.	5 marks
passive in the present tense	6 marks
passive in other tense	7 marks

The non-syntactical measures that were employed embraced a classification of the language as

middle-class or working-class, (Berstein, 1962) and as formal language or public language (Berstein, 1959).

According to Berstein, middle-class groups in his research used a higher proportion of:

- subordinations
- complex verbal stems
- passive voice
- total adjectives
- uncommon adjectives
- uncommon adverbs
- uncommon conjunctions
- egocentric sequences

'of' as a proportion of the sum of prepositions 'of'

'in', and 'into' (this finding is not consistent within the working class group)

'I' as a proportion of all personal pronouns

'I' as a proportion of the total number of words

'I' as a proportion of the total of selected pronouns.

Score 3

Note: the last two proportions are suggestive and tentative.

Intermediate language, possessing significant characteristics of both groups

Score 2

The working-class group used a higher proportion of:

Total personal pronouns (m)

Total selected pronouns (m)

'You' and 'they' combined as a proportion of the total personal pronouns (m)

'You' and 'they' combined (personal pronouns total) as a proportion of the total number of words sociocentric sequences.

Score 1

No significant differences were found for the proportion of finite verbs, nouns, adverbs, prepositions, conjunctions, and the proportion of the selected personal pronoun 'I' to the number of words.

Berstein found that the middle-class groups used shorter phrase length and a longer pause interval than did the working-class groups. These differences in the hesitation phenomena were sharper when middle-class and working-class subjects, matched for intelligence on a group verbal and non-verbal test, were compared. It was considered that the members of the two class groups were oriented to qualitatively different levels of verbal planning which powerfully influence lexical and structural choices. The working-class groups appeared to be making selections from a lower level of the linguistic hierarchy than did the middle-class groups, whatever was the distribution of IQ among

this class. These findings refer to spoken language.

Berstein (1959) gives these criteria as typical of public language:

-short, grammatically simple, often unfinished sentences; poor syntactical construction with verbal form which stresses the active mood;

-simple, repetitive use of conjunctions (so, then, and, because);

-frequent use of short commands and questions;

-rigid and limited use of adjectives and adverbs;

-infrequent use of impersonal pronouns as subject of a sentence (one, it);

-statements formulated as implicit questions which set up a sympathetic circularity (Just fancy: It's only natural, isn't it?);

-the use of statement of fact as both a reason and a conclusion; or, more accurately, the reason and the conclusion are confounded to produce a categoric statement (Do as I tell you; hold on tight; you're not going out; lay off that);

-individual selection from a group of idiomatic phrases; symbolism of a low order of generality; meaning is implicit.

Score 1

Formal language exhibits these characteristics:

-accurate grammatical order and syntax;

-logical modifications and stress how mediated through a grammatically complex sentence construction, especially through the use of a range of conjunctions and relative clauses;

-frequent use of prepositions which indicate logical relationships as well as propositions;

-frequent use of impersonal pronouns (it, one);

-a discriminating selection from a range of adjectives and adverbs;

-individual qualification is verbally mediated through the structure and relationships within and

between sentences; it is explicit;

-expressive symbolism conditioned by this linguistic form distributes effective support rather than logical meaning to what is said;

-the possibilities inherent in a complex conceptual hierarchy for the organizing of experiences.

Score 3

The definitions furnished in the foregoing paragraphs concern the structural units and descriptive categories, from which were chosen the independent linguistic variables that correlated significantly with the scores for comprehension, already defined in an earlier paragraph. With respect to adults, comprehension should embrace more than a recital of factual information. There should be some indications of an ability to interpret facts, to infer what is not directly stated, and to predict outcomes from the information at hand. There are, of course, levels of comprehension, and for the purpose of establishing these a modification of the scheme by Schroder et al (1967) afforded an appropriate instrument.

There is a tendency to pay too much attention to the content and amount of what a person learns and too little to the manner in which it is integrated with existing knowledge and how it is used subsequently. As the authors (Schroder et al) remark: "given the same amount of information, different people use different conceptual rules in

thinking, deciding, and interrelating [p.3]." Thus, in assessing the level of comprehension, in this present study, it was decided to give considerable weight to the process of thinking as far as it was revealed in responses and comments.

Scoring Comprehension Complexity

The scheme for judging the comprehension of respondents is given below:

- Score 0. Rudimentary account; little or no interpretation
- Score 1. Simplistic, absolute interpretation; fast, unambiguous resolution of any issues.
- Score 2. Recognition of some complexity; alternative and primary are interpretations are recognized
- Score 3. Alternative ways of perceiving an event are recognized and illustrated.
- Score 4. Possibility of interaction among alternative and primary interpretations are recognized
- Score 5. Alternative interpretations are recognized, and also procedures for comparing the joint outcome of different perceptions.
- Score 6. Recognition of the simultaneous operation of alternative interpretations and of the functional relations between them.
- Score 7. Recognition of alternative perceptions and their significance in establishing ways of viewing the world; indications that the various alternatives are simultaneously held in focus.

Schroder et al (1967) make the customary distinction between the content variables, in the

processing of information, and the structural variables. The former are concerned with facts, the selection of them, how many of them are remembered, and the subject's attitude toward them. The latter afford a method of combining the facts, and are thus concerned with the process of thinking, which with aspects of memory is the essence of comprehension, as defined in this study.

Another classification which is of general interest as a descriptive device refer to the mode of responding. The reactive category embraces those respondents who, in general, needed prompting with a question or gesture before making a reply. At the other extreme were men who readily initiated conversation. Between these two poles, there was the borderline group, who warmed to their subject for a period and then once more became reticent.

Language Sampling Procedure

In this investigation, it was decided to collect a sample of the language used by each inmate to paraphrase an account of armed robbery in a supermarket, and to describe the impressions made by four pictures, arranged in whatever order the inmate wished. The description had to reflect the content of all four pictures in a connected way, and was spoken or written when the pictures had been laid out and then withdrawn after about three minutes. The speech was recorded and transcribed at a later date,

without editing. It is believed that these verbatim, unexpurgated versions truly reflect the attitudes of the inmates and their capacities for conveying their thoughts and intentions, and for receiving and appreciating the information passed to them by others.

The accounts vary from the very fluent to the almost inarticulate. There is the evocative style, practised with great effect, and the terse, unadorned speech of the wary. None refused to speak. Taken as a whole, these samples constitute a corpus which is representative of contemporary English. A first scrutiny seemed almost to suggest that there was a "prison language", but this is not so. There is a prison vocabulary, which has its place within the full range of speech that can be heard in all the institutions, but this does not approach in any way the status of a patois.

The Language Quotient

The complete assessment of the language comprised syntactical variables to which numerical scores were attached. These were: 1) the total number of sentences in a sample, 2) the number of compound clauses, 3) the number of categories of subordinate clauses, and 4) the score for verbs calculated from a modification of the scheme by Lee and Canter (1971).

Associated with these primary measures was 5) the score for comprehension complexity, to which reference is made on a previous page. A second set of variables concerned the assessment of language on social and stylistic scales. These have already been mentioned, and the grading nominal (6) working class-borderline-middle class; 7) public-borderline-formal, awarded in each instance 1, 2, or 3). The characteristics for each of these categories have already been mentioned.

Language Assessment Procedures

These various assessments, embracing objective and subjective measures, supply a comprehensive analysis of each language sample. Syntactic complexity is reflected in the type (compound/complex) of the sentences, the number of categories of subordinate clauses, and the degree of sophistication in the use of verbs. The criteria for social class (working/middle), style (public/formal), and type of responding (reactive/initiatory) furnish data on the semantic density and supply additional information on syntax and the general effectiveness of the individual's language.

Steps to Language Analysis Procedures

- Step 1 Count the total number of words in the sample
- Step 2 Mark the finite verbs
- Step 3 Bracket simple sentences that are not part of any compound or complex sentence.
- Step 4 Bracket compound sentences (one subject and two predicates, but the second (repeated) subject understood).
- Step 5 Bracket complex sentences (one main clause with one or more subordinate clauses attached or embedded).
- Step 6 Identify and label each category of subordinate clause (eg. adjectival, subordinate, adverbial of time etc.)
- Step 7 Score each category of subordinate clause each sentence type according to the schedule.
- Step 8 Score for verbs, according to schedule
- Step 9 Score for other features listed in schedule (eg. direct objects etc.)
- Step 10 Grand total: score for verbs + scores for each category of subordinate clause and each type of sentence + score for other features listed in the schedule.
- Step 11 Score for comprehension complexity according to schedule
- Step 12 Score for descriptive categories (social class language type etc.) according to schedule.

