

THE UNIVERSITY OF CALGARY

**PERSONALITY AND SOCIAL FACTORS  
IN CRIMINAL OFFENDERS**

by

Bill Coleman

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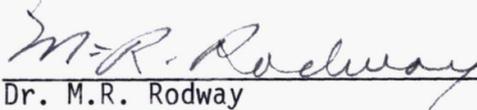
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## ABSTRACT

This was an exploratory study investigating psychological and social characteristics of property and violent offenders in contrast with a non-offender group. Questionnaires were administered to 29 property and 16 violent offenders serving their sentences in federal medium and maximum security institutions, and to 29 non-offenders, who were child care workers. The questionnaire was designed to assess some seventy-six variables measuring aspects of adult perception of home and early life experiences, as well as characteristics such as coping strategies, intelligence, total life stress experiences, social behavior, esteem for self and others, and personality.

The continuous variables were analyzed through a series of one way analyses of variance. These analyses were done for the purpose of establishing benchmarks which would allow development of insights which, in time, could lead to hypotheses. The use of the term statistical significance in this study does not indicate that the necessary assumptions for parametric statistics were made but indicates the strength of group separation on those specific variables. Twenty-two variables

reached a significance level of  $p < .05$ . These twenty-two variables were included in a discriminant function analysis which, in turn, yielded nine variables. Use of these nine variables provided the correct classification of ninety percent of the subjects in this study. Five of nine variables produced from the discriminant function analysis relate to early life experiences, and four relate to present state characteristics.

A model is presented showing the characteristics relating to criminality. The results are discussed in relation to other findings in the field. These results were further investigated through clinical interviews of four property and two violent offenders. The interview results were generally consistent with the research findings.

Implications for further research into the antecedents of criminal behaviour are discussed, as well as some possible treatment approaches are examined.

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## CHAPTER ONE: INTRODUCTION

The history of the study of criminality is replete with speculation as to causes and possible cures. Theorists have attributed criminal behaviour to aspects of physical appearance, personality characteristics, accidents of birth, hereditary factors, feeblemindedness, glandular function, and, more recently, the arrangement of chromosomes in the DNA molecule. Hypotheses vary from ancient primitive guesses to modern, highly sophisticated propositions based on genetic research. Attempts to study and explain criminal behaviour have inevitably encountered obstacles related to limitations in current understanding of the causes of human behaviour and the complexity of identifying behavioural qualities that are uniquely criminal.

As early as the fifth century B.C. the Greeks believed that head shape determined personality which in turn determined behaviour of both criminal and other varieties. This belief emerged again (Gall, 1791), in the eighteenth and nineteenth century studies of phrenology, with the examination of the relationship between mental faculties and shape of the cranium (Leek, 1970). Two centuries earlier, J. Baptiste della Porte

had proposed a relationship between overall body form and specific criminal acts (Vold, 1979). These ideas retained popularity as explanations of criminal behaviour into the twentieth century, when Sheldon published Varieties of Delinquent Youth, (1942) and Glueck and Glueck published Physique and Delinquency, (1956).

A somewhat more detailed examination of the early proposals regarding body form reveals the degree to which these initial concepts continued to influence evolving ideas on the causes of criminal activities. Lombroso (1911), for example, compiled the following list of specific physical features which he claimed to be characteristic of criminals:

1. Deviation in head size and shape.
2. Asymmetry of the face.
3. Excessive protrusions of the jaw and cheek bones.
4. Eye defects and peculiarities.
5. Ears of unusual size.
6. Nose twisted, upturned or flattened in thieves, beak-like in murderers.
7. Lips fleshy, swollen and protruding.
8. Pouches in the cheeks like those of some animals.

9. Peculiarities of the palate, such as a large centre ridge.
10. Abnormal dentition.
11. Chin receding, long or short and flat as those of apes.
12. Abundance, variety and precocity of wrinkles.
13. Anomalies of hair.
14. Defects of the thorax.
15. Inversion of sex characteristics in the pelvic organs.
16. Excessive length of arms.
17. Supernumerary fingers and toes.
18. Imbalance of the cranium.

Many of these features, alone and in combination, were the focus of the work of such later researchers as Kretschmer (1921), Hooton (1931, 1939), Sheldon (1940, 1942, 1949, 1954) and Glueck and Glueck (1950, 1956).

Lombroso was a strong contributor to the systematization of the study of the criminal. However, his work tended to reinforce the already widely held concept of the born criminal, an idea that, because of its narrowness, tended to restrict the advancement of the

science of criminology (Toch, 1979). Vold (1979) does point out that while from today's perspective Lombroso's conceptual approach seems naive, historically, it may be seen as a necessary step in the investigation. In any event, it is apparent that interest in body form as a source of understanding of criminality has a long history and persistent influence.

On quite another theme, exemplified in the work of Dugdale (1910), "feeblemindedness" has been considered a cause of crime. He studied six generations of a single family named Jukes, calculating their progeny to be two hundred thieves, two hundred and eighty beggars and ninety prostitutes. He concluded that degeneracy and depravity were both innate and the cause of criminal behaviour. Similarly, Goddard (1925) in his study of the Kallikak family, concluded that mental defectiveness was inherited and that the mentally retarded were more likely to become criminals than were people of normal intelligence. It was indeed widely believed in the United States in the early nineteen hundreds, that criminals were mentally retarded and should be sterilized (Barns and Teeters, 1959). The British Mental Health Act at one time legally defined "moral imbecility" as a category of mental retardation that involved criminal

behavior (Clarke and Clarke, 1958). Systematic research into the relationship between intellectual capacity and criminal behaviour, initially became possible with the development of a standardized intelligence measure developed by Binet, in the early nineteen hundreds. Goddard (1925), extending Binet's earlier work, suggested that 70% of prison inmates could be considered "feebleminded". However, the work of others indicated that even in such populations as U.S. Army personnel, approximately 50% of the male population fit the accepted definition of "feebleminded" (Zeleny, 1933).

In his review, Vold (1979) observed that I.Q. measures correlated with school performance and that school performance in turn correlated with juvenile delinquency, but not with adult criminality. Etiologically, he proposed that a possible explanation might be that poor school performance tended to increase the likelihood of truancy which, in turn, could lead to vandalism and delinquency. Ultimately, Vold concluded that adult criminals are not consistently found to be either severely or mildly retarded.

Another school of thought, represented well in The New Criminality, (Schlapp and Smith, 1928) held that

the causes of criminal behaviour derived from glandular function. They proposed that notions of inherited criminal propensities, body form, or mental anomalies were actually manifestations of glandular imperfection. It has been suggested that these authors attempted to extend fundamental biochemical findings, through a questionable reasoning process, into speculations about hormonal imbalance leading to emotional disturbance, ultimately producing deviant behaviour (Vold, 1979). Motlitch (1937), in more careful research found no significant relationship between hormonal changes and delinquency. On the other hand, Shaw and Roth (1974), in a much more recent investigation, identified the pre-menstrual period in women as a time of higher probability of criminal behaviour. These authors infer a hormonal effect.

To mention one additional school of thought, Jacobs (1965) conducted the first study of chromosomal abnormalities in prisoners. She hypothesized that persons having an extra Y chromosome may be "super-masculine" and possibly therefore more aggressive. Jacobs reported finding a significantly greater occurrence of XYY males in her prison population. However, in a subsequent study by Price and Whatmore

(1967), it was observed that these XYY males were not in fact more violent, but less so than the average inmate. In a related vein, it has also been observed that XYY males generally show a higher frequency of institutionalization than members of the average population (Fox, 1971). Hunter (1966) speculated that this may be explained by the fact that XYY males tend to be taller and therefore pose a more frightening picture to the court and psychiatrists, thereby increasing the likelihood that these males will be institutionalized for the "protection of society". Alternately, he suggests that the effect may also be due to the fact that XYY males tend to be less intelligent, and therefore more often apprehended and institutionalized.

Even this abbreviated selection of a variety of past approaches to an understanding of criminal behavior demonstrates one pattern very clearly; there is little agreement regarding the identity of the antecedents to criminal behavior. The variables studied have ranged from basic physiology, such as glandular function or body build, to more psychological explanations focussing on such features as intelligence. Some positive associations emerge from each kind of study. Equally common to each field of study are researchers refuting

such relationships. One must almost certainly conclude, at this stage of investigation, that the precursors to criminal development might eventually be found to be numerous in nature and origin. It follows, to some degree, and is equally inviting of assumption at this point, that no single, isolated source is likely to be found to entirely explain criminal development.

It seems appropriate to mention briefly some of the difficulties with which previous studies of criminal behavior have struggled. A rather consistent theme, common to many of the early beliefs, studies and theories regarding criminal behaviour is that of "causation". Dressler (1969) in a brief but powerful review, offered the following modernized compilation of "known causes" of crime and delinquency:

1. Too much parental affection during the individual's childhood.
2. Not enough parental affection during the individual's childhood.
3. Too much corporal punishment in the home.
4. Not enough corporal punishment in the home.
5. Inconsistent corporal punishment in the home.
6. Underprivileged childhood.
7. Overprivileged childhood.

8. Too much education.
9. Absence of religious training.
10. Insufficient education.
11. Over-stringent religious training.
12. Broken homes.
13. Unbroken homes when they would have been more wholesome if broken by divorce.
14. Poverty.
15. Affluence.
16. Tough police.
17. Over-permissive police.
18. Feeblemindedness.
19. Intellectual brilliance.
20. Comic books.
21. Depiction of violence in movies and on television.

Dramatically illustrating the entirely contradictory nature of the currently established selection of "causes", Dressler makes it abundantly clear that causal speculation is at best, premature. Concluding that we have found no cause that relates to crime without variance, he suggested that we would be better advised to re-direct our investigation more specifically and fundamentally toward a search for

correlates of crime. He indicates that there are already some promising general findings of this variety within the categories of personality disturbances, family conditions, neighbourhood influence, peer association, and economic circumstances.

The difficulties inherent in the study of criminality extend well beyond the logical or philosophical problems noted by Dressler regarding attempts to identify "causes" of criminal behaviour. The very term, criminal behaviour, is highly inclusive and subject to widely differing interpretations, often depending substantially on the specific social context for meaning.

Strictly speaking, most people have committed criminal acts of the variety of cheating on taxes, driving home from a party after having had too much to drink, and taking souvenirs from motels. Yet we are not all considered criminals in the serious social sense that we apply to such activities as break and entry, robbery, assault, murder or rape. In order to ensure that research optimizes the element of social significance, it seems appropriate to study the more serious range of offences first. If reliable correlations can be

determined at this level of distinction, it may then be possible to study less well differentiated groups such as the "minor criminal".

Another consideration in the area of definitional difficulties is the classification of criminals. Megargee and Bohn, (1979) have reviewed possible classification systems including such variables as chronicity, level of violence, and type of crime. In connection with the criterion of chronicity, the present study focusses on the more clearly chronic, repeating offender in the hope of magnifying differences. Considering the issue of crime type, it has been reported that the two largest and most readily identifiable groups of offenders in the Canadian penitentiary system, and therefore possibly the two groups most significant to Canadian society, are those convicted of property offences and violence (Canada Yearbook, 1981).

For the above series of reasons, the search for correlates or antecedents of criminal development presently seems best aimed toward the serious, repeating criminal displaying established patterns of offenses against property or of violence toward other persons.

A final major question arises in the choice of specific variables to study. A vast array of variables have been previously studied, without clear or conclusive categories emerging to guide the selection. Dressler(1969), fortunately, has indicated some categories within which there have been some promising early indications.

One of Dressler's categories, that of personality characteristics, has been the object of some debate. Vold (1979) argues, on the basis of a review of carefully constructed studies of the measurement of personality characteristics using objective tests, that the available scales are not yet sufficiently developed to be used in any serious theoretical formulation of deviance and delinquency. Megargee and Bohn (1979), on the other hand, found that it was possible to both diagnose potential criminals and to sort them into sub-groups or types, using their responses to the MMPI.