Cognitive Measures

Along with the language measures, the cognitive measures offered possible new sources of predictor variables of the dispositional variety. The language x cognitive x personality measures would be used in analysis to determine if cognitive dysfunction was an appropriate diagnosis for some of the inmates in the study, especially the dangerous offenders as set out in the framework for the study.

Cognitive Dysfunction As the cognitive tests are the basic measures of cognitive dysfunction this should be clarified before we proceed.

Understanding cognitive dysfunction requires several assumptions: 1) That, as heterogeneous as the population may be, there is sufficient integrity among characteristic traits to justify a construct and diagnosis of cognitive dysfunction. 2) That these people possess central processing deficiencies resulting in cognitive dysfunction that is specific and identifiable. 3) That deficiencies in these functions leads to inadequate development in language, cognition and personality for the person so affected. 4) That, as these deficiencies interfere with learning broadly in the person's life, an intervention strategy employing a learning model is likely both the most logical and most successful methodology to pursue in treatment.

Cognitive Processes: While there are as yet an undefined number of cognitive processes that affect developmental learning, several emerged in the author's 1983 research in the penitentiaries and have been identified by other researchers. Three that seem to have importance, especially with regard to habit patterns of criminal behaviours are:

A. Selective Attention - Attentional deficits are widely accepted as probably the most basic and most disruptive of the cognitive processing deficits. Selective attention is that aspect of attention where the individual is aware of the critical stimulus variables in any situation, and he can identify and attend to them and only them predictably and consistently. A sample of behaviours that require selective attention are:

- selecting important from unimportant details
- knowing when there is enough information to make decisions
- critical reading or listening
- establishing and maintaining priorities
- goal orientation

B. Sequential Processing - Many persons with cognitive dysfunction are unaware that the sequential nature of some information is essential for complete understanding. These people also have difficulty creating a sequence or processing one of any sizable length. The following behaviours require sequencing:

- planning and organizing
- following directions or steps
- serial recall
- sentences expressed and understood comprised of fewer than average length
- a non-linear repetitive view of time
- an inability to use language to control behaviour

C. Relational Thinking - It is believed that people with cognitive dysfunction do not store information in conceptual groupings. Difficulties in seeing the relatedness of multiple pieces of information and events is a very serious problem for people with cognitive dysfunction which leads directly to faulty reasoning and problem solving skills, and some people believe - crime. Some difficulties experienced by people who have inadequate relational thinking are:

- inability to exercise comparative judgment
- inability to make inferences
- inability to recognize cause and effect
- difficulties in future perspective
- difficulties accepting responsibility for ones actions.
- inadequate critical thinking

Language has been discussed in the preceding section and personality will be discussed in the following section. Cognitive development itself, as the important factor in higher level thinking should be explained as it is fundamentally involved in cognition dysfunction.

If language is developed by children initially to code perceptions and thought, then language that

does not develop to a level of complexity necessary for adult reasoning and problem solving can be the determiner of faulty thinking ability. The lack of these abilities involves people with cognitive dysfunction in many practical day-to-day thinking difficulties and confusions. These problems include:

- inflexible thought, concretized thinking
- difficulties learning by experience
- little or no effective deductive logic
- little awareness of or ability to search for alternatives to thoughts or behaviours
- difficulties in making decisions, or decisions made impulsively
- action, arising from a feeling state ungoverned by language

There are no standardized tests for cognitive dysfunction in adults. Most measures that are used are task analyzed after administration and error patterns are observed in order to infer the presence of cognitive dysfunction. Koopman (1983) used several factor-pure experimental measures to look for the presence of cognitive processing disorders and related them to language performance. This study has expanded and developed these two areas further. The cognitive measures were administered as clinical measures of relational ability and included:

A. Patterns - Inmates were asked to finish a sequence of numbers that involved increasingly complex patterns. This task involved both sequential and relational thinking at a symbolic level.

B. Attributes - Inmates were shown positive and

negative instances of a figural concept. They then were asked to make decisions about other figures with regard to inclusion or exclusion in the concept defined. The examiner then asked them what the relevant attributes of each concept were. This task was given to determine selective attentional and multivariable manipulation abilities.

C. Syllogisms - Two syllogisms were presented and the inmates were asked to answer yes or no to several questions presented about them. The aspects of language especially syntax that are affected by faulty relational thinking at a higher level were observed with this task.

d. Court Report - This task was used for both the language analysis and an analysis of reasoning ability at a higher cognitive level. In this way we were able to compare language and reasoning in one measure. The inmates were asked to listen to a recording and read a short transcript of a robbery in a supermarket. They were then asked to retell what happened (selective attention, sequential processing) and then to make certain decisions about what happened and what disposition was appropriate (relational thinking at a concrete and meaningful level). The scoring for all measures was the number of items correct. Syllogisms and the Court Case were also coded for characteristic error types.

D. Personality Measures

The court transcripts and the reasons for judgment were carefully read for all data with regard to diagnostic statements of mental illness, personality disorders, emotional problems etc. In addition, where the information was provided, the bases for these diagnoses were also coded. The same procedures were used for institutional file information. Tests such as the Minnesota Multiphasic Personality Inventory were recorded in detail as to the individual T scores for each individual. This information was then combined with the interview information and personality measures administered by this investigator at the time of the interviews.

As most of these men are serving indeterminate sentences, because they are seen as requiring treatment, the issue of personality measurement becomes an important one. Personality development is also affected by cognitive dysfunction and is important to differentiate from the traditional definitions of personality disorder.

Much of personality is learned through positive and negative interactions with the people in one's environment. Because learning disabled people have difficulties attending to subtle clues and with transfer and generalization of experiences, and because they are particularly poor in incidental

learning, their personality structure and socialization are often inadequately developed. However, their personality is also affected by faulty language and the faulty cognitive development that has already been discussed. These problems directly influence the person's personality development, by diminishing his ability to gain understanding about himself and his behaviour. He becomes dependent on others to perform this monitoring function for him. Characteristics of this personality pattern may include:

- a tendency to act out emotions
- easily habituated to compulsive behaviour, alcohol, drugs and crime
- little insight into self or others
- little empathy for the plight of others
- narcissistic and ego-centric at a level usually found in a much younger person
- poor impulse control, and low frustration tolerance
- sees self as a reactor to a world not determined by his actions and to which he is responsive but not responsible

These people, when assessed, also demonstrate personality patterns of depression and high levels of persecutory ideation. They frequently speak of a hopeless view of the world and themselves coupled with an all pervasive mistrust of others in their interactions with them. This emotionally inappropriate view of self and others appears to be an outgrowth of a state of "learned helplessness."

When these people who come before the courts and are given mental status examinations and/or

personality tests they are frequently mislabeled as anti-social personality disorders. This misdiagnosis has as its roots confusion regarding the exclusivity of the personality characteristics mentioned above, especially those of a lack of insight and empathy for others. However, as mentioned by Koopman (1985) these people lack important traits of this personality disorder, most notably, the systematic victimization of others. The implications of this false positive diagnosis on treatment are very serious. Not only are the therapeutic methodologies different but because many clinicians consider the anti-social personality to possess very little amenability for treatment, a person may not receive treatment at all as he is believed to be untreatable when, in fact, he may be an excellent candidate for therapy.

Personality Measures

1) The Rorschach was presented to all inmates in the study. As it is a projective measure, and sensitive to sexual dysfunction and not amenable to faking it was selected for the study. It is recognized that this measure has a history of unreliability when used by several clinicians on the same subjects. However, this investigator has been trained in the use of this instrument and was the sole examiner. There is consistency of interpretation

because of this. There was also an attempt to quantify some of the responses according to a modified Harrower (1943) approach.

2) The Four Picture Test - This is a projective device that looks for emotional disturbance and more general affective problems than does the Rorschach. This test was developed in Holland, and has been used in a limited way in this study. We were looking for general themes, much in the same way that one would using the Thematic Apperception Test (a measure that was considered too lengthy for this study). This measure also allowed for the observation of the inmates' abilities to organize and sequence an integrated response to the pictures.

Chapter III

RESULTS

The data for this study consisted of the court transcripts, reasons for judgment, institution files, inmate files, information provided by lawyers, and interviews and testing by this investigator. The three tiered model presented earlier was the basis for the data organization and analysis. Information was gathered on each of the predictor variables for the Dangerous Offender group and the Inmate group. It was collated and percentages or other quantifiable means were developed that would allow for description of the Dangerous Offenders as a group on each of the predictor variables. The same was done with the information for the Inmate group.

Because the entire population was included in the Dangerous Offender group, sample statistics were not necessary. Also because this was designed as a case study albeit, a multiple case study, the measures used and the analyses performed were aimed at description only. We were interested in finding out as much as we could about these men that was related to dangerousness and about the effects the label of Dangerous Offender had on them. Whether they differed significantly from other offenders in a statistical sense was of minor importance. Comparisons were made between them and the Inmate

Group, and there are a number of statistical tests of significance employed but they were not the major thrust of the analytical study of these men.

The data and the discussion of the results will be presented in the same sequence as that set forth in the model introduced in Chapter I. This will allow us to address the known major predictors with regard to these men, and will allow an organization of information that should prove to be less confusing than a simple listing of the multiple types of results obtained.

I. Demographic Data

Table 1: Median Scores for Major Variables
Dangerous Offenders and Inmate Group

Variable	D.O.	I.G.
Age	35	36
Sex	M	M
Education	Gr. 9	Gr. 9
Marital Status	single 58%	74%
Socio-economic Status	low middle	working
Residential Stability	not avail.	not avail.
Sexual Offence	79%	10%
Record of Murder	0	38%
Delinquency	46%	47%
Age, 1st Adult Offence	18	18
Record of Violence	69%	82%
Escalation of Violence	47%	51%
Severity of Violence	moderate	extreme
N=	43	43

CONTINUED

1 OF 2

The variables and the results will be discussed separately.

A. Age. The ages of the two groups are essentially the same. The age range was 17-57 in the Dangerous Offender Group. This was a bimodal distribution with 30% of the inmates 26-30 and 23% in the 36-40 range. The range of ages in the inmate group was 21-73. The inmate group was distributed slightly differently with 14% 21-15, 17% 31-35, and 14% 41-45. This places them both well above the average age for inmates in federal prisons. This is not surprising; however, as these people have been within the system for long periods. They should be expected to be among the older of the prison residents. The closeness in ages of the two groups is of somewhat more interest, as it is the first bit of information that identifies similarity between them.

B. Sex. All of the dangerous offenders were male, thus we only sought males for the inmate group. One female in Canada has been brought forward for dangerous offender proceedings, but she was found not to be a dangerous offender because the presiding judge felt that she should be given a last chance.

C. Education. The Grade 9 education level attained by the Dangerous Offenders is above that of the average grade level within the institutions. However, this is slightly misleading in that many of the men

have continued their education in prison through upgrading courses. The range of education in the Dangerous Offender group was Grade 2-University degree in Psychology. Of this group 24% had Grade 8-9, 16% had Grade 10, and 17% had Grade 12 and beyond. In the inmate group the range was Grade 5-Grade 13. Unfortunately, 30% of the inmates did not have information recorded, nor was it collected with regard to education, thus frequencies were not appropriate to calculate. The distribution that was derived was not dissimilar to the Dangerous Offender group.

D. Marital Status. The differences in the two groups are worth noting. Of the Dangerous Offenders 58% were single and always had been as compared to 74% of the Inmate Group. Of these men, 4 were married, 6 were living common-law before incarceration, and 3 considered themselves engaged. The marital status of only one of these men is unknown, in that he gave conflicting information to that on his most recent records. In the Inmate Group 2 were married, and 2 were living common-law. The much greater frequency of singleness in the inmate group seems to be more one of lifestyle of crime vs the more domestically oriented lives of a number of the Dangerous Offenders. While a sizable number of them are sex offenders they were also much more likely to have had living relationships with members of the opposite or

same sex. These relationships were sometimes a "cover" for their other sexual activities.

E. Socio-economic status. There was a definite trend for the Dangerous Offenders to come from home environments and families that would be considered more middle-class than those of the Inmate Group. There were exceptions, of course, in that two of the persons in the inmate group were professional men, and several of the Dangerous Offenders were from very modest circumstances. However, there was a striking difference in the middle-class orientation of many of the Dangerous Offenders' family origins.

F. Residential Stability. While this has emerged from the literature as an important variable when predicting dangerousness, it seems that it would only be appropriate if the clients being assessed were people who were not incarcerated for the periods of time that these men have been. For this reason, this variable was not pursued, as it was considered invalid for this population.

G. Sexual Offence. There is an overwhelming number of Dangerous Offenders who have as their qualifying offences or patterns of offences; sexual offences. In fact, 79% of the Dangerous Offenders are considered to be sexual offenders. The other offences for these men included arson (1), attempt murder (4), and assault causing bodily harm (4). This makes them very

similar to the men who came before them in former legislation, namely the Dangerous Sexual Offenders. Certainly, many persons who hear that a man has been found to be a Dangerous Offender assume that he is a sex offender, and not without some justification as we can see.

H. Record of Murder. I am sure that it would come as a surprise to the Canadian public to know that no Dangerous Offender to date has a conviction for murder on his record. By comparison, 38% of the Inmate Group had convictions for murder. Also one inmate had been convicted of attempted murder. Property offences were much more common in the inmate group with 15% having them on their records.

I. Delinquency. These data were more difficult to obtain. Because juvenile records are generally not part of the files, this information came from psychiatry reports, and from the inmates themselves. If one of the most important pieces of actuarial data with regard to dangerousness is the delinquency of the client, then the data for both of these groups do not support this variable strongly. There are several possible interpretations of this finding: 1) the information is incomplete, or was not honestly reported by the clients 2) the variable is not as important and discriminating as has been believed 3) the dangerousness of these people may not be as absolute as it may seem.

J. Age of first offence - Again, the lack of juvenile records hampered data collection. However, considering that this would be the first reported adult offence, their age is slightly higher for both groups than that found in the age of first offence in the inmate population as a whole, but not significantly so. This sameness of both groups is worth noting.

K. Record of Violence. These data include information from files as well as from records of convictions. Again, this seems to this investigator a somewhat surprising finding. Dangerous persons are seen by most people as violent individuals, but in this group we see that only 69% have violence on their records. This is a sizable number, but far from unanimous. The opposite is true for the inmate group, where 82% have violence on their records. The Inmate Group, is similar on this variable and several other variables to that of the inmates from the 1983 study by this author.

L. Escalation of Violence. There was evidence from records and transcripts that in only 47% of the Dangerous Offenders' backgrounds was there a pattern of escalating violence, as opposed to patterns of escalating violence in 51% of the Inmate group. This is likely not a significant difference in the real sense, but the lack of differences between the groups

is important. In order to establish a man as a dangerous offender, a maladaptive pattern of behaviour must be established- an important element of which is his potential for violence. It appears from the data that this is true for less than half of the men in the Dangerous Offender group. Moreover, they are not different in this respect from other longterm offenders.

L. Severity of Violence. This information was gathered from the court transcripts for the Dangerous Offenders and from the records and files of the Inmate Group. There was less injury inflicted on their victims by the Dangerous Offender group than for the Inmate Group. This finding is obviously an interpretation of many sources of information, and thus subjective, but every case was carefully considered, and two raters (the research assistant and the investigator) discussed each case until agreement was reached. While there were Dangerous Offenders who did inflict severe harm on their victims, it appears that the nature of their crimes (sexual) and their personal behaviours, as repugnant as they were to their assessors, were more psychologically damaging to their victims than expressions of acting out aggression.

Summary of Demographic Data: With regard to the actuarial data available on these men, there do not

appear to be definable differences to that of other inmates with long records, in fact the only real differences appear to be in the areas that make them appear to be less violent.

II. Dispositional Variables

This information was in most instances highly individual and unique. There was an attempt on the part of this author to summarize the data as objectively as possible in order to give an overview of both groups on each of these very complex variables.

A. Measured Intelligence - Eleven of the Dangerous Offenders scored on the Test of Non-Verbal Intelligence within the mentally handicapped range. Two of these people had been diagnosed as being mentally retarded, one because of a head injury. It is the opinion of this examiner that the lower intelligence scores of the other nine men do not necessarily indicate less than average potential, but reflect the presence of emotional disturbance and cognitive dysfunction that interacted with their ability to respond adequately with the demand characteristics of the task and with the nature of their learning problems.

The range of IQ scores on the TONI was 53-135 with a median score of 89. This places many the Dangerous Offenders in the borderline range of

ability. More will be discussed about this fact in the section on cognitive dysfunction and language. In the Inmate group there is a bimodal distribution with 79 being the mode of one distribution and 105 being the mode of the other. Two of the inmates in this group have been diagnosed as having a mental handicap and seven others are within the mildly handicapped range. These persons were also highly represented in the cognitive dysfunction diagnosis. The range of their IQ scores was 58-120. Several subjects were thought to have neurological involvement: one as a result of head injury, one from a fall, and one from substance abuse.

B. Alcoholism and Drug Addiction - The instance of these addictions was very high in both groups as it is in the prison population generally. It was not possible to judge degrees of habituation of either or discern substance varieties that were most common. Most subjects indicated that while alcohol or drugs did not cause the behaviours, they contributed significantly to their actual occurrence. While the exact numbers was risky to estimate, there was no question during interviews that the presence of drugs and alcohol was significant clinically in the Dangerous Offender group to a much greater extent than that of the Inmate Group. This points out the need for the interviewer to take a thorough alcoholic history of each individual during

assessment.