Toch (1979), in summary, states that psychological assessment has not yet been able to provide a reliable procedure for identifying the potential offender. Psychological treatment has not been able to assure that the apprehended offender will not re-offend.

Finally, he claims psychology has yet to evolve tools for identifying and providing dependable prevention programmes to "high risk" pre-delinquents.

Another category mentioned by Dressler, that of family circumstances, has also received some attention. Silver (1981) listed six family based variables that have been found to relate to delinquency:

1. Alcoholism of family members.
2. Absence of one or both parents.
3. Illness, indifference or hostility of parents.
4. Unhappiness in the home.
5. Conflicts over religion and culture.
6. Poverty.

Silver has also identified a possible relationship between delinquency and discipline as it varies from permissive to excessive and unfair. Belson's (1975) earlier research seemed to question such relationships. He found that the variables of broken homes, social class and punishment did not relate to theft. He did however, discover that permissiveness regarding stealing in the home, desire for excitement, and truancy all related to later stealing behavior. The Gluecks (1934, 1950) found that broken or "distorted" family structure was a significant correlate of

delinquency. Stott (1982) claimed that delinquency increased where a child's need for a "secure attachment to a caring adult" was not met for a variety of reasons. He claims that unless the cause of the child's lack of affectionate relations can be traced, intervention is likely to be ineffective.

Examining some aspects of the three areas of personality, social support, and family background, it may be possible to explore the combined or interactive effects of these variables as well as studying them in isolation. With this approach, this study may re-direct attention to a more integrated, multi-dimensional approach to the identification of those at risk and to the treatment of the offender.

CHAPTER TWO: REVIEW OF THE LITERATURE AND BACKGROUND TO  
THE STUDY

A. INTRODUCTION

The criminology literature provides extensive demographic description of criminals and their offenses (Bartell, Winfree, 1977; Jeyasingh, 1980; Monk and Gervais, 1979; Roy, 1979; Sellin and Wolfgang, 1964; Witte and Schmidt, 1979). These studies have focussed on such variables as neighbourhood crime statistics, seasonal variation, and even the effects of weather on commission of crimes (Fisher, 1979; Monk and Gervais, 1979; United States Department of Commerce, 1980).

Comparatively fewer investigators have explored the personality characteristics and dynamics of the criminal. The majority of these studies deal with the more dramatic crimes such as murder, rape, espionage, and more recently, highjacking (Holland, Hold, and Beckett, 1982; Lefkowitz, Eron, Walder, and Huesmann, 1977; McGurk, Davis, and Grehan, 1981; Megargee, 1966; Cohen, Garofalo, Boucher, Seghorn, 1971). This preoccupation with the spectacular persists in spite of the fact that almost 80% of convictions in Canada, for example, are for

the less dramatic offences such as break and entry, theft and fraud. These crimes, recognized as offenses to property, account for almost 60% of admissions to the Canadian Federal Penitentiary System (Canada Year Book, 1977).

Partially because of a perception that this large and significant offender group has been less extensively studied, and after almost four years service as a Psychologist in two Canadian Federal Penitentiaries, the writer became particularly intrigued with the personality variables and motivations of the convicted and incarcerated property offender. Clinical observations frequently noted that many inmates reported broken or difficult homes. Other consistent themes included excessive concern about acceptance, especially from peers, and a tendency to react to real or apparent rejection with anger and hostility. These observations, while of some clinical interest, require a detailed examination before the reliability and validity of such behaviour clusters could be confirmed or before their relevance and utility in criminal identification, remediation or prevention could be assessed.

The following review examines the relevant

literature pertaining to the personality characteristics, social support and family histories of criminals in general, and specifically, as they differ according to offenses against person or property. There seems to be a pattern in the literature toward more frequent appearance of studies dealing with offenses of violence, once again representing the relative lack of focus on offenses to property as a distinct, identifiable and significant category. The validity of pursuing this distinction is suggested by the findings of Holland, Levi, and Beckett (1981). Using correlational analysis, these authors found that violent and non-violent offenders formed two distinct groups and further, that once an offence pattern was established the offender was unlikely to change his pattern. These results also supported the earlier findings of some stability in patterns of deviance among prison inmates (Peterson, Pittman, and O'Neal, 1962).

It is incidentally noteworthy that a previous reviewer, Tennenbaum (1977), initially began his review with a computer search but was forced to abandon that approach because of the vast variety of topics and fields under which relevant articles were located. Studies of criminal behavior were found within the disciplines of criminology, sociology, social work, psychology, and

psychiatry, to name only a few. The relevance of this earlier logistic finding to the present work has become abundantly clear. Criminal behavior and its antecedents have been the object of so many studies of such varied scientific foundations and of such widely differing operational approaches that the literature can seem almost overwhelmingly unmanageable. The extensive nature of the varied fund of material defies an attempt to outline and summarize the information with any degree of elegance.

## B. PERSONALITY CHARACTERISTICS

### i. General

Tennenbaum (1977) in a review of the literature relating personality and criminality, reported that during the period 1966 to 1975, 72 different psychological tests were used in some 52 articles to determine how the criminal population differed from the normal population. In almost two thirds of the studies, significant differences were found between personality characteristics of the criminal and normal populations. A number of other studies examined the relationship between intelligence and criminality. The most frequent

tests used in this ten year period were the Minnesota Multi-Phasic Personality Inventory (MMPI) and the California Psychological Inventory (CPI); the most widely used personality measure of the two being the MMPI (Buros, 1975). There appear to be a number of contradictions between studies using the MMPI. Hathaway and Monachesi (1963), in a very comprehensive study, found that the MMPI did not predict delinquency among high school students. However, other published findings suggested that it was possible to both diagnose potential criminals and to classify them as to crime types according to their responses to the MMPI (Megargee and Bohn, 1979).

Even though a significant number of studies have found that criminal offenders respond differently on these tests from the normal population, almost all of these differences were accounted for by items measuring "delinquent behaviour". It is no surprise that such items as "I have never been in trouble with the law" will result in criminals responding differently from the normal population! Not only is this difference less than relevant in providing new information about offenders, it is even misleading because there is a suggestion of a difference in personality when in fact, only a difference

in criminal experience is actually identified.  
(Tennenbaum, 1977)

Another significant focus of attention has been the possible relationship between intelligence and delinquency. In 1981, Moffitt, Gabrielli, Mednick, and Schulsinger measured intelligence using a limited range from sub-scales of the Wechsler Intelligence Scale for Children (WISC) including Vocabulary, Similarities, Block Design, Object Assembly, and Mazes. They found a correlation between intelligence and number of offences of  $-.27$  showing that, as IQ increased, number of offences decreased. Some twenty-one years earlier, a Danish intelligence test, the Borge-Priens-Prover, had been found to yield full scale measures of IQ that correlated with the number of offences committed at a level of  $-.17$  in a study of 129 subjects in Denmark (Rasch, 1960). Moffitt et. al. (1981) noted that most studies have found that while Performance IQ is average in delinquents, Verbal IQ is slightly lower than average. They delineated a persuasive cause-and-effect hypothesis based on their findings, suggesting that children with a low Verbal IQ suffer failure and frustration in the early grades. Through this early experience with failure, pre-delinquent children may learn to resent authority.

For the child who has average or above average Performance skills, failure in school would amplify the child's frustration and alienation. The suggestion was made that, although lower intelligence may not be a direct cause of antisocial behavior, it may be related to some other causative variables. Yet another possibility is that the relationship between IQ and crime is an artifact resulting from selection factors. It may be speculated that criminals of lower IQ are more likely to be caught and disposed of more severely. Therefore, those criminals more readily available for study display lower than average IQ.

Yochelson and Samerow (1977) conducted a 14 year investigation in search of the "root cause" of crime. Deciding that crime was not caused by emotional or economic factors, they concluded that the cause was more likely to be found in the patterns of thought. These authors formulated 52 separate thinking patterns, some examples of which include "no trust", "no empathy", "I can't", and "feeling victimized". In a critical review of Yochelson's work however, Vold (1979) has questioned the validity of these findings, noting in particular the lack of attention to operational definition. This reviewer also drew attention to the

extremely low success rate of treatment reported by Yochelson and Samerow. In a 14 year period, they claimed successful treatment of only 12 cases out of their total of 240. Finally, Vold registered a serious challenge to the identification of thinking patterns as the "cause" of crime. Obviously one is left to question the "cause" of the thinking patterns, and whether the determinants are more biological or environmental in origin, or result from some interactive combination of many other variables.

Eysenck's Personality Questionnaire (EPQ) and Personality Inventory (EPI) have been said to yield results that are somewhat more effective in differentiating the criminal from the normal population (Eysenck, Rust, and Eysenck, 1977).

Eysenck, in one of his theoretical presentations, derived an hypothesis that criminals would generally score high on both extroversion and neuroticism, based on the arguments that socialization is achieved through conditioning; that extroverts condition poorly; and that neuroticism acts as a drive to make one more extreme in either intraversion or extroversion and therefore more antisocial (Eysenck, 1964).

Pursuant to Eysenck's proposals, Burgess (1972) examined three different samples totalling 29 prison inmates of a maximum security institution in British Columbia, Canada, and compared them to a control group comprised of 16 university students, using the EPQ as an independent variable. Burgess generally supported Eysenck's hypothesis and, in addition, suggested that an examination of the cross-product of the extroversion and neuroticism scores would show a more pronounced difference between the normal and criminal population. Burgess suggests that this cross-product could be called "H" for Hedonism, and might be a more powerful instrument for detecting or predicting criminal development.

However, not all studies have produced findings in agreement with Eysenck's theories (Little, 1962; Forrest, 1977; and Passingham, 1972). These authors all found that only the neuroticism scale successfully distinguished young offenders from non-offenders.

In an article by Scimecca (1977), it was suggested that an effective way to learn about the personality, or what he called the "inner workings" of the criminal, would be by means of the Repertory Grid

Technique developed by George Kelly (1955a) and derived from Kelly's (1955b) Personal Construct Theory. During a telephone conversation in 1981, Scimecca advised the writer that he knew of no-one who had used the Repertory Grid with an incarcerated inmate sample, and there appears to be no reported subsequent use of it with this population.

The Repertory Grid Technique provides a broad look at the individual's relationships with significant others by having the respondent compare and differentiate role types such as "mother" and "friend" using constructs such as "warm" and "helpful". There are numerous variations of choice and format of role types and constructs (McReynolds, 1978).

Heather (1979) used a modified Repertory Grid Technique in a study of 40 institutionalized delinquents in England and found that the grid did yield information useful in separating delinquents from normals. The nature of the modification was that constructs were provided while the "significant others" were names of peers chosen by the subject. Further, the constructs that proved most significant were claimed by Heather to be strikingly parallel to Eysenck's EPI scale measuring

extroversion.

The Repertory Grid Technique has numerous variations and can be adapted to many different situations (Fransella and Bannister, 1977). One variation that is suggested by these authors is that of a modified semantic differential technique. This approach provides a list of significant others for subjects to rate on dichotomous variables. An example of this would be to rate "mother", "father", "wife" on such variables as "good-bad", or "kind-unkind".

#### ii. Studies of crime type

Many theories have been proposed to explain violent behavior in particular. Dollard, Dob, Miller, Mowrer, and Sears (1939) developed the concept that aggression results from frustration. Lorenz (1966) suggests that aggressive or fighting instinct is biologically based in man as in other animals, and that aggression can build spontaneously without external stimulation. Feshbach (1970) claimed that the only viable theories of aggression state that aggression is acquired rather than innate. Lefkowitz et. al. (1977) argued that aggression increases because it is rewarded. Mischel

(1971) proposed that impulsivity or the inability to delay gratification is directly related to criminality and indirectly related to violence as well. He claimed that because of an inability to work toward long term goals with larger rewards, individuals will react aggressively to obtain short term or immediate gratification. Barclay (1971) postulated a connection with sexuality in his notion that persons aroused through sexual stimuli are more likely to be aggressive than those aroused through non-sexual means.