C. Physical and neurological disorders - One of the Dangerous Offenders is a deaf mute, and one suffers from limited capacity as a result of brain damage. Two Dangerous Offenders are epileptics. In the Inmate Group one man was believed to suffer from senile dementia and brain damage as a result of substance abuse, one as having brain syndrome as a result of street drugs, one who was believed to have sustained brain damage as a result of a fall in childhood, and two with spina bifida (that appeared to not have interfered with intellectual ability).

D. Mental Illness. This variable appears in the literature as an illusory correlate of violence. However, it is a dispositional variable addressed in every Dangerous Offender proceeding and appears on many of the records of the Inmate Group. The Inmate Group were less likely to have been diagnosed psychiatrically because they did not have need at their trials of the testimony of two psychiatrists, as did the Dangerous Offenders. This investigator, did not have sufficient time during the interview to do a mental status examination, but relied on information, from the files and the personality measures, given in the interviews to amplify information that was lacking as compared to that of the Dangerous Offender group. The Inmate Group

contained four people who had been diagnosed as schizophrenic at some time in their history. Eight inmates had been hospitalized for emotional problems. Of the Dangerous Offenders, nine had been diagnosed as schizophrenic or paranoid schizophrenic at some time in their history. Ten Dangerous Offenders had been hospitalized. The regional psychiatric centres were often the sites of their hospitalizations, accounting for one half of all their psychiatric admissions.

E. Language - There are no indications that the men comprising this population characteristically exhibit disordered or impoverished language. There are among them the most reticent and the very fluent. Some are evocative, and some are inarticulate, even when gently prompted to give more. There is an institutional jargon, which is an environmental vocabulary rather than a natural language. In any event, this specialized form of communication chiefly concerns vocabulary, and has nothing to do with syntactical complexity and style. Significantly, the language samples did not portray any of this jargon.

The syntactical analyses performed on the language samples yielded the following results for the Dangerous Offenders and the Inmate Group.

Table 2: Percentages of Dangerous Offenders and Inmate Group Using Various Structures

Type of Structure	D.O.	I.G.
Simple Sentence	100	100
Compound Sentence	94.4	75.07
Noun Clause Object	91.6	87.5
Adjectival Clause	61.1	50.0
Adverbial Clause of Time	41.7	25.0
Adverbial Clause of Place	16.7	0
Adverbial Clause of Reason	41.7	37.5
Adverbial Clause Condition	38.9	12.5
Other	19.4	0
	N= 41	43

This table shows some superiority of syntactical competence of the Dangerous Offender Group versus the Inmate Group. They possess a greater variety of clause structures, giving them more flexibility in expression than is characteristic of the Inmate Group.

The syntactical performance of the Dangerous Offenders as a group is comparable with the expected language competence of average adults of the same age.

The magnitude of relationships between a number of language measures and particular language measures with other variables was sought with the following results:

Table 3: Summary of Correlations

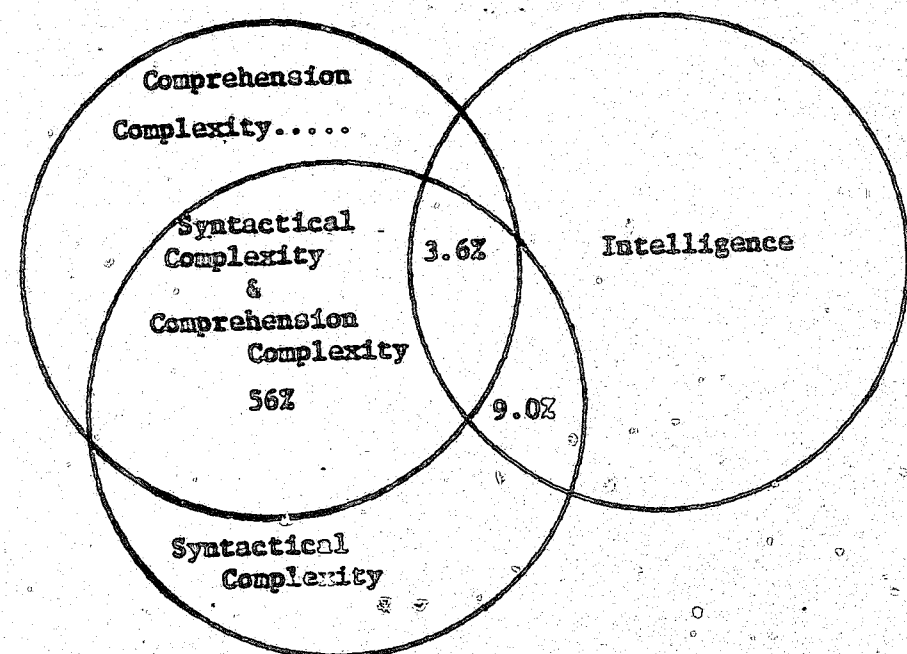
Variables	Correlations
	D.O.
Number of sentences and comprehension Complexity	0.52
No. of categories of subordinate clauses and comprehension complexity	0.49
Score for verbs and comprehension complexity	0.58
Score for verbs and number of sentences	0.80
No. of sentences and categories of subordinate clauses	0.67
Comprehension complexity and social class	0.75
Syntactical complexity and comprehension complexity	0.75
Intelligence and comprehension complexity	0.19
Syntactical complexity and intelligence	0.30

In this table, worthy of note are the low correlations for intelligence and comprehension complexity and syntactical complexity. This is important because of our continuing contention that language is independent of intelligence at the language and ability levels represented by these people.

Also, the high relationship between syntactical complexity and comprehension underscores the syntax by cognitive relation hypothesized by this author.

The variance in comprehension complexity accounted for by syntactic complexity is as follows:

Figure 2: Diagrammatical Relationship Among Several Language Variables



CC/SC: Comprehension Complexity and syntactical complexity share 56% of the variance
 CC/I: Comprehension complexity and intelligence share 3.6% of the variance.
 SC/I: Syntactical complexity and intelligence share 9.0% of the variance.

Diagrammatically, we see the minor influence of intelligence on syntax and comprehension at the higher levels of competence.

The amount of comprehension complexity accounted for by syntactical complexity is 56%. This is high considering the inter-correlation within the language variables and within the cognitive variables. This is a very satisfying result to this investigator and of greater magnitude than we had anticipated.

The language samples were scored using Bernstein's formula for formal language and public language giving the following results:

Table 4: Formal Language and Public Language:

Distribution of Scores

Category of Language	D.O.	I.G.
Public	80.6	87.5
Formal	19.4	12.5

We would expect most persons in free discussion to use public language, but both groups had real representation in formal language usage as well.

The language samples of each inmate were investigated for spontaneous versus elicited utterances. They were scored 1-3 for Initiatory to Reactive expression and the results for each group follow:

Table 5: Type of Responding: Distribution of Scores

Type of Responding	D.O.	I.G.
Reactive	19.4	12.5
Borderline	16.7	37.5
Initiatory	63.9	50.0

The speech of both groups was usually initiated by them and was not simply responsive and/or imitative. This increases our confidence of its representativeness of their true language repertoire.

The Bernstein analysis for social class and language style was used with the following results:

Table 6: Social Class and Language Style

Social Class	D.O.	I.G.
Unclassified	8.3	12.5
Working Class	33.3	37.5
Borderline	11.1	37.5
Middle Class	47.2	12.5

There is a middle-class and working class split in the scores of the Dangerous Offenders unlike the scores of the Inmate Group who were distributed evenly in the working class and borderline classes. The middle-class backgrounds of the Dangerous Offenders is reflected in their language.

The Schroder analysis was used to determine levels of comprehension complexity for both groups with the following results:

Table 7: Comprehension Complexity: Distribution of Scores

Score	D.O.	I.G.
0	16.7	50.0
1	33.3	12.5
2	8.3	25.0
3	38.9	0
4	2.8	12.5

The Dangerous Offenders were both less competent and more competent than the Inmate Group, indicating a bimodal distribution of scores. This finding will be discussed in the section on cognition as evidence of cognitive dysfunction.

F. Cognitive Measures - Task analytic techniques and information about their known factor structure were used in interpretation of these data.

Table 8: Median Z Scores on Cognitive Measures for Dangerous Offenders, Inmate Group and Control Student Subjects

Cognitive Measure	Z Scores		
	D.O.	I.G.	C.S.
Attributes	2.78	2.68	3.0
Sequential Patterns	2.15	2.02	2.51
Syllogisms	1.41	1.65	1.40

It is readily apparent that there are no real differences, either statistically or clinically when we compare the three groups on these measures. We shall see that a different pattern emerges when we consider them as individuals. The control subjects are included to emphasize the normality of performance on these tests for the many people in both inmate groups even when compared to good cognitive ability.