Megargee (1966) studied the personality features of murderers who had exhibited exceptionally violent behavior. He found it possible to distinguish between murderers of two types, overcontrolled and undercontrolled. The overcontrolled person is usually rigidly controlled and conforming to social norms. He is generally less aggressive than the average person but when he loses control he becomes hyper-violent. In contrast with this pattern of extreme disinhibition, is the person who is generally insufficiently controlled and for whom excessively violent behavior is commonplace.

Megargee's study demonstrated a significant difference between groups of individuals convicted of the

same offense, that has been confirmed by a number of other investigators (Lane, 1978). Other authors suggest there are anywhere from two to three, and up to ten or eleven different subgroups of murderers (Abrahamsen, 1960; Glaser, Kenefich, and Leary, 1968; Banay, 1952; Spencer, 1966; Jesse, 1952; Neustatter, 1957; Guttmacher, 1960). Notwithstanding apparent disagreement about the number of sub-types, there does seem to be concensus that not all murderers are alike. Megargee's research illuminates a clear issue in the study of criminology that concerns the level of distinction between crimes. Criminal development has been studied by using the more gross comparison of offender and non-offender and then, at the other extreme, much finer distinctions of subgroups related to specific offences.

In a study of rapists, Cohen et. al. (1971) developed four categories for the motivation for rape. Their classification scheme included: 1) displacement of aggression toward females; 2) compensation for sexual inadequacy; 3) sex-aggression fusion requiring violence to achieve sexual satisfaction; and 4) lack of socially appropriate controls over impulses.

In 1975, Perkins and Reeves used the 16

Personality Factors (16PF) to ascertain whether criminals of differing offence patterns scored differently on this measure of personality. In an extensive study of all admissions to the Virginia penitentiary over a five year period, these workers sorted 214 offenders into categories of 58 violent and 156 property crimes. They found no significant differences between types of offense patterns and level or pattern of the 16PF scores. This study clearly makes a serious attempt to thoroughly sample the population. However, there appear to be some possible weaknesses in the categorization. For example, one offence included in the property group was "breach of probation". By itself, this is not a particularly discriminating criterion since probation could be violated by a violent act or offence just as well as a property or other type of criminal action. There are other instances of similar possible contamination in the sorting process. It seems possible that the samples were not homogeneously constituted or well differentiated, thereby conceivably masking any personality differences.

It is important to note that this study did find one statistically significant difference between offence types. Scores on Factor F were found to differ at a level of  $p < .05$ . However, this was determined to

account for only 3% of the variance. These results exemplify one of the problems inherent in the use of large samples. While the finding may be statistically significant the difference may account for such a small proportion of the variance as to undermine any practical meaning or significance. A further implication of this study may be to question how promising an instrument the 16PF is likely to be in the study of crime types.

Jorm (1977) using the EPI, found no difference between those who committed crimes against people and those who committed crimes against property. Studying 133 inmates of an Australian prison, he did find differences between alcohol related offenders, sexual offenders, and offenders acting without an accomplice. Rapists were found to exhibit higher psychoticism. Offenders reporting alcohol abuse displayed higher neuroticism irrespective of specific offence pattern. Jorm's work has been influential in directing attention to the necessity of examining personality differences between different classes of criminals. As he commented, the populations of "criminals" or "prisoners" are global and heterogeneous in nature, obviously including many different sub-groups.

In a study of personality and classification of criminal offenders by Eysenck, Rust, and Eysenck (1977), the EPI yielded four separate groups: the inadequate offender, the residual offender, the violent offender, and the property offender. The residual and inadequate offenders tended to score higher on the neuroticism scale. The violent offender tended to score high on the extroversion scale, whereas the property offender tended to score low on extroversion. This article strongly supports the notion that there are measurable psychological differences between inmates with different types of offense patterns.

Edmunds (1977) found that extroversion and neuroticism did not relate directly to all types of aggression but individuals may show their aggression in differing manners. For example, some may be verbally aggressive while others may be physically aggressive or assaultive. Fitch (1962) found that violent offenders scored lower on extroversion than the property offender group. Le Unes and Christensen (1974) found that there was no difference between the property offenders and violent offenders in their scores on the EPI.

Indeed, a number of studies have tested Eysenck's

hypotheses with consistent and sometimes contradictory results. Cochrane (1974) found only one out of twenty studies that unambiguously supported the prediction that the criminal group would score higher on the extroversion scale. Passingham (1972) found seven confirmations in twenty-five studies reviewed. Eysenck (1974) argued that when careful controls for age and social class are incorporated, results confirm his theory. However, Burgess (1972) and Edmonds and Kendrick (1980) report that even when these particular controls are utilized, they were still unable to support Eysenck's hypothesis.

The findings of studies of neuroticism tend to provide more consistent support for Eysenck's prediction that the scores on this scale would be higher in the criminal population (Cochrane, 1974; Feldman, 1977; Passingham, 1972). In a cautionary vein though, Passingham (1972) notes that many of these results depend on testing of subjects while they are on remand or in institutions and that situational factors may account for elevations in neuroticism scores.

In any event, there are attractions to using Eysenck's instruments in the study of crime. He has developed a specific theory of criminology and his theory

generates empirically testable predictions.

Syverson (1983) used the Eysenck measures in an attempt to find differences between violent and nonviolent offenders. He also reported that there has been very little research examining the differences between these two groups. Syverson did not find that the measures of extroversion and neuroticism were different for the violent and nonviolent offenders.

### iii. Summary

In summary, according to the literature, although there is considerable variation among the conclusions of these studies, the EPQ and EPI seem to provide a better differential description of the criminal than other personality tests. The MMPI and the CPI tend to provide differential descriptions of criminals and normal population samples by means of variables that are on the continuum of social vs antisocial, though this continuum is not very helpful in dealing with incarcerated offenders. The Repertory Grid may show some promise in providing additional information about the criminal. In comparison to the MMPI, it has been relatively unexplored in this area.

## C. SOCIAL SUPPORT HISTORY

### i. General

Although somewhat difficult to distinguish from family history, social history has been explicitly studied by a few workers. Bandura (1969) noted that there is an enormous sociological literature addressed to "peer group influences" and numerous psychological studies attesting to the importance of the effects of one's friends as behaviour models.

Belson (1975), studied over 1400 teenagers in London, England. Using a factor analytic approach, he examined both family and social history. Among his findings was a relationship between a person's delinquency, and his association with boys who were engaged in stealing, as well as a correlation with truancy. He identified four factors that tended to decrease the likelihood of stealing:

- (1) having a grandparent living at home
- (2) being Jewish
- (3) attending church frequently
- (4) getting caught by the police for stealing

Hirschi (1969) theorized that there are four facets of behaviour that tend to reduce the likelihood of a person becoming a criminal. Hirschi's "control theory" states that:

(1) attachment to conventional persons is a major deterrent to crime;

(2) commitment to conventional behaviours bonds a person to society;

(3) involvement in conventional activities provides one with positive recognition and rewards.

(4) belief that the individual should obey the rules of society discourages criminal action.

There are some evident similarities between the findings of Belson and Hirschi and, although the findings are not strictly identical, some interesting parallels can be drawn. Hirschi's construct of attachment to a conventional person resembles Belson's finding of having a grandparent living with the child. Hirschi found that commitment to conventional behaviours acts as a bond to society and Belson found that church attendance was a more frequent observation with the non-offender. A strong belief that one should obey the rules of society was found by Hirschi to be significant in deterring crime

while Belson found that getting caught by the police for stealing reduced delinquency. It seems reasonable to suggest a connection between getting caught by the police and the building and strengthening of socially appropriate beliefs. Together, these two studies point rather consistently to the importance of social support in reducing criminal activities.

Heckel and Mandell, in their 1981 factor analytical approach to criminality, utilized standardized interviews in which they rated 200 adult males, 60% of whom were property offenders and 15% of whom were violent offenders, on 48 demographic and behavioural variables. While they did not attempt to differentiate types of offense, they did contribute additional insights into the prison inmate population in the southern United States. From their collection of social history items, they identified such factors as "divorced", "rootless", "middle class", "single", "educated" and "black" as relating to incarceration.

#### ii. Studies of crime type

Only a relatively small number of studies have been found to address the question of the effect of

social support variables upon the development of specific, and differing, offence patterns. Zimbardo (1973) concluded that crowding may cause people to exhibit additional aggression because of the greater feelings of anonymity associated with larger numbers. The Belson (1975) study, while it tended to deal primarily with family experience, did offer some insight into social factors. Association with other boys who were engaged in stealing and truancy were found to be significantly related to stealing behaviour.

In a study of crime and unemployment rates from 1940 to 1973, carried out for the Joint Economic Committee of the United States Congress, it was concluded that a sustained 1% increase in unemployment resulted in a 4% increase in state prison admissions and a 5.7% increase in murders (Brenner, 1977).

Shaw and McKay (1969) found the highest rates of delinquency in the areas of lowest economic status determined by factors such as percentage of families on welfare, median rental rate, and percentage of families owning homes.

### iii. Summary

The literature contains an abundance of indications that social experience, particularly as it involves issues of support, has a significant bearing on whether or not an individual develops criminal behaviour patterns. The present work aims to further examine the effect of social support variables alone and in combination with other factors included in the frame of reference of this study.

The relationship of intelligence to criminality is not consistent. Moffitt et. al. (1981) summarized that delinquents generally have average performance scores and lower than average verbal scores.

Yochelson and Samerow (1977) in their extensive study of criminals concluded that criminality related to more than fifty different thinking patterns. However, their theories have been criticized on very basic conceptual grounds.

It has been suggested by Scimecca (1977) that the Repertory Grid Technique may yield a broad look at the offender's relationships with significant others.

There have been numerous other theories put forward in an attempt to relate personality and criminality. Dollard (1939) suggested the frustration-aggression hypothesis; Lorenz (1966) talks of a fighting instinct; Feshbach (1970) claims aggression is acquired; Mischel (1971) speaks of aggression being a result of an inability to delay gratification. In short, there are many ideas and theories as to the causes of aggression, delinquency and criminal behaviour, and how these factors relate to personality. There is no widely accepted theory relating personality to criminality, outside of the concept of psychopathy, which is a general term describing a personality disorder. Psychopathy is sometimes inaccurately confused with criminality.

It is clear that personality tests, as they exist to date, are not able to fully describe the "criminal personality" in a reliable manner.

#### D. FAMILY HISTORY

##### 1. General

In what appears to be one of the earliest systematic studies of the influence of parental family

experience, McCord and McCord (1958) investigated parental role models, attitudes of parents towards children, and methods of discipline. In their sample of 253 male youths collected in Massachusetts, U.S.A., they found maternal affection to be associated with decreased criminality, and maternal rejection or passivity to be correlated with increased criminal tendencies. Nearly one half of their convicted male subjects reported "non-loving" mothers. The McCords also found paternal criminal behaviour to be somewhat related to criminal development in sons, depending upon the interaction of other family factors such as presence or absence of love and disciplinary variations. They also reported the absence of consistent discipline to be a significant variable in that almost 70% of the sample claimed their parents disciplined in a lax or erratically punitive manner.

In one of the very few pertinent Canadian studies, Blakely, Stephenson, and Nichol (1974) compared 50 delinquents in Vancouver, British Columbia with a non-delinquent sample of the same size, confirming that poor relationships with peers and adults as well as family problems were more common among delinquents. Specific family dysfunctions identified included broken

and disorganized homes, deviant or defective role models, inadequate discipline, and generalized social problems within the family. They argued that delinquency emerged as a result of a breakdown in social or "external" controls leading to or including deficiencies in personal or "internal" controls.

The Belson (1975) study, detailed earlier, carried out a comprehensive study of thefts committed by teenagers, using a sample of 1425 randomly chosen boys from London, England, all of whom admitted to stealing. Each boy was individually questioned about his stealing behaviour and his home situation. The data were processed using a correlational analysis, a matching technique comparing thieves to non-thieves, and a final interview with the subjects to confirm results. He found associations between stealing and: 1) parental permissiveness regarding stealing; 2) early separation from mothers; and 3) a "miserable and uninteresting home". Factors not consistently related to stealing included frequency of punishment for misbehaviour, parental strictness prior to the age of ten, and coming from a broken home. Belson seriously attempted to address the issue of causation. By design, he examined the possibility of multiple causality. He also

specifically questioned his subjects and others who had worked with the boys, regarding their perception of the causes. Integrating these data with a literature review, he developed hypotheses regarding causation which he then checked through the sample matching technique.

#### ii. Studies of crime type

Sears, Maccoby, and Levin (1957) found that physical punishment by parents was positively related to aggression being displayed by their children. In the McCord and McCord study (1958), mentioned earlier, inconsistent discipline was also a factor identifying property offenders specifically. In addition, and of particular relevance to the current research, property offenders were twice as likely as other types to report neglectful mothers. The authors concluded their comments on property offenders by saying that "this most common form of crime stems from neglect and insecurity in the home".

Gray and Gray (1978) based their discussion of the nature of the antecedents of criminal behaviour upon their personal clinical observations gathered rather unsystematically in the course of conducting therapy with

their clients. Their suggestion that specific environmental stressors and social history may relate to specific offenses are clearly premised on a belief that family experience is a primary cause of crime. They suggested, for example, that those convicted of break and entry have found themselves "locked out" of some important or significant aspect of family life. Stealing, malicious destruction of property, and unsocialized aggressive reactions tended, according to Gray et al., to be a pattern for individuals with poor family relationships, including the presence of "emotionally cold" fathers. Assaultive patients were said to have reported abundant use of physical force, "macho" attitudes, and patterns of victimization and blaming by parents. Persons involved in armed robbery, were proposed to be individuals who view life as a "life and death matter", and who were looking for revenge because of mistreatment when they were young. The weapon, they suggested, symbolically becomes an equalizer against an overpowering father. In general, they concluded that stealing was a product of lack of parental emotional involvement. In further speculation, they ventured that these "emotionally bereft children were shame driven into performing shameful behaviours". It must be emphasized that Gray et al. based their dynamic

and causal hypotheses on clinical encounters assessed from a psycho-analytical perspective and not empirical research.

While clinical observation is often thought to lack the rigor of empirical testing, it does merit at least some attention. For example, the clinical context may be a more fertile source for research questions that may not arise out of the more rigid structure of the scientific study. In addition, clinical input may guide empirical work toward continuing relevance and practical usefulness.

Other authors emphasize the relevance of family experience to later behavioral development more in terms of learning. Monahan (1981), in his text on violence, claims that a critical aspect of the influence of the family environment is the role of supporting or discouraging violent behavior.

### iii. Summary

Studies of the effects of family history establish that the likelihood of later criminal development is clearly influenced by variables included

in family experience. Whether one notes generalized effects of a dysfunctional family milieu, including the modelling and reinforcing of unacceptable behavior, or more intricate dynamics of specific relationships within the family, it is apparent that the growing child is powerfully affected by this full range of factors, and, in some cases, this seems to be a feature of the beginning of criminal development.

#### E. CONCLUSION

Generally speaking, the literature suggests an association can be found between some personality characteristics, family experience and social experience, and later criminal behaviour. It can be speculated that delinquent or criminal behavior is more likely to emerge from a poor home situation including poor relationships, lack of trust, lack of skills in gaining supportive relationships, and an inability to use strong supportive relationships in time of crisis, disappointment, or failure. Findings indicate that additional exploration in these areas may make it possible to further isolate characteristics and features that differentiate the violent and property offender from each other as well as from the non-criminal. The purpose of the present study

is to learn simply more about selected variables from each category both in isolation and in combination or interaction of one variable with another.

The present study was conceptualized in a fashion that integrates several aspects of the author's clinical experience with offenders, with both general patterns and specific findings of previous research. In response to the relative failure to employ control or comparison groups in previous criminal research, the present study utilized a contrast group of successfully functioning individuals. In this context, it was hypothesized that offenders would differ from normal subjects on measures of family and social background and personality characteristics. It was expected that family and social disturbances, as well as personality deficits claimed to be characteristic of criminals by other authors, would be confirmed, at least in principle, in a direct comparison with contrast subjects.

Property offenders are a significantly large and identifiable group that has not been extensively studied. The present study included a group of these offenders and compared them with the more extensively studied violent group as well as the contrast group. It was hypothesized

that the distinctions between types of offenders could be supported, together with differences in the areas of family and social experiences plus current personality characteristics. The fact that prior research has produced highly contradictory results made the formulation of specific directional hypotheses difficult.

Direct clinical contact by the author with inmates in several penal institutions suggests that criminals usually have a low self and social image that predisposes them to defective personal and social functioning. The present study measured perceptions of self and others, along with some key aspects of personal functioning, in order to test the possibility that the property and violent offenders would differ from contrast subjects in this regard. It was hypothesized that criminals would show evidence of lower self-esteem and poorer coping mechanisms compared to normals, and further, that specific aspects of self-image and problem solving could be identified that would differentiate the two offender groups.

The author did not purport to be conducting an original investigation into the effects of all specific variables previously studied. Some family and social

phenomena have been extensively considered by other workers. There are indeed variables included that have not been previously studied in connection with criminal development and the intent was to simply explore new sources of information that might contribute to the understanding of criminal behavior. The more notable uniqueness of this study rests in the comparison of property and violent offender groups with a contrast group, the measurement of stress and coping skills, and the use of the subjects' own perceptions of their early life experiences.

## CHAPTER THREE: METHODOLOGY

### A. INTRODUCTION

This chapter contains a description of the subjects, the data collection procedures, and the methods of data analysis. The instruments used to measure the variables in this study are described in detail, as are the composition and administration of the study questionnaire.

As indicated in Chapter One, the experimental subjects for this research were convicted criminals incarcerated in the British Columbia Region of the Canadian Federal Penitentiary System. These criminal subjects were all males divided into two groups, one of violent and the other of property offenders. A contrast group of non-criminal males was also recruited.

After the subjects completed a questionnaire, the data were analyzed through a series of one-way analyses of variance, using each continuous variable. These analyses were done for the purpose of establishing benchmarks which would allow development of insights which, in time, could lead to hypotheses. The use of the

term statistical significance in this study does not indicate that the necessary assumptions for parametric statistics were made but indicates the strength of group separation on those specific variables. From these results, variables were selected for inclusion in a discriminant function analysis if they achieved an overall significance of  $P < .05$ .

#### B. SUBJECTS IN THE STUDY

The subjects for this study were drawn from two main populations. One group was convicted criminal males serving their sentences in the Canadian Federal Penitentiary System. The contrast group consisted of male Child Care Workers at the City of Calgary Children's Service Centre.

##### 1. Experimental groups

A number of difficulties were encountered in the course of obtaining a sample of the criminal population. Proposals to both the Alberta provincial prison system and the Prairie Region of the Federal Penitentiary System were rejected outright. Some administrators raised highly specific objections to the study procedure. One

stated, for example, that it was unreasonable to ask questions such as "do you ever swear when under stress?". Other managers explained their rejections on the basis of more general concerns such as disruption of institutional routines and security. Still others appeared to be bureaucratically immobilized. While they claimed to favor proceeding with the study, the necessary official approval seemed to be endlessly delayed. The British Columbia Region of the federal system approved the study but then imposed a number of regulations which proved to be seriously restricting in some instances.

Perhaps the most significant stipulation placed upon the study by Federal Corrections, was that a small sample of offenders be chosen. This condition was explained in terms revealing a somewhat skeptical orientation toward research in general. The concern expressed by the authorities was that large samples were more likely to exhibit significant differences based on statistical mechanics alone. It was argued that using smaller samples would reduce the probability of such artifacts and thereby make the results more "meaningful" in the sense of practical application, in that statistically significant findings with the reduced numbers would suggest greater genuine differences between

the groups. The Perkins and Reeves (1975) study tends to support this argument to the extent that with their large samples they demonstrated a statistically significant difference that actually accounted for very little variance. The converse approach of utilizing small samples, presupposing that only substantial, meaningful differences could be reflected, has some merit, even though one cannot deny the difficulties raised for eventual generalization of the results to other populations. In addition however, it is also probable that the insistence upon small samples was also an attempt by administrative staff to reduce the overall number of inmates involved and thereby reduce institutional concerns such as disruption of routines and security issues. Even though this regional administration approved the study, they expressed reservations similar to those used by other jurisdictions to reject the proposal. The author encountered a number of institutional and bureaucratic barriers that are no surprise to anyone who is even remotely familiar with prison systems. What is somewhat surprising is the relative absence of reports of similar difficulties in other Canadian and American studies.

For reasons of efficiency, the author chose to

work within the two maximum security facilities of Kent and Matsqui and the two minimum security establishments of Mountain and Mission. These four were chosen because of the close proximity to one another in the Vancouver, British Columbia area. These institutions were determined to be holding over 90% of inmates in the British Columbia Region of the Federal Penitentiary System.

Hence, the criminal Population for the study was drawn from the total of approximately 1500 inmates in the four British Columbia federal institutions, and included all of the approximately 100 persons who met this study's criteria for either the violent or property offender group. The sample from this population included those inmates who voluntarily agreed to participate. This group ultimately totalled 45 and was composed of 20 minimum security and 25 maximum security prisoners.

The sampling process was begun by obtaining a computer printout from the regional headquarters of the penitentiary system, listing all presently incarcerated inmates. To this listing, a number of selective criteria were applied, firstly for the obvious, practical reasons of study locale, and secondly, to purify the experimental

groups. The author's intention was to extract groups of property and violent offenders with high separate homogeneity and little overlap in offence histories. In this regard, subjects were considered desirable only if they displayed a well established repeating pattern of offences of one kind or the other.

The disadvantages of this approach were clearly that a number of marginal offense patterns were excluded, possibly leaving some truly violent or property offenders excluded from this study. This would tend to increase the risks inherent in generalization. On the other hand, the advantages lie in the area of amplifying differences. The appropriateness of this approach, at this stage of investigation, is rather obvious. While the study may exclude the one time offender of either variety, it will examine the chronic groups, a level at which understanding may be more readily established before examination of the more marginal or less well differentiated groups. Conservatively sized samples also permit more extensive, in depth, and detailed study.

The computer printout therefore, was used to screen for inmates meeting the following criteria:

1. They were currently housed in the British Columbia region.

2. They were serving their sentences in one of the four Vancouver area institutions.

3. They were male. This criterion represents one more contribution to sample purity and is supported by the fact that 95 to 97% of all currently incarcerated federal inmates are male.

4. They had established criminal records of at least four previous adult convictions.

5. Their conviction for their present offence was less than one year prior to data collection. This criterion was used in an effort to reduce error or variance due the effects of lengthy institutionalization intervening between the offence and time of testing.

6. Their previous adult criminal convictions were at least 80% in the same category of either violent or property offences.

The offences that were used to sort the inmates into categories are listed in Table 1.

TABLE 1

OFFENCES USED TO CLASSIFY OFFENDERS TO  
PROPERTY OR VIOLENT CATEGORIES

OFFENCES USED TO CLASSIFY OFFENDERS AS VIOLENT	OFFENCES USED TO CLASSIFY OFFENDERS AS PROPERTY OFFENDERS
Use of firearm	Fraud upon government
Prison breach-violence	Causing a disturbance
Point firearm	Public mischief
Cause physical injury	Theft over \$200
First degree murder	Theft under \$200
Second degree murder	Take without consent
Capital murder	Take motor vehicle without consent
Manslaughter	Theft of cattle
Attempt murder	Theft/forgery credit card
Cause bodily harm	Break and enter with intent
Common assault	Break and enter
Assault cause bodily harm	Possession of stolen property
Assault with intent	Theft from mail
Forcible confinement	Obtain lodging by fraud
Robbery with violence	Forgery
Robbery	Fraud over/under \$200
	Make counterfeit money

A number of offenders such as those involved in drug and motor vehicle crimes were excluded from both lists because it was not clear that they fell into either category. Inmates with a drug offence history were excluded both because of the apparent heterogeneity of this group and because it could be argued that their offences may have been secondarily motivated by their drug usage. A small number of inmates having motor vehicle offences were included in the sample since they had a well established offence history, and only a minor record for impaired driving or reckless driving.