Table 9: Median Z Scores for Dangerous Offenders and the Inmate Group on Three Language Measures

Language Measure	Z Scores	
	D.O.	I.G.
No. of Categories of Clauses	1.89	1.80
Verb Score	1.38	1.53
Comprehension Complexity	1.64	1.46

While the Dangerous Offenders are somewhat superior on these three measures to the Inmate Group, by inspection of the qualitative differences, it was obvious that this was not a significant functional difference.

The Court Case - The responses to this task were categorized according to: 1) Cannot retell events 2) Can retell, but leaves out essential details 3) Can retell, but adds detail that is incorrect 4) Can retell, but cannot answer questions of interpretation 5) Can retell, but contradicts self in answers to questions 6) Can retell, and can answer questions in an integrated manner

There were men who qualified in each category. This information was combined with the language data to arrive at decisions regarding higher cognitive abilities.

Four Picture Test - The information gathered from this measure was the person's ability to

organize and retell a sequential story. The production was to include all relevant detail and contain thematic material that was cognitively above the descriptive level. Inmates placed themselves throughout the competency levels of this task. This information was also integrated with the other case specific information about higher cognitive functioning.

Table 10: Language Level X Cognitive Level for the Dangerous Offender Group

	High Cognitive	Low Cognitive
High Language	17 (43%)	6 (15%)
Low Language	5 (13%)	12 (30%)

Note: The investigator was unable to secure these measures for two inmates as they were not interviewed.

From this table we can see why, for the first time, we did not get group differences for the Dangerous Offenders, as compared with the control subjects. The control subjects had a short range and no split between high cognitive-high language, and low-cognitive and low-language as the Dangerous Offenders have. This split will be discussed later in this report as an important diagnostic clue to the presence of cognitive dysfunction in some inmates.

G. Personality - The court transcripts were used extensively in this area of assessment. Each Dangerous Offender had the testimony of at least two psychiatrists and sometimes psychologists as well. In almost all cases the issue of a personality disorder was addressed and either rejected or accepted and defended. The two personality disorders most commonly mentioned were the inadequate personality, and the anti-social personality. Personality disorders were identified for many of the Dangerous Offenders. Eighteen of the Dangerous Offenders were said to possess anti-social personalities (this writer is including in this category persons also labeled as psychopathic, or socio-pathic recognizing that there are some clinicians who make distinctions among these labels). Five of the Dangerous Offenders were said to have inadequate personalities; all of these inmates were sex offenders most often choosing children as their victims.

This study attempted to differentiate the Dangerous Offenders further, and to compare them on personality measures to other offenders who had not been routinely examined psychiatrically. We were curious to see if there would be diagnostic category differences in the two groups. Thus the Inmate Group was tested using the same projective measures.

The results indicate that both measures, the

Rorschach and the Four Picture Test do not in and of themselves disagree with the statements about diagnostic categories forwarded by the psychiatrists. The responses to these measures were those that one often associates with anti-social or inadequate personalities for the persons so identified. There were also no additional disorders disclosed by our measures.

However, when we combine the language, cognitive and personality measures (along with such file data as the Minnesota Multiphasic Personality Inventory) we find a different picture emerging.

Turning again to the four-fold table of Language by Cognition competence and adding our data from the personality measures, we find that it is possible to further differentiate within the four categories.

High Cognition - High Language: These inmates had average or above abilities in both areas. In addition they did not suffer from cognitive dysfunction, but had a significant number of members who were labelled by the court psychiatrists and our measures as anti-social personalities. These men appear to be the anti-social personalities of whom the Diagnostic and Statistical Manual III of the American Psychiatric Association speaks.

Low Cognition - Low Language: These inmates

had low ability in both cognition and language. It was this group that fit the model of cognitive dysfunction most closely. Most important is that a sizable number of these inmates (9) were found to be anti-social personalities but in the opinion of this writer were incorrectly labelled as such. This is because the personality traits often developed by persons with cognitive dysfunction appear to be indicative of personality disorders, but are the result of their faulty learning of socialization skills.

Low Cognition - High Language: There were six persons in this group. These persons were among those with diagnosed mental illnesses. Persons with inadequate personalities also appeared in this category. As the numbers are small, this should be considered only a possible indication of relationship.

High Cognition - Low Language: The unsocialized person who has spent most of his time in prison was found in this class. The state raised children of whom there were a number, appeared in this classification providing they had no other disorders. Social class was also most obvious in this group, with inmates belonging to the unskilled lower classes.

When comparing the Dangerous Offenders to the Inmate Group, the same pattern emerges in the Inmate

Group with regard to cognition x language x personality, but there is a much higher frequency in the personality disorders that are based in cognitive dysfunction. This is probably because of the number of Inmates included in this group from the investigator's private practice, where many persons are referred by their lawyers, because of the author's known interest in cognitive dysfunction and personality disorder. It is not being suggested that the prevalence of this combination of disabilities in the Inmate Group is representative of its presence in the inmate population, or of long term offenders specifically. However, the author believes from her clinical experience that the incidence in the later group is likely very high.

H. Motivational Patterns: The assessment of motivational states is accomplished primarily through interview. This requires that a considerable amount of familiarity and trust be built over time between professional and inmate. There was relevant information in the court transcripts and some inmates were good respondents with regard to their motivational patterns. Several of the Dangerous Offenders and an equal number of the Inmate Group were said to be explosive personalities, suffering from episodic dyscontrol. They were often referred to as over-controlled persons, who suddenly erupt

without warning in situations where most persons would not be so aroused.

In order to be found a dangerous offender there has to be established a habit pattern of violent or dangerous behaviour has been a part of the person's history. This was established to the court's satisfaction in all cases where inmates were found to be Dangerous Offenders. The records of a number of the Inmate Group and the information provided by them indicate that they too have established patterns of violent behaviour, at least equal to that of the Dangerous Offenders. Almost all of the Dangerous Offenders expressed strong desire for programs in order to bring about changes in their behaviour patterns. They, of course, know that with indeterminate sentences, it is primarily through success in programs that they will be able to show improvement to the National Parole Board, and earn some form of parole. This investigator was impressed with the sincerity of many who recognized that there were aspects of their behaviour that were not under their control and that they needed help to develop a more socially positive manner. The same motivations were true for the Inmate Group, but stated not as emotionally. This is probably because they have the security of a mandatory supervision date (a light at the end of the tunnel, even if faint and far away).

I. Physical Appearance - Berzins (1984) noted that a proportion of the Dangerous Offenders had physical appearances that placed them in a position of greater susceptibility to being seen by others as different - and if suggested to them, perhaps even dangerous. While physical appearance is a very subjective matter, this investigator, who has interviewed many hundreds of inmates, must agree with Berzins data that a number of the Dangerous Offenders were "unusual looking" in that they possessed startling features such as prominent eyes, or had cultivated a fierce appearance for any one of a number of reasons. The outcome is that physically they compound the impression of themselves as dangerous. It would be difficult to assess the effects that this demeanor and physiognomy had in court, but it is not impossible that it played a role.

Their feelings about themselves was sometimes stated dramatically in physical description. One man said, "I'm trapped in this ugly, warped, neurotic body, and I can't get out."

III. Situational Variables

Bem and Funder (1978) say that, "the probability that a particular person will behave in a given way in a certain situation is a function of the similarity between his or her characteristics and the characteristics of the people (Templates) that typically frequent the situation. "Another way of saying this is that there needs to be a "good fit" between the person and the situation, which may include both people and other environmental variables.

We must be able to describe in detail the characteristics of the situations where he has performed dangerous behaviours in the past and compare these characteristics to the situations that he will be experiencing in the future. The degree of overlap will be a good measure of the probability of similar inappropriate behaviour in this environment. Likewise, we could say that the degree to which we can alter certain salient characteristics of this new environment should have a direct consequence in reducing the probability of similar dangerous behaviours occurring.

There are at present no clinical techniques or measures developed that can routinely be applied by clinicians doing assessments of situational variables. This is obviously an area needing

research. However, from the literature, especially on the prediction of violence there have been established a number of variables that are worthy of experimental use as they have good face validity with what we know clinically about these men. Information shared in interview also tended to cluster on these variables.

The following are suggested as situational and environmental variables that have emerged in this author's investigation as having promise when assessing individuals:

The case specific data from this study will be presented with each.

A. Environmental support systems

1. Family environment - The family, can provide important support or can be a major stressor in the person's life. Family members are also among the most common victims. It is important to be able to describe the family dynamics for each person assessed.