Inmates convicted of sexual offences were not included. Though sexual offences are often believed to be violent in nature, the act of sexual violence could indicate a unique motivation and a special target for the violence. In addition it is also true that while some sexual crimes such as rape are undoubtedly violent in nature, other acknowledged sexual offences such as indecent exposure are generally thought not to be interpersonally assaultive. Under the circumstances, this was considered a possible sub-group to that of either violent or non-violent offender groups, and therefore one that did not fit within the study's aim for highly pure samples.

Sixteen subjects were males convicted of violent offences, and 29 were males convicted of property offences. There are more property offenders than violent offenders in the prison system, thus the small number (16) of violent offenders in this sample reflects the relative incidence of such criminals in the total prison population. It should also be noted that this difference is representative of the prison population, in that, there are more property offenders than violent offenders sentenced.

ii. Contrast group

The subjects for the contrast group consisted of 29 adult males, approximately the same age as the inmate sample. This group comprised child-care workers employed at the Calgary, Alberta, Children's Service Centre, a residential facility for neglected and delinquent youths ranging in age from 8 to 16 years, having emotional or family problems. This group was chosen to be a contrast group for the study for a number of reasons. The subjects were an all male group, as were the prison sample. They were readily available to the author. In addition, they were approximately equal to the criminal sample in mean age. Because their full-time occupational milieu was that of an institution for disordered or deviant clients, they had considerable direct exposure to a somewhat similar institutional environment. In contrast the group was vocationally successful and non-criminal. In other words they could be considered a relatively normal, or at least non-criminal group of subjects. Almost 75% of all male counsellors at the center completed the research instruments.

Self reports by the subjects concerning social economic status, age, and criminal histories were used to

establish the similarities and differences between the contrast group and the offender group.

iii. Summary

A final sampling issue relates to the fact that subjects of both the experimental and contrast groups were strictly voluntary. It would obviously have been impractical to have proceeded otherwise and would have placed the validity of test responses under serious question. Unfortunately however, this factor reduced the size of both groups considerably.

Of the 96 criminal subjects selected through screening, 50 or about 50% appeared for testing. Of this total, a further 5 or about 10% declined participation after hearing an introduction to the study. In the contrast group, 75% of the subjects solicited, responded by completing and returning the study questionnaire to the author.

Inherent in the voluntary aspect of the design is a lack of information about non-voluntary subjects. The author has no data upon which to base an explanation of refusal to participate and is simply forced to tolerate

the resulting possibility of sampling bias. The alternative of pressured participation, if it could have been done at all, would clearly have threatened the validity of all data collected. In any event, attempting to proceed otherwise would clearly constitute a violation of fundamental ethical standards.

### C. DATA COLLECTION

This section presents a description of the construction of the study questionnaire, followed by a detailed discussion of the psychological tests included and the collection of demographic data. Outlines of the procedures for test administration and data analysis conclude the chapter.

#### i. Study questionnaire

The questionnaire was presented in a plastic spiral bound booklet and all subjects received the material in the same order. There were minor changes in the material presented to the contrast group. These differences will be described below.

Pages one to three consisted of questions about

the subject's background, early life history, and demographic data. All of these questions were designed by the experimenter.

The inmate population was asked on the first page, to outline their previous and current convictions. The contrast group was asked to list their juvenile and adult convictions. All subjects were asked their age and their social economic status. All subjects were asked whether they lived with parent figures up to the age of 16 and who these persons were. All were asked five questions about their relationships with their parents and family. Fifteen semantic differential questions were presented concerning aspects of changes they would like to have had as a child. One open-ended question invited general comments about their childhood.

Page four gave eight questions taken from the Clinical Analysis Questionnaire, to provide a gross measure of intelligence.

The next four pages consisted of a life stress questionnaire, called the Life Experiences Survey. The instructions here were changed for the contrast group, from "rate those events which you have experienced in the

six months prior to committing your present offence" to read "rate those events experienced in the six months from January, 1982 to July, 1982".

Page nine contained the Eysenck Personality Inventory for the criminal group. The contrast group did not complete the EPI because of problems concerning the amount of time it takes to complete, In addition, there is normative data available for use in comparisons with the inmate responses.

The tenth page contained the Bell Coping Scale, a scale of 18 items, each to be rated from "never" to "always". The scale is designed to show how persons cope with stress.

The eleventh page consists of a modified "repertory grid". The contrast group was not asked to rate their "partner in crime" and their "L.U.", the latter of which is slang for prison counsellor, for obvious reasons.

The FIRO-B was on the twelfth page.

The last page of the questionnaire, for the

criminal group, contained the answer sheet for the Ravens Progressive Matrices. The contrast group did not complete this because of time constraints, and the fact that normative data was available for comparison with the inmate sample.

ii. Description of measures

This study was an endeavour to survey and describe the personality, social support, and family background of the property and violent offender, and compare these two groups to each other as well as to a contrast group.

Demographic information was collected on all subjects. The inmate group completed six standardized psychological tests, while the contrast group completed four such tests. The following is a detailed explanation of the rationale for test selection and description of the specific measures used.

a. Eysenck Personality Inventory

The Eysenck Personality Inventory (EPI) (Eysenck 1963; Eysenck and Eysenck, 1968, 1969), was designed to

measure extroversion and neuroticism, two dimensions which are regarded as orthogonal to each other. The EPI contained 57 questions, 24 for each of the two scales, extroversion and neuroticism, and nine questions which function as a lie scale.

Persons scoring high on the psychoticism scale of the Eysenck Personality Inventory are said to be outgoing, impulsive, and uninhibited. The high scorers on the neuroticism scale tend to be emotionally labile, over-active, over-responsive, and in addition, are said to experience difficulty returning to a normal state after emotionally stimulating activities (Eysenck, and Eysenck, 1977).

Because much of the literature in the field has shown the EPI can be useful in discriminating nonviolent from violent criminals, it was an obvious choice for inclusion in this study. By utilizing this instrument, it was anticipated that the variables generated would provide meaningful information for discriminant analysis. Because the EPI has been used in many previous studies, its use would enable a comparison to be made between the present sample and other study results. An additional advantage was that Eysenck has developed some theoretical

predictions of how property offenders will respond to the EPI. The reliability and validity of the EPI is reported to be in the 80s to 90s for test-retest reliability, and the EPI correlates in the 70s and 80s with other measures. (Eysenck and Eysenck, 1969)

b. FIRO-B

Schutz (1958, 1967, 1977) developed the FIRO-B to measure traits in his three-dimensional model of interpersonal relations. The theory rests on the premise that "people need people". His three dimensions are: (1) inclusion, which refers to interaction and association with others; (2) affection, which refers to love and close, intimate relationships; and (3) control, which relates to power.

The FIRO is based on a theory of personality, the primary aspects of which concern interpersonal relations. The "B" in the FIRO-B refers to behaviour. Therefore the FIRO-B measures reported behaviour in interpersonal relations.

The FIRO-B is used to measure people's wanted and expressed behavioural characteristics for the three

dimensions. It consists of 54 questions with nine items measuring each of these three constructs on the two aspects of wanted and expressed, thereby yielding six scales, which are:

1. Inclusion Expressed - makes an effort to include others in activities, tries to belong, joins social groups, and tries to be with people as much as possible.

2. Inclusion Wanted - wants to be included in others' activities, to be invited, and to belong.

3. Control Expressed - exerts control and influence over others, takes charge, tells others what to do.

4. Control Wanted - wants to be controlled by others, to be told what to do.

5. Affection Expressed - makes effort to become close to others, is friendly and affectionate, tries to be personal and intimate with others.

6. Affection Wanted - wants affection from others, and wants others to make an effort to become close (Schutz, 1967).

The FIRO-B provides a general view of how the individual behaves in social relationships, as well as a view of his interpersonal needs. One reason for selecting the FIRO-B for this study was the fact that it represented one of the most widely used instruments to

assess interpersonal behaviour. The test has good reported reliability and validity, in the 70s and 80s for test-retest reliability and in the 90s for validity. (Schutz, 1967) It must be noted that these levels of reliability and validity were findings arising in separate studies, at different times with different samples.

Schutz (1977), who developed the FIRO, has found that parents who give little attention to their children raise offspring who have less interpersonal involvement. He also concluded that parents who harshly discipline their youngsters tend to have youngsters who are autocratic in interpersonal relationships. Cold parents tend to have children who dislike interpersonal closeness. The literature on criminals points toward the idea that parents of criminals tend to be cool or unpredictable in their relationships with their children.

Individuals who score low on "wanting inclusion", tend to be seen as counter social; those who score low on "wanting control" tend to be seen as rebellious; and those who score low on "wanting affection" tend to be seen as counter personal (Schutz, 1977).

As much of the literature on criminals points to poor family environment, the FIRO-B appeared to be useful as a sensitive measure of the social and interpersonal behaviour that may result from such a family history. Awareness of an inmate's social relationships may provide some insights into his social support structure, and if this is lacking, one may begin to gain some understanding of how theft and violence relate to such a life style.

c. Life Experiences Survey

The Holmes and Rahe (1967) "Schedule of Recent Experiences" is the most widely used measure of life stress, and the first systematic measure of this type of stress. One problem with this measure is that it assumes that life events affect all people in the same way and to the same extent. With this instrument, standard values of stress are assigned to each event identified by the subject without regard to individual differences. Inmates likely have a different value system from the norm of society. Because of this, they may find their stress response to be different from the normal population. Because of these difficulties, it was decided to use the less well-known Life Experiences Survey.

The Life Experiences Survey (LES) was developed by Sarason and Johnson (1979). Sarason, Johnson and Siegel (1979) found that LES scores correlated significantly with the SN scale of the Psychological Screening Inventory, which is used to assess similarity to incarcerated prisoners.

The LES asks the person to rate for himself the direction, either positive or negative, and the amount of stress experienced for each of 50 life events. The subject is also given the opportunity to add significant life events that are not included in the list provided. Each item on the list that a person has experienced in the preceding six months is to be rated on a seven point scale by the individual. In this study, the inmate population was asked to rate, on a 7 point scale, each of the items on the LES that had been experienced in the 6 months preceding his last offence.

The seven point ratings range from +3 to -3, with 0 being neutral as a stressor. Plus 3 represents a very positive experience and minus 3 represents a very negative experience.

Scoring is effected by converting the scale to a simple one to seven point scale, where -3 equals 1 (negative experience) and +3 equals 7 (positive experience). The converted scores are simply added to represent the total amount of stress experienced.

The LES was included in this study because it was felt that life stress may be a factor in those who become involved in crime.

d. Bell Coping Scale

If life stress is considered a factor in understanding the criminal population, then methods of coping with stress may also be relevant. Interaction between the amount of life stress and the methods of coping with that stress may be a factor in determining criminal behaviour. Bell (1975) found that mentally ill persons had significantly different coping patterns than those of normal individuals. The mentally ill person tended to seek more short-term "solutions" to stress than did others.

The Bell Coping Scale (BCS) was developed in 1975. The instrument contains 18 self-report items.

Individuals are asked to respond to each item on a five point Likart scale. The items ask respondents how often they engage in specified activities when under stress. Bell (1983) reports that the BCS has reliability coefficients from .50 to .70. It is perhaps noteworthy that the validity established for this instrument is of the inferred variety (Bell, 1983).

e. Ravens Progressive Matrices

The Ravens Progressive Matrices (RPM) (Raven, 1938, 1948, 1956) is a non-verbal measure of intelligence consisting of five sets of matrices. Respondents are requested to select one figure out of six to eight possibilities which will correctly complete the matrix. The RPM provides one score which can be converted to a percentile, and then to a non-verbal IQ measure. Test-retest reliability for the RPM was reported to be in the high 80s, and the construct validity is reported to be in the 80s as well (Raven, Court, Raven, 1977).

The RPM was felt to be an appropriate measure of intelligence for use with inmates because it is a non-verbal measure; thus providing a measure which is not normally affected by poor school attendance or poor

school experience. A non-verbal measure would be anticipated to be less affected by the amount of exposure to verbal learning situations such as those emphasized in most schools.

f. Clinical Analysis Questionnaire - B scale

A gross measure of verbal intelligence was used in this research to provide additional information on the inmates' verbal intelligence. However, due to time restrictions, only a short test could be included. The "B" scale of the Clinical Analysis Questionnaire (CAQ) is an eight item measure of verbal intelligence which has good reliability (.70s) and at least minimally acceptable validity (.30 to .40) (Cattell and Sells, 1974).

The inclusion of this measure makes it possible to verify that subjects were likely able to understand the concepts involved in completing the questionnaire. Also, if no very low scores were obtained then it could be argued that the reason for incarceration can not be intellectual incapacity for functioning in society.

g. Modified Repertory Grid

The Repertory Grid Technique was developed by Kelly (1955a, 1955b, 1963, 1969). The technique is based on his theories. Kelly believes that one important aspect of personal functioning is the way a person construes his life experiences. According to Kelly, it is of equal importance to understand the "self-characterizations" that are unique to an individual, as well as those that are similar to others (Lindzey and Hall, 1965).

Kelly developed the Role Construct Repertory Test (REP Test) to measure an individual's personal constructs. This test has several variations. (McReynolds, 1978). The most popular version of the test consists of the presentation of a list of "role types" such as mother and friend, followed by a request to show how the two are similar to each other, and on which constructs they differ (McReynolds, 1978).

Because the administration and scoring of the Repertory Grid is so complex, Bieri (1955) developed a modified version. Bieri, Atkins, Briar, Leaman, Miller and Tripodi (1958) developed a more widely used version

of the Repertory Grid. In this version, "role types" such as mother and sister are provided along with pairs of bi-polar constructs such as warm-cold and kind-unkind.

Additional modifications have been used in research to assess such subjects as automobiles (Mazis, 1973), group therapy patients (Fransella and Joyston-Bechal, 1971), universities (Reid and Holley, 1974), friendship groups (Duck, 1972; Duck and Spencer, 1972) and many other objects and people. Other authors (Reker, 1974; Vecc and Vecc, 1973) modified the REP grid so as to render it more appropriate for use with children (McReynolds, 1978).

Hersen, Kazdin and Bellack (1983) describe Kelly's theoretical orientation that had led him to develop the REP Grid as that of believing that proper assessment of individuals must focus on the qualitative study of individual cases, with special attention directed at the ways a person interacts with his feelings about his own social environment.

The present study incorporates many of the modifications suggested by Bieri (1955), Bieri et al. (1968), and Fransella et al., (1977). For example, in

this study, 14 roles or "significant others" made up part of the modified Repertory Grid (12 such roles were provided for the contrast group). These significant others included such roles as mother, father, friend, wife, person closest to you, etc. The two roles not presented to the contrast group were "partner in crime", and "your living unit officer".

All subjects were asked to rate each person on nine bi-polar constructs such as warm-cold, good-bad, honest-dishonest, helpful-not helpful, happy-sad, etc. These constructs were meant to reveal how positively the subject perceived the significant others in his life, and thereby provide insight into the social support structure of the subject.

The version of the repertory grid used in this study is similar to the form utilized by other investigators who employed a group administration procedure (Duck and Spencer, 1972; Fransella and Joyston-Bechal, 1971). This structure, in effect, amounts to an adaptation of the semantic differential approach to Kelly's construct based model of personality.

The responses to the Modified Repertory Grid were

summed across the bi-polar constructs for each significant other (role). This method resulted in 14 variables for the inmate population, and 12 for the contrast group.

#### h. Demographic and background data

Data was collected on 32 demographic variables. Physical statistics such as age, height and weight were self-reported. All subjects reported their weight in pounds and their height in inches or feet and inches. Weights were converted to kilograms and heights, to centimeters. Other items examined family circumstances such as socio-economic status, age at the time of leaving home, number of years spent living with a single parent, relatives, friends, or in foster homes. Additional items explored features of social history such as number of convictions as a juvenile.

Fifteen, 5 point, Likart-type questions were asked about recollections of experiences up to the age of 16. These questions elicited memory for wanting more or less of such attributes as: 1) physical build, referring to parameters such as weight and height; 2) social, referring to such issues as friends and clubs; 3) family,

with examples being time with parents, brothers or sisters, discipline; and 4) emotional, including variables such as love and understanding.

The two non-continuous variables in this study examined the questions of: 1) to whom the subjects turned for help with homework and other problems, and 2) the type of punishment administered by their parents.

### iii. Test administration

#### a. Experimental group

After the determination of which inmates would be included in the study, the Psychologist serving the institution was contacted to assist in the data collection. The institutional staff facilitated test administration indirectly by arranging for testing areas, inmate movement and other details but did not participate directly in interaction with inmates.

Inmates in the institutions were informed of their selection as possible subjects through notices given to them the day prior to testing. Inmate movement passes were given to them at that same time. For reasons

that could not be identified, only 50% of the subjects invited to participate arrived for the testing.

Inmates were divided into groups ranging from 7 to 25 in each group. The group sizes varied because of the differences in the size of interview rooms available and because of the administrative needs at some of the institutions. As indicated in earlier discussion, prison authorities imposed a number of non-negotiable regulations upon both sampling and data collection procedures. These difficulties are further exemplified here in the physical limitations in size of the testing facilities, and the insistence that the study not disrupt institutional routines such as work assignments. Fortunately, there are no substantial suggestions that the size of testing room or group would contribute any systematic variability to the data.

Inmates were assembled in the interview rooms for testing in groups. The purpose of the study was explained to them, through reading a prepared statement. The statement asked for their cooperation in completing some research questionnaires. They were told that it was completely voluntary and anonymous. Institutional staff were excluded from all explanation and testing sessions.

All inmate queries were answered by the experimenter. As previously reported, 85% of the subjects who arrived at the interview room completed the testing. The few who refused to take the tests generally said that they were not interested and left the room. All subjects who remained at this point completed the questionnaire in times ranging from 50 to 70 minutes.

The reasons for inmates not appearing for testing were not clear but some speculations for their non-appearance can be offered: (1) they did not want to leave their work stations; (2) they may not have wanted to be involved with "psychologists" because of the implications this may have had; (3) they were generally "uncooperative" inmates; (4) there was the possibility that some inmates were not informed of the testing. Because the reasons for some inmates not appearing for testing are unclear, it was difficult to determine if, or to what extent, the sample of inmates for the study may have represented a biased sample. However it was considered necessary to restrict testing to only voluntary subjects in order to limit more predictable but much more serious sources of error.

The age of the inmates sampled is consistent with

the age of the general population of inmates, and this lends some confidence to the assumption of randomness of those appearing for testing. The average age of inmates in federal penitentiaries in British Columbia is 28 years; the average age of this sample is 26.7. Although this is slightly lower than the general population of inmates, it has been noted that the present sample were these are all inmates at the beginning of their sentences, which presumably accounts for the lower age (Statistics Canada, 1983).

b. Contrast group

A letter outlining the study was personally handed to each potential contrast subject. All questions asked by the subjects were answered at that time. They were asked to complete the questionnaire and return it anonymously to the experimenter. This group was screened for histories of adult convictions, with the intent of excluding any such subjects from the sample, by a simple self-report method. There are admittedly obvious limitations to this procedure. However there is no strictly ethical method of inquiring into the legal history of a person who does not currently fall within some legitimate legal mandate. No-one reported such

convictions and therefore no-one was excluded from this contrast group. There were no subjects who had reported extensive juvenile convictions. The response rate of these child-care counsellors was 75%.

#### D. DATA ANALYSIS

There were 76 variables used in the data analysis in this study. Table 2 lists all variables included for

TABLE 2

LIST OF VARIABLES INCLUDED IN ANALYSIS

1. Age	45. Don't worry about it
2. Height	46. Sleep more
3. Weight	47. Take definitive action
4. Socio-economic status of family	48. Draw on past experiences
5. Number of juvenile convictions	49. Smoke, eat more
6. Age of moving out on own	50. Get prepared to expect the worst
7. Years living with natural mother and father	51. Curse
8. Years living with natural mother and not father	52. Make alternate plans
9. Years living with natural father and not mother	53. Use drugs
10. Years adopted	54. Involve self in other activities
11. Years living with foster parents	55. Cry
12. Years living with relatives	56 to 69 are modified repertory grid items
13. Years living on own	56. Self
14. Frequency of parents helping with homework	57. Mother
15. Who was turned to for help	58. Father
16. Frequency of talking about problems as a child	59. Sister
17. Type of parental punishment	60. Brother
18 to 32 rated from much less to much more	61. L.U. (inmate group only)
18. Friends	62. Friend (not lover)
19. Time with parents	63. Girlfriend/wife
20. Change of residence (moving)	64. Person closest to you
21. Holiday trips with parents	65. Person you dislike very much
22. Weight	66. Person you respect
23. Brothers or sisters	67. Former girlfriend/wife
24. Understanding	68. Partner in crime (inmate group only)
25. Money	69. Self as you would like to be
26. Love	70 to 75 are Piro-B scales
27. Church attendance	70. Express inclusion
28. Time with professional counsellor	71. Express control
29. Height	72. Express affection
30. Intelligence	73. Want inclusion
31. Club membership	74. Want control
32. Appropriate discipline	75. Want affection
33. Verbal IQ	76. Non-verbal IQ
34. Life stress	
35. EPI extraversion scale	
36. EPI neuroticism scale	
37. EPI lie scale	
38 to 55 are methods of coping with stress	
38. Use alcohol	
39. Talk it out	
40. Seek more information	
41. Daydream	
42. Believe in supernatural power	
43. Physical exercise	
44. Try to see humorous aspects of situation	

analysis. These are derived from eight different sources: demographic and background information (32 variables), verbal IQ (1), life stress (1), Eysenck Personality Inventory (3), Bell Coping Scale (18), modified Repertory Grid (14), FIRO-B (6), Ravens Progressive Matrices (1).

All data generated from the three groups were coded and entered in the computer at the University of Calgary. All standardized tests were scored in the prescribed manner. All continuous variables were analyzed by use of one-way analysis of variance. The non-continuous variables were evaluated by use of Chi Square.

All variables in the one-way analysis which obtained a significance level of  $p < .05$  were used in a discriminant analysis. The results of the discriminant analysis were used to generate an equation representing the variables which contributed to discriminating the three groups in this study.

All results were used to develop a model to describe variables that discriminate the property offender from the violent offender.

## CHAPTER FOUR : RESULTS

### A. INTRODUCTION

This chapter consists of four main sections. The initial segment presents data pertinent to the issue of validity of the questionnaire employed in the study. The second section reports the results of the one-way analyses of variance. The Chi Square analyses for the non-continuous variables constitute the third section. Finally, the fourth section of this chapter presents the results of the discriminant function analysis involving the continuous variables.

All results reported here are based on the data collected from the sample of three groups totalling 74 subjects. There were 29 property offenders, 16 violent offenders, and 29 in the contrast group. The data relating to all variables examined in this study were analysed using the Statistical Package for Social Sciences (SPSS) (Nie, Hull, Jenkins, Sheenbrenner, 1975). All one-way analyses were carried out in a two-tailed approach.

## B. QUESTIONNAIRE VALIDITY AND RELIABILITY

The questionnaire required the subjects to provide information on a number of similar constructs presented in different ways, thereby providing the opportunity to examine the responses for consistency and to infer the degree of reliability involved.

The offender groups indicated that they had a poor home environment as registered in their responses to "parental punishment", "help with problems", and "help with school work" questions. On the modified Repertory Grid, they also rated their father and mother negatively. On the other hand, the contrast group, which also produced consistent responses, reacted positively to all of these aspects of home environment.