The Dangerous Offenders generally had disrupted family relationships. In many cases, because of long absences or the families discouragement with the nature of their criminal behaviour, the inmates were totally cut-off from their families.

Parents differed greatly in the degree of support that they provided; A. Some refused to

believe that their son could be responsible for such repugnant behaviour and blamed everyone else including society for the offence. B. Some were so shocked and appalled by the crime, that they testified in court providing evidence against their son. C. Some parents saw the Dangerous Offender status as providing a legal vehicle for long overdue psychological help.

The most powerful personal relationships for these men seemed to be those they had with their mothers. A mother, who committed suicide, abandoned them or deserted the family, was a chronic alcoholic, or abused them, remained a vivid active part of their own self-esteem and, according to psychiatrists, constituted a major source of where life first began to go wrong for them.

Relationships with wives also were broken by their offences and the long periods of incarceration. One man said, "In prison you lose everything and everybody, not just your freedom."

A number of these men were state raised, having been apprehended by health authorities as children or abandoned by their parents. They spent years in many foster homes, under varying conditions, many of them bad experiences. One man left home at the age of 12 having witnessed his mother's death through suicide when he was 3. Others reported childhood traumas and

physical ailments that left them feeling inferior. Tough backgrounds and emotional deprivation were common experiences for some of the men.

2. Peer Environment - The effects of one's friends on one's behaviour have been recognized for a long time. It is important to determine if criminal behaviour was committed in a social context or by the person alone. Persons who are "loners" or who seem unable to establish and keep friendships appear more likely to develop inappropriate behaviours.

The social relationships of the Dangerous Offenders were generally not positive. While some of the men were gregarious, and had lasting friendships, a great majority were social isolates. They had been poor mixers at school, were shy around girls, often were unsuccessful in early female relationships, and had short chaotic friendships with both sexes. The crimes committed by almost all of these men were solitary crimes, not as part of a group. Many of their crimes were crimes of anger and rage regarding perceived rejection and undeserved exclusion.

3. Job Environment - We know that holding a job that is satisfying and supportive reduces recidivism in parolees. It also seems true that being fired from a job, experiencing harrassment on the job, being subjected to unfair practices such as low pay, and being unemployed are major sources of stress in any person's life. It was no different for these men,

other than that it appeared to damage their already fragile self-esteem to a greater extent than people usually experience.

Work experiences were far from homogeneous in this group. Some were good workers in prison, but were unable to hold or find jobs outside of prison; some were only sporadically employed in and out of prison; and some were fully employed wherever they were.

An important issue regarding employment, is that in the institutions it was very difficult for these men to hold jobs due to the likelihood that they were in protective custody, seriously cutting down on the job options available.

B. Sources of Heightened Probabilities include:

1. Availability of victims - Some victims are the end result of displaced aggression that was unable to be enacted on the primary source of frustration. Other victims are the specific target or they belong to a class of people who are targets for the criminal behaviour. Victims of street robberies are usually in physical environments where criminal behaviours are likely to take place.

Among the sex offenders who were pedophiles, the choice of young children as inappropriate sexual partners has been well established. Other forms of specific group preferences as victims include,

hitch-hickers, prostitutes, bisexual women, and women generally. One man said that "women represented all that is good and all that is bad, but always unattainable".

2. Availability of weapons - The weapon that is available at the time of the crime can determine the crime. For example, the type of weapon present can make the difference between assault and murder. Some persons do store weapons with great care and deliberation against that time when they think they will need them.

Among the Dangerous Offenders, weapons did not emerge as an important variable. Some of the men used weapons to threaten or gain compliance from their victims, but many did not. The members of the Inmate Group were much more likely to use weapons in a planned and deliberate fashion.

3. Availability of Alcohol and Drugs - Most crimes take place in and near bars, where there is an easy access to alcohol, or with partners who drink and/or abuse drugs to excess.

It has been mentioned frequently, in this report that alcohol and drugs were present in a vast majority of the crimes committed by these men. A number of them realizing this, have been actively involved in Alcoholics Anonymous within the prisons. Successful membership in Alcoholics Anonymous groups is seen by the Dangerous Offenders as an important

ingredient to eventually securing parole.

Alcohol acts as a catalyst for these men reducing inhibitions, as a trigger mechanism, and as a facilitator to various sexual and violent behaviours. It was particularly prevalent in the instances of sexual misconduct. This is a definite departure from that of the Inmate Group, where alcohol was mainly related to assault.

4. Sexual history - The bases for inability to develop satisfying heterosexual relationships are most often rooted in a person's early sexual history. It was no different for these men. Many of them felt inadequate as men due to early embarrassing and humiliating experiences with women. A number of these men were sexually abused as children. Also, their relationships with their mothers, especially mothers who were openly sexually promiscuous, had important dynamic value to their lack of normal sexual development.

A significant number of men saw their sexual crime as one of assault rather than one of sex. One such person stated, " I start trembling - once I begin the act I don't think of the consequences, but get involved in what I am doing, the rougher the better."

The Effects of the Dangerous Offender Status and the Imposition of an Indeterminate Sentence

Indeterminate sentences were given to all but 3 of the Dangerous Offenders sentenced to the date of this study. The commonly stated reason was so that they could receive needed treatment, and once they improved they would be candidates for parole. One of the Dangerous Offenders, said that at his trial he did not want his lawyer to actively oppose the designation as he felt it would increase his chances for treatment, which he felt he badly needed.

The reality is that only a limited number of these men are now undergoing treatment, and the treatment offered is often of a short duration, three weeks to four months. This investigator was told repeatedly by staff and inmates alike, that men with indefinite sentences often wait longer to receive treatment than other inmates with definite sentences because the philosophy of the institutions is that a man should receive treatment toward the end of his sentence. Because they have no release date, they stay far down on the treatment waiting list. There are shortages of treatment facilities and staff and these men as a result do not rate high priority over other inmates with known release dates.

This lack of treatment, places these men in double jeopardy. Not only are they not getting the

treatment that they need and request, but they have no basis upon which to show improvement, even if in the absence of treatment it does take place. Without this, they have nothing of substance to show to the parole board, and stand little chance of serious consideration.

The men believe, and the staff of most of the institutions concurred, that even though Part XXI states that a man with this indeterminate sentence as a Dangerous Offender must be reviewed for possible parole in three years, and every two years thereafter, that no serious consideration for parole by the National Parole Board is likely to take place before ten years, even with treatment. To date, none of the Dangerous Offenders has been granted parole since 1978, reinforcing the belief that this may be true. This investigator is presently preparing a report concerning a day parole plan for one of the Dangerous Offenders in British Columbia at the request of the National Parole Board. If granted it would be the first, according to the information available to this writer.

The designation as a Dangerous Offender has its own special problems. There is a great stigma involved in wearing this label in a Canadian federal penitentiary. These men are usually in protective custody in a maximum security institution primarily for their own safety as well as for the crimes they

have committed. They are still confused by many people, including staff, with the former legislation which designated certain sex offenders as Dangerous Sex Offenders. The effect for some of the present Dangerous Offenders is that they are seen as sex offenders when they are not. They believe that they are treated as lifers, and as dangerous people who are simply to be "warehoused" for the rest of their lives. They may well not be exaggerating their situation.

Each man in the interview (Dangerous Offenders and the Inmate Group) was questioned about his view of the dangerous offender status, and the imposition of the indeterminate sentence. Representative samples of their answers are as follows:

- The time gets longer and longer, its like doing it on the installment plan

- I don't understand the whole thing. They never gave it to me in plain English.

- It was said of one Dangerous Offender after his trial, I don't think he has any appreciation of what awaits him.

- Suicide looks good compared with the indefinite sentence

- When you put dangerous offender on a man, it is a very dangerous thing for him

- I would have preferred a life sentence

- They look at you like a lifer in here, while you could get out, they treat you like you never will

- ...the indefinite part, it could be next year, it could be forever

- I'll get out, but I'll be in a pine box (this man thinks of suicide as the only way out)

- One man, a deaf-mute, signed to the investigator in the language of the deaf, "I will silence wait."

Treatment Received by the Dangerous Offenders

While need for treatment is one of the major reasons stated by the court and by psychiatrists for designating a man as a dangerous offender and giving him an indeterminate sentence, it is also just about the best way of ensuring that he probably will not receive treatment, or will receive little treatment after many years of waiting.

The diagnostic category of personality disorder, placed upon an impressive number of these men, mitigates against treatment for many of them. It is said of them, that they require treatment, but when and what kind is beyond the expertise of present knowledge. In the recommendations section of this report the author will suggest a new alternative to this position.

Being sex offenders and in protective custody closes certain programs to inmates who have difficulties not directly related to the sexual aspects of their crimes. The therapeutic programs offered in the institutions are mostly concerned with sexual deviance. Inmates who require extensive habilitation due to long years in prison, or who have other forms of personality and emotional problems have difficulties finding appropriate programs. This is particularly true for the Dangerous Offenders who are not sex offenders.