The "lie" scale scores from the Eysenck Personality Inventory were low. No subject had a score over 4 on this scale and 5 is considered to be the cutoff for questioning the validity of responses. This indicates that the responses were probably valid (Eysenck and Eysenck, 1968). It may seem surprising to obtain this level of honesty among a large group of inmates on such a personal questionnaire. It is possible that the

original sample had been self-screened in that many inmates may have chosen not to participate in the study because of their lack of interest in spending time telling a stranger about themselves or, alternately, because of a need to keep perceptions and behaviours private. Those who participated may have been sufficiently concerned to treat the study seriously and therefore provide valid answers. These possible explanations are consistent with high validity, and perhaps suggest a wider sample of the population may have resulted in less reliable and valid results. However, such a conclusion raises concerns about the generalizability of the results. This may be important to bear in mind in later studies.

#### C. ONE-WAY ANALYSES OF VARIANCE

The continuous variables grouped naturally into eight categories:

- (1) Demographic and background information.
- (2) Verbal IQ.
- (3) Life experiences.
- (4) Eysenck Personality Inventory.
- (5) Bell Coping Scale.
- (6) FIRO-B.

(7) Modified Repertory Grid.

(8) Non-verbal IQ.

As outlined in Chapter Three, a series of one-way analyses of variance were carried out on 60 variables.

i. Demographic and background information

This section consists of items regarding the respondents' reported perceptions of basic background, family and social memories, and, general early life experiences. There were 32 separate items within this category. The means, standard deviations, and the results of a series of one-way analyses of variance for each of these variables in this section, are reported in Table 3.

Appendix one contains the items presented to measure the subjects' perceptions of early life experiences. These items were developed by the author of the present study.

TABLE 3  
MEANS, STANDARD DEVIATION AND PROBABILITY  
RESPONDENT'S BACKGROUND INFORMATION AND  
EARLY LIFE EXPERIENCES

VARIABLE	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROB F
	MEAN	SD	MEAN	SD	MEAN	SD	
Age	26.1	5.2	27.4	5.4	29.4	5.0	.060
Height(cm)	179.3	5.0	170.8	10.8	176.7	6.4	.001**
Weight(kg)	76.8	9.2	72.0	5.4	78.8	8.8	.039*
Family SES	3.1	0.9	2.9	0.7	3.2	0.6	.521
No. juv. conv.	5.4	4.1	3.6	4.1	0.2	0.5	.001**
Age left home	15.5	1.9	15.2	2.4	19.7	3.0	.001**
Yrs. with Mo/Fa	10.2	6.2	10.7	5.6	13.6	5.1	.067
Yrs. with Mo	1.9	3.9	1.2	2.6	0.6	1.7	.253
Yrs. with Fa	0.6	2.5	0.1	0.3	0.0	0.0	.296
Yrs. adopted	0.8	2.5	0.2	0.7	1.7	4.9	.401
Yrs. fost. par.	1.4	3.1	1.9	3.8	0.0	0.0	.036*
Yrs. relatives	0.3	1.0	1.2	2.7	0.2	0.9	.059
Yrs. on own	0.6	1.1	0.9	1.3	0.3	0.1	.006**
Fr. school help	2.2	1.2	2.1	1.1	2.8	1.0	.039*
Fr. of talk	3.2	1.6	3.1	1.7	2.5	1.1	.122
Friends m/l	3.3	1.1	3.3	0.9	3.1	0.4	.729
Time with par.m/l	3.7	1.1	3.6	1.1	3.4	0.6	.473
Moving m/l	2.3	1.2	2.9	0.7	3.1	0.5	.009**
Holiday trips m/l	3.1	1.4	3.2	1.4	3.4	0.6	.737
Weight m/l	2.9	1.0	3.0	0.7	3.0	0.6	.957
Siblings m/l	3.3	0.7	3.4	1.0	3.2	0.5	.493
Understanding m/l	3.5	1.1	3.7	1.1	3.3	0.5	.502
Money m/l	3.4	1.0	3.7	0.9	3.4	0.7	.445
Love m/l	3.7	0.8	4.0	1.0	3.1	0.8	.001**
Church att. m/l	2.4	1.3	2.1	1.0	3.1	0.8	.004**
Prof. help m/l	2.6	1.4	2.5	1.3	3.2	0.7	.086
Height m/l	2.7	0.7	3.1	0.9	3.4	0.6	.002**
Intelligence m/l	3.3	0.7	3.7	1.0	3.3	0.5	.142
Club member. m/l	3.1	1.0	2.6	1.2	3.4	0.6	.015*
Appr. disc. m/l	3.3	1.1	2.9	1.2	3.1	0.4	.451

\* P < .05

\*\* P < .01

There were 30 continuous variables concerning early life experiences and of these a total of 12, or more than one third, showed overall significance at a level of  $p < .05$ . They are listed below:

- (1) Number of juvenile convictions

- (2) Age left home
- (3) Number of years with foster parents
- (4) Number of years on own before age 16
- (5) Frequency of receiving help from parents with school work
- (6) Wanting more/less change of residence before age 16
- (7) Wanting more/less love before age 16
- (8) Want more/less church attendance before age 16
- (9) Wanting more/less height before age 16
- (10) Wanting more/less club membership before age 16
- (11) Height
- (12) Weight

The results of the responses of the three groups on each of the twelve variables are presented below.

a. Number of juvenile convictions

The numbers of juvenile convictions were significantly less for the contrast group than for each of the two criminal groups ( $p = .001$ , property offenders;  $p = .006$ , violent offenders). The violent and property offenders reported similar numbers of criminal convictions as juveniles ( $p = .151$ ).

b. Age of leaving home

The reported age at which subjects left home was similar for the two inmate groups ( $p = .674$ ), but both were significantly different from the contrast group ( $p = .001$ , property offender;  $p = .001$ , violent offender). The contrast group reported leaving home an average of four years later than the criminal group. The offenders reported that as a group they left home at about age 15 while the contrast group left home at about age 19.

It is possible that the later age of leaving home for the contrast group may have been associated with the fact they were engaged in post-secondary education and, therefore, were more financially dependent on their parents.

c. Number of years with foster parents

None of the respondents in the contrast group spent time with foster parents. The average number of years that property and violent offenders spent in foster homes were 1.4 and 1.9 years, respectively. There was no significant difference between the two inmate groups

( $p = .642$ ). The proportions of violent and property offenders having been in foster homes appears to be about similar at 36% of the violent offenders, and 31% of the property offenders. The differences on this variable indicate a significant frequency of home environment disruptions in the offender groups which does not occur at all in the contrast group.

d. Number of years on own before age 16

The property and violent offender respondents spent a mean of 1.1 and 1.3 years respectively, living on their own before age 16, compared to 0.1 for the contrast group ( $p = .011$ , property;  $p = .014$ , violent). There was no significant difference between the two inmate groups ( $p = .419$ ).

The construct underlying this variable is similar to the "age of leaving home" variable. The two correlated at  $-.504$ . The negative correlation may be misleading in that one variable was "age of leaving home" and the other was "number of years on own under age 16". The negative correlation reflects measurement of similar characteristics. The fact that they are seen to correlate is a further measure of reliability.

e. Frequency of receiving help from parents with school work

Both offender groups reported receiving less help from their parents than the contrast group, according to ratings on a scale from a low of 1 to a high of 4 ( $p = .024$ , violent;  $p = .038$ , property), with the overall level of significance being  $p = .039$ . The means were 3.2 for the property group, 3.1 for violent offenders, and 2.5 for contrast subjects. The two offender groups were not significantly different from each other.

f. Wanting more or less change of residence before age 16

The property offenders differ significantly from the contrast group on this measure ( $p = .006$ ) with an overall level of  $p = .011$ . There is no significant difference between the two offender groups ( $p = .073$ ). Both offender groups wished to move less than they had, although the violent offenders objected less to their frequency of moving than did the property offenders. The contrast group was content with the amount of change of residence that they had experienced. It is not known how much the individuals in the three groups actually moved.

It is important to remember that this is a measure of recalled perception of earlier experience which might reflect a remembered desire for more residential stability, or conceivably, a more general desire for more stable early experience.

g. Wanting more or less love before age 16

There is no significant difference between the two inmate groups on this 5 point Likart type scale (5=much more, 1=much less). The two offender groups wished more love than they had received. Mean ratings were 4.0, violent, 3.7, property, and 3.1, contrast, on a scale where 3.0 represents "same amount" of love. The overall level of significance for this variable was  $p = .004$ . Although the violent offender reported a need for more love than did the property offender, this was not significant ( $p = .327$ ).

The contrast group was generally more content with the amount of love they received. There was a significant difference between the violent offender group and the contrast group ( $p = .001$ ). The property offenders, compared to the contrast group, also wanted significantly more love ( $p = .003$ ).

h. Wanting more or less church attendance before age 16

The "wanting more or less church attendance" variable displayed an overall significance level of  $p = .004$ . There was no significant difference between the two inmate groups on this variable ( $p = .402$ ). Both groups wished less church attendance than they had experienced. The contrast group was satisfied with their frequency of church attendance. The differences between criminal and contrast groups were significant ( $p = .001$ , overall;  $p = .001$ , violent;  $p = .003$ , property).

The inmate groups appeared to have had some problems with this question. They sometimes entered comments such as "no way", and "never". It appears that they may have had little church involvement and did not desire any. However, because of the way the question was worded it was difficult to convey the idea of not going to church and not wanting to. The poor wording of the question appears to have provoked the apparently confused responses.

i. Height

The overall significance for the variable concerning the subjects' reported height was  $p = .001$ . The property offenders were the tallest at 1.79 metres, and the violent offenders were the shortest of the three groups at 1.70 metres. The contrast group mean was 1.76 metres. There was no significant difference between the height of the property offender and the violent offender ( $p = .108$ ). There was a significant difference between the property offender group, compared to the contrast group, ( $p = .001$ ), but not between the violent and the contrast groups. ( $p = .352$ )

It is important to remember that these results depend upon the subjects' reports of their height and it may be that the property offenders exaggerated their height but, since this was not anticipated to be a significant concern, no actual measurement of height was taken. Therefore, there is no data to confirm or refute such a speculation. The property offender reporting more height is a somewhat surprising result. It may be fruitful to explore the effects that being taller may have had on the property offenders' development. The possibility that the results occurred by chance alone

seems unlikely in view of the probability of  $P = .009$ .

j. Wanting more or less height before age 16

There was no significant difference between the property and violent offender groups on this variable ( $p = .109$ ). The means were 2.7, property, 3.1, violent, and 3.4 for the contrast group. There was, however, overall significance at a level of  $p = .0016$ . There was also no significant difference between the violent offender and the contrast group ( $p = .352$ ). The property offenders were the only group to report wanting less height, which is consistent with the previous question relating to overall height, where they perceived themselves to be the tallest of the three groups.

k. Weight

The violent offender reported weighing the least of the three groups at 72.0 kilograms, and the contrast, the most, at 78.8 kilograms. It should be noted that the violent offender also reported the least height of the three groups, so it seems appropriate that they should also weigh less. The contrast group weighed the most yet was not the tallest. It appears that they are generally

more sturdily built than the inmate groups, which may be a function of life style and comparative affluence, and, perhaps most notably of all, lack of recent institutionalization. Measurement on this variable found an overall level of significance of  $p = .039$ .

1. Wanting more or less club membership before age 16

The club membership variable had an overall significance of  $p = .015$ . The violent offender wished less club membership, with a mean of 2.6 on a 5 point scale, while the contrast and the property offender groups wished slightly more club membership, displaying means of 3.1 and 3.4, respectively. The violent offender group wanted significantly less club membership than the contrast group ( $p = .015$ ).

ii. Verbal IQ

The responses to the eight items of the verbal IQ measure were scored with a possible range from zero to eight for each subject. Table 4 presents the means, standard deviations, and the results of the one-way analysis for the three respondent groups on the variable of verbal IQ.