Phallometric testing, aversive therapy, drugs like depro-provera are present in some institutions, but need systematic development so that their effects can be evaluated. Inmates asking for these forms of measurement and therapy occasionally get conflicting recommendations and responses from the administration and staff. Some of them also have had unpleasant experiences with these devices and are very vocal about the negative results.

It was frequently mentioned that the mental health staff was too small to give the intensive kind of fact-to-face treatment that the Dangerous Offenders desired. They also expressed concern about revealing all their private emotions to staff who were paid by the institution. They did not question the professionals' ethics, but worried about how far they could trust them. They didn't know their bounds or the bounds of those who were there to help them. This concern was magnified many times in programs that involved group therapy where they had to trust to the good will and confidentiality of their fellow inmates.

Inmates were sometimes refused treatment as they were seen by staff as not motivated, or not sincere in their desire to face their problems with an attitude toward change. Genuine motivation to change was seen as an essential prerequisite for

entry into programs. Some inmates presented very different views. Versions of "I want someone to break me" were common. They knew something was wrong, and they knew that they didn't know how to handle it, but they were afraid to submit to treatment. They wanted someone to help them in spite of themselves.

Many inmates were waiting anxiously for admission into one of the Regional Psychiatric Centres for treatment. They attributed almost a magical quality to what they thought would happen for them there. A number of the men had been refused admission and this had depressed them greatly. Several others had had previous admissions, but had been either uncooperative, or had threatened staff, etc. and were persona non grata. They hoped for another chance.

There were many positive comments about the STS Program at Kingston Institution, with desires to go back for a longer period of treatment.

The therapeutic effects of the school programs were mentioned frequently by these men. They said that the successes they achieved made them feel good about themselves. They also felt more competent to handle their lives in a more general way. Some of the men stated that they found the atmosphere in the school one where they felt free to talk and discuss many problems.

Chapter IV

Summary and Discussion of Results

This research used a multiple case study ecological approach to find out as much as possible that related to the assessed dangerousness of the 43 men given the legal designation of Dangerous Offender since 1977 when Part XXI, Section 688 of the Canadian Criminal Code was enacted.

We wanted to discover if there was information that could be gathered by analyzing these men individually and as a group that would help those who are charged with the responsibility for the definition, assessment and prediction of dangerousness in people like them.

We were particularly interested in the men themselves. We wanted to know what effects the Dangerous Offender designation and the imposition of an indefinite sentence had had on them. How they differed from other long term inmates and what treatment programs were provided or needed was also examined.

Procedure To collect these data the principal investigator personally interviewed and tested 41 of the 43 men with the Dangerous Offender status in the

federal institutions in Canada where they were incarcerated. File information and institutional data were used for the remaining two men who could not be interviewed due to their inability to respond because of severe emotional problems.

Court transcripts were secured for all but four of the Dangerous Offenders and all of the people upon whom the dangerous offender application had not been successful. Institutional, psychological, medical and personal files of the inmates themselves were used to complete the data collection for each man.

These data were analyzed using the following model with attendant predictive variables chosen after a careful review of the literature. The Dangerous Offenders were compared on these variables with a comparable group of 43 inmates who were long term offenders, many with violence on their records.

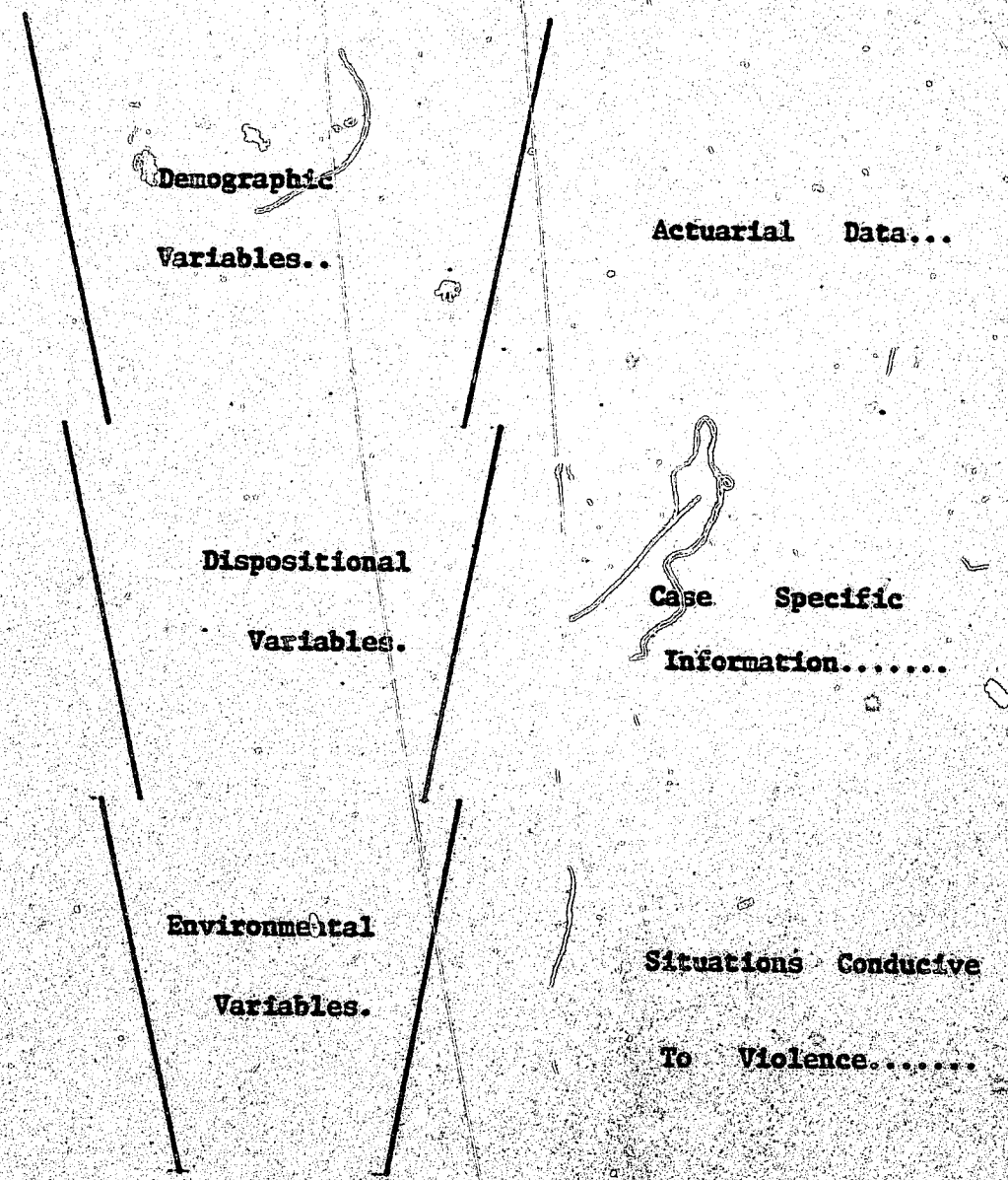


Figure 3: Model for Prediction of Dangerousness

Results by Class of Variables

A. Demographic Variables - The Dangerous Offenders and the Inmate Group did not differ on most of these variables. They were male, approximately 35.5 years old, single, with a Grade 9 education. Less than half had records of delinquency and their first adult offence was at about age 18.

Differences did exist, however. The Dangerous Offenders were more likely to be middle-class in socio-economic status, employment and domestic orientation.

Important deviations were found with regard to the nature of the offences of the two groups. Sex offences constituted 79% of the Dangerous Offenders' crimes and only 10% of the Inmate Groups' crimes. No Dangerous Offender had been convicted of murder while 38% of the Inmate Group had a record of one or more murders.

Likewise, violence differentiated the two groups. The Inmate Group was more violent, had been violent over a longer period and had shown a tendency to greater escalation of violence. It appears that the nature of their crimes (sexual) and their criminal behaviours, as repugnant as they were to their assessors, in many cases were more psychologically harmful to the Dangerous Offenders.

victims than they were physically damaging.

B. Dispositional Variables - The systematic collection of information on these case specific variables enabled us to speak of the inmates as individuals thus permitting discussion beyond group data with regard to prediction. The variables with greatest agreement in the literature were augmented by variables of language and cognition that were believed to hold promise as additional sources of valid predictors. These new variables were collected in this study as measures of cognitive dysfunction. The author's 1983 study in the federal penitentiaries and the 1984 Berzins study pointed to the potential importance of cognitive dysfunction for the prediction of dangerousness.