TABLE 4  
MEANS, SD, AND PROBABILITY OF VERBAL IQ RESULTS

VARIABLE	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROBABILITY OF F
	MEAN	SD	MEAN	SD	MEAN	SD	
VERBAL IQ	6.21	0.96	5.62	1.50	7.28	0.88	.001

The instrument used to measure verbal intelligence was taken from the Clinical Analysis Questionnaire (Cattell and Sells, 1974). All three respondent groups were above the standardized mean of this test. There was no statistically significant difference between the property and violent offenders ( $p = .171$ ), although the property offender, with a mean of 6.2, scored slightly higher than the violent offender with a mean of 5.6. There was a significant difference between the contrast group mean of 7.3, and the two inmate groups ( $p = .001$ , property;  $.001$ , violent), in favor of the contrast group.

The scores on this verbal intelligence scale also tend to support the general observation that the respondents experienced little difficulty in reading and

understanding the questionnaires.

### iii. Life Experiences Scale

The Life Experiences Scale contains 58 items. Responses were summed for each subject, thus providing a total stress score, with the higher raw score indicating more stress experienced by the subject. The means, standard deviations, and the overall probability of F are reported in Table 5.

TABLE 5  
MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF F  
LIFE EXPERIENCE SCALE

VARIABLE	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROBABILITY OF F
	MEAN	SD	MEAN	SD	MEAN	SD	
TOT.STRESS	42.8	14.3	37.5	14.3	30.8	11.7	.012

The property offenders, with a mean score of 42.8, reported greater stress, during the six months prior to their convictions, than did the violent offenders, who showed a mean of 37.5, although this difference was not significant. The contrast group claimed the least stress, with a mean score of 30.8.

There was no significant difference between the two inmate groups ( $p = .619$ ). The property and violent offender groups were significantly different from the contrast group ( $p = .001$ , property;  $p = .002$ , violent). The inmate group indicated that they had experienced significantly more stress than the contrast group. These ratings of stress are retrospective and the fact of being in jail may cause the offenders to view their prior experiences as being more severely stressful because of their current situation and negative environment.

#### iv. Eysenck Personality Inventory

The results of the analysis of data collected on the Eysenck Personality Inventory are presented in Table 6. The contrast group did not complete the EPI because of time constraints. Table 6 shows the means, standard deviations and the probability of F for the two offender groups. There was no significant difference between the two groups on any item within this variable ( $p = .2112$ , extraversion;  $p = .658$ , introversion;  $p = .447$ , lie scale).

TABLE 6

MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF F  
EYSENCK PERSONALITY INVENTORY  
(OFFENDER GROUPS ONLY)

VARIABLE	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROBABILITY OF F
	MEAN	SD	MEAN	SD	MEAN	SD	
EXTRAVER.	11.8	4.3	10.2	3.2	NOT AVAIL	.211	
NEUROT.	10.4	5.2	9.7	3.9	NOT AVAIL	.658	
LIE SCALE	2.9	1.5	2.5	1.6	NOT AVAIL	.447	

v. Bell coping scale

The Bell Coping Scale, with its 18 self-report items, assesses the methods that are used by the subject to cope with stress. Each individual rated the 18 items on a five-point Likart-type scale. Higher scores indicate that the individual is more likely to use the method of coping with stress described in that item. Table 7 gives the means, standard deviations, and the results of a series of one-way analyses of variance. Not only did the inmate group report more stress, as indicated by an earlier measure, but they also coped less efficiently with that stress.

TABLE 7  
MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF F  
BELL COPING SCALE

VARIABLE	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROBABILITY OF F
	MEAN	SD	MEAN	SD	MEAN	SD	
DRINK ALC.	3.4	1.0	2.4	1.2	2.4	0.8	.001**
TALK OUT	2.6	1.0	2.7	0.7	3.3	1.0	.020*
SEEK INFO.	3.5	1.1	4.0	0.6	4.2	0.6	.008**
DAYDREAM	2.6	1.2	3.2	1.3	2.3	1.0	.056
BELIEVE GOD	2.3	1.6	1.8	1.2	2.0	1.1	.441
WORK IT OFF	2.7	1.3	2.8	1.1	3.0	1.2	.528
SEE HUMOR	3.1	1.2	2.7	0.9	3.2	0.9	.399
IGNORE	2.5	1.1	2.6	1.0	2.9	0.8	.324
SLEEP	2.4	1.2	2.4	1.2	2.5	0.9	.953
TAKE ACTION	3.3	1.1	3.6	0.9	3.6	0.7	.363
DRAW PAST	3.2	1.2	3.4	0.8	3.8	0.8	.039*
EAT, SMOKE	2.8	1.3	2.9	1.3	2.3	1.2	.226
EXP. WORST	3.9	0.9	3.3	1.1	2.4	0.8	.001**
CURSE	3.1	1.1	3.4	1.3	2.9	0.9	.293
MAKE PLANS	3.4	1.0	2.9	1.0	3.3	0.9	.172
USE DRUGS	3.1	1.5	2.5	1.0	1.3	0.7	.001**
OTHER ACT.	3.1	1.2	2.6	0.8	2.8	0.7	.162
CRY	1.6	1.0	1.6	0.8	1.6	0.6	.901

\* P < .05

\*\* P < .01

a. Use of alcoholic beverages

The overall significance level for this variable is  $p = .001$ . With most of the variables described to this point, the significant difference was usually the greatest between the offender groups and the contrast group, but on this variable there was a significant difference between the two inmate groups as well. The property offenders indicated that they used alcoholic beverages to cope with stress significantly more often than did the violent offender ( $p = .010$ ). The property offender also used alcoholic beverages in reaction to

stress more often than did the contrast group ( $p = .001$ ).

There was no significant difference between the violent offender group and the contrast group on this variable ( $p = .945$ ). The significance level indicates that violent and contrast groups were almost identical in reported use of alcohol under stress.

b. Talked it out with others

The overall probability of  $F$  in this case was  $p = .020$ . There was no significant difference between the property and violent offenders on this variable ( $p = .725$ ). Both offender groups of respondents showed statistically significant responses to this variable ( $p = .014$ , property;  $p = .024$ , violent) compared to the contrast group, indicating that the contrast group "talked it out" much more often than the offenders.

c. Sought more information

It appears that the property offenders, with a group mean of 3.5, did not seek information about stressful situations as often as the violent offender, who showed a group mean of 4.0 ( $p = .049$ ), and much less

often than the contrast group, with a mean score of 4.2 ( $p = .003$ ). There was no significant difference between the violent offender group and the contrast group ( $p = .319$ ). The overall significance level was  $p = .008$ .

d. Drew on past experiences

The overall significance of F with this variable was  $p = .039$ . There was no significant difference between the two inmates groups and their reported use of past experiences in coping with stress ( $p = .519$ ). The contrast group, with a mean score of 3.8, drew on their past experiences when faced with stress significantly more often than did the property offenders, with a mean of 3.2 ( $p = .018$ ). The difference between the contrast group and the violent offender group, who displayed a mean of 3.4, on this variable was not significant ( $p = .076$ ).

e. Prepared to expect the worst

There were significant differences among all three groups of respondents on this variable. The overall probability of F was  $p = .001$ . The property offenders, at a mean score of 3.9, expected the worst ( $p$

= .035) significantly more often than the violent offenders, with a mean of 3.3. The property offender also expected the worst more often than the contrast group, whose mean was 2.4 ( $p = .001$ ). The violent offender group expected the worst more often than the contrast group ( $p = .003$ ). It is apparent that the offenders expected their intervention to be a failure and usually expect the worst.

f. Used drugs

There was an overall level of significance of  $p = .001$  on this variable. The reported use of drugs under stress was not significantly different for the violent, with a mean of 2.5, and property offenders, who showed a mean of 3.1 ( $p = .131$ ). The contrast group, with a mean of 1.3, used drugs as a coping method significantly less often than did the offender groups ( $p = .001$ , property;  $p = .001$ , violent).

vi. FIRO-B scales

The FIRO-B contains six scales, with the possible scoring range for each scale being zero to nine. The means, standard deviations, and the results of the

one-way analysis of variance, for the six scales, are presented in Table 8.

TABLE 8  
MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF F  
FIRO - B

VARIABLE	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROBABILITY OF F
	MEAN	SD	MEAN	SD	MEAN	SD	
EXP.INCL.	2.2	1.8	1.9	1.4	2.6	1.8	.134
EXP.CONT.	2.7	2.3	0.9	1.0	3.4	2.1	.007**
EXP.AFFEC.	2.5	2.5	1.7	1.2	3.0	2.1	.205
WANT INCL.	1.4	2.6	0.6	1.3	1.7	2.9	.396
WANT CONT.	2.7	2.6	2.5	2.3	3.0	2.3	.731
WANT AFFEC.	2.6	2.4	2.0	2.1	3.7	2.4	.101

\* P < .05

\*\* P < .01

Of the six FIRO-B scales, only the express-control item produced a significant difference, the overall level of significance for this variable being  $p = .007$ . The violent offender scored significantly lower than the property offender and the contrast groups ( $p = .001$ , and  $p = .001$ , respectively). There was no significant difference between the property and the contrast groups, ( $p = .418$ ).

#### vii. Modified Repertory Grid

Each respondent was asked to rate "significant

others" on the modified Repertory Grid which contained nine bi-polar rating scales. These ratings followed the general format of a Kelly Repertory Grid (Kelly, 1955b), with the revisions for use in group data collection, as suggested by Fransella and Bannister (1977).

The inmate groups were asked to rate fourteen significant others and the contrast group was asked to rate twelve significant others. The two that the contrast group did not rate were "partners in crime" and "living unit officer".

The analysis of the modified grid was carried out in two steps. First, a factor analysis was carried out by collapsing the nine scales across the 12/14 roles. These results indicated that there was only one factor in the results.

The second step in the analysis of these scales was to sum the responses for each role, to yield 12/14 variables. The scales were scored so that the sums represent how positively each significant other was perceived, with the higher score indicating a more positive perception.

By summing the ratings across the nine rating terms (honest-dishonest, good-bad, etc.) a total rating for self and the significant others was obtained. These total ratings were subjected to an analysis of variance, which revealed a significant difference on the four roles of "self", "father", "ideal self" and "person closest to you", as shown in Table 9.

TABLE 9  
MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF F  
REPERTORY GRID

	PROPERTY OFFENDER		VIOLENT OFFENDER		CONTRAST GROUP		PROBABILITY OF F
	MEAN	SD	MEAN	SD	MEAN	SD	
SIG. OTHER							
SELF	21.6 (N= 24)	5.8	21.6 (N= 15)	7.7	16.2 (N= 18)	3.9	.002**
MOTHER	17.7 (N= 26)	8.9	19.3 (N= 15)	6.6	15.2 (N= 27)	5.0	.092
FATHER	22.7 (N= 26)	10.9	20.5 (N= 13)	7.0	16.2 (N= 27)	6.7	.037*
SISTER	18.4 (N= 22)	6.6	18.1 (N= 14)	9.6	17.5 (N= 21)	7.6	.725
BROTHER	22.0 (N= 22)	8.9	19.8 (N= 14)	8.0	20.1 (N= 24)	6.1	.753
L.U.	26.1 (N= 21)	9.9	19.8 (N= 11)	9.5	NO DATA		.206
FRIEND	17.0 (N= 25)	7.8	19.9 (N= 15)	6.3	17.9 (N= 27)	5.9	.227
WIFE/GF.	16.1 (N= 23)	7.6	16.3 (N= 13)	6.4	16.0 (N= 25)	6.1	.773
PERS. CL.	16.7 (N= 19)	7.8	20.3 (N= 14)	8.7	15.0 (N= 24)	4.9	.020*
PERS. DIS.	33.4 (N= 21)	8.8	33.0 (N= 11)	8.0	33.5 (N= 24)	6.2	.856
PERS. RESP.	15.1 (N= 25)	7.1	17.3 (N= 13)	7.6	15.1 (N= 26)	6.2	.292
FORM. W/GF.	18.0 (N= 24)	10.1	20.5 (N= 15)	8.0	18.4 (N= 24)	5.4	.371
PAR. CRIME	19.1 (N= 