The results indicated that intelligence, as anticipated, did not differentiate the two groups nor was it a good predictor of cognitive dysfunction or dangerousness. The overwhelming role that drugs and particularly alcohol played in the crimes of the Dangerous Offenders was cited as an important area for further research as to its dynamic role in the crimes of these men and with regard to treatment. Mental illness, often thought to be an illusory correlate of violence, did not appear as a substantial diagnosis for either group. Some of the men had diagnosed mental illnesses, but these were not characteristic of either group.

The language of both the Dangerous Offender and the Inmate Group was not deficient or disordered in general. The analyses developed for this study established independence of effects beyond those of prison jargon, social class and intelligence. The relationship measured between syntactical competence and cognitive complexity enabled the investigator to discover particular sub-groups within the overall competent groups, who did demonstrate language deficiencies. One of the four groups identified, displayed language patterns common among persons with cognitive dysfunction.

Cognitive dysfunction did not characterize either the Dangerous Offender Group or the Inmate Group. However, there were a significant number of men in both groups who possessed the characteristic deficiencies in cognition and language that are diagnostic of cognitive dysfunction. This finding is important because it establishes a differential diagnosis that discriminates these people from persons who are language competent and also from persons suffering other disorders.

The introduction of personality variables into the interactive schema of cognition and language further differentiated the Dangerous Offenders and the Inmate Group alike. A major contribution of this study was the partitioning of persons diagnosed as

having antisocial personality disorders into two additional sub-groups 1) men who appeared to be unsocialized due to lack of experience in society and the detrimental effects of growing up in prison, 2) and men with cognitive dysfunction who had not developed appropriate insight and empathy for their victims and who did not profit from the observation of the consequences of their actions. This differentiation was accomplished through a combined analysis of clinical and statistical data on each inmate and the inmates as groups. This finding is also important in that the offence patterns of many of the men in the second group included the most violent and impulsive acting-out behaviours.

The motivational patterns of the Dangerous Offenders differed greatly depending on whether the man had a personality disorder, lifestyle of crime, or cognitive dysfunction. Men with personality disorders and lifestyles of crime were usually capable of exercising considerable personal responsibility for behaviour change, while the men with cognitive dysfunction had developed and maintained their inappropriate habit patterns more from inflexible learning abilities and the reinforcement of criminal behaviours through practice than they had through exercising freewill.

As Berzins suggested in her 1984 study, the

physical appearance and demeanor of these men also compounded the impression of them as dangerous.

The techniques demonstrated in this study that us to differentiate among these offenders with regard to personality disorder, unsocialized lifestyle and cognitive dysfunction is most important in its implications for the specific prescriptions for treatment required by each group.

C. Situational Variables - Assuming that the interaction of dispositional variables and situational variables holds the greatest likelihood of accurate prediction of dangerousness for the individual, then the need for complete and systematic data at the environmental level is vital. The investigator found, that because data were not collected with these variables in mind the information available from records was often very sparse. She had to rely on the interview and questions to staff to elicit information on these variables. In the future, a methodology for the collection of this information should be developed so that it can be systematically analyzed in order to determine what the salient variables are. More interview time will also be required from the client and significant other persons in the man's life.

While recognizing the great individual differences among the Dangerous Offenders there were

some commonalities. For example, it was observed that many of the Dangerous Offenders had disruptive family experiences and were often loners in crime and in social contexts. Their victims possessed particular traits, alcohol was instrumental in their crimes and they had a history of inadequate psycho-sexual development.

Only a limited number of Dangerous Offenders were receiving treatment although one of the primary reasons for their legal designation had been that they should be provided with psychiatric, psychological or counselling assistance. A variety of specific programs needed by certain inmates was not available, and the long waiting lists and staff shortages, made individualization very difficult. This author did not find any programs specifically designed to help the offender with cognitive dysfunction and/or an anti-social personality. The men appeared to be generally low down on the treatment waiting lists due to the effects of the indeterminate sentence and the policy of corrections institutions to administer treatment toward the end of a man's sentence.

The effects of the Dangerous Offender status were altogether negative: stigma as a sex offender whether the man was or not, the view of the institution and himself as a man doing a life sentence, the probability of doing much of their time

in protective custody, and the self-fulfilling prophecy of other persons treating a man over a number of years as a dangerous person.

Summary of Results

If we compare these men, all of whom have satisfied the requirements of Part XXI, Section 688 as Dangerous Offenders, to the model presented that represents the best of our knowledge of what constitutes accurate prediction we see that:

1. They are not different from the Inmate Group on the actuarial data. In addition, if these are the best statistical predictors available, the Dangerous Offenders as a group did not qualify at a level usually thought necessary when predicting dangerous behaviour.

2. Almost half of the Dangerous Offenders have been diagnosed as anti-social personality disorders. This is a very high incidence of this rather uncommon disorder. However, this study was able to further differentially diagnose over sixty percent of these men as having cognitive dysfunction or unsocialized personalities rather than accept the global diagnosis of anti-social personality disorder with its pessimistic view of their amenability to treatment.

3. There is an absence of treatment for

many of the Dangerous Offenders, sometimes because they are serving an indefinite sentence and sometimes because there is no treatment program available in the institution suitable for their specific problem.

The author has begun, with the cooperation of the institution, the developmental phase of a treatment program at the Regional Psychiatric Centre, Pacific and at Kent Institution for long term offenders with violent histories who have been diagnosed as anti-social personalities, but who suffer from cognitive dysfunction and unsocialized personalities. A learning model has been adopted as the basis for the program. The use of cognitive behaviour therapy to increase effective higher-level thinking and problem solving through increased competence in language complexity forms the basis of the methodology. The program has been designed as a clinical experimental study with an external evaluation component.

Recommendations

In a report of this magnitude it is possible to offer many recommendations, important but dependent on the acceptance of one or more basic recommendations before they can themselves be considered. For this reason, this investigator will concentrate on only four areas. All other recommendations could not be implemented if these are not adopted.

Recommendation One

This investigator, having developed a model for the prediction of dangerousness which we believe represents the best that is known about the validity of classes of predictors and specific predictors and having had the opportunity to systematically organize and interpret all available data regarding the Dangerous Offenders around this model, agrees with Webster's 1983 conclusion that on the grounds of this study and the scientific and legal literature, abolition of Part XXI would be the

most reasonable action to take at this time.

Petrunik was optimistic when he said that he believed that the 1977 legislation would not be much used. There is evidence that there has been an increased usage of Part XXI, particularly in the last two years.

It is this investigator's opinion that the Dangerous Offenders sentenced after 1977 could well become the Habitual Offenders of the future. The double jeopardy of the designation, coupled with difficulty in demonstrating change makes release very hazardous for these men.

This legislation does not provide more protection for society as we have no scientific reason to believe that the men who are detained under this designation and given indeterminate sentences are any more dangerous than men who have been given long substantive sentences.

In a recent judgment, a man who having been found to satisfy the requirements of Part XXI was given a definite sentence of seven years by the trial judge. This investigator interprets the judgment to indicate that the man's satisfaction of the requirements of the legislation notwithstanding, the court considered the man and the crime to warrant a definite sentence and not necessarily a long one. If this becomes a common form of judgment, one wonders what utility the designation of Dangerous Offender

holds beyond unnecessary discrimination.

Recommendation Two

This recommendation is for substantive sentences rather than indefinite sentences to be given to men who are considered dangerous and in need of treatment, but where treatment becomes part of the court order in such a manner that the system is compelled to provide for the specific needs of this individual. In this manner there would be a serious attempt to protect society through the rehabilitation of the individual. Review procedures would need to be developed to check progress at defined intervals in treatment and before release, with special sanctions if the inmate was found to still pose a danger to society.

Recommendation Three

With regard to treatment, The Correctional Service of Canada must be encouraged to diversify its treatment programs in order to be able to adequately cope with the difficulties of persons with a wide variety of adjustment problems. a) Facilities and training for the mentally retarded, sensory impaired and geriatric offender are urgently required. b) New programs that stress social learning skills for long term offenders who are to be released to society need to be extended over a longer time period and developed in greater depth. c) Experimental

developed in greater depth. c) Experimental treatment programs for anti-social personalities, and/or persons with cognitive dysfunction must be systematically developed, administered and evaluated. It is in this area, particularly with long term and difficult inmates, that we stand an excellent chance of making substantial rehabilitative progress.

Recommendation Four

That research be conducted into the systematic application of the proposed three stage model for the prediction of dangerous behaviour. It combines statistical and clinical data in a framework that is amenable to experimentation. The advantage of adopting this model would be the establishment of a standard format for assessment based on the best of our existing knowledge such as that now being used in the mental status examination so that mental health professionals could communicate uniformly and effectively among themselves and with the law regarding the dangerousness of certain individuals.

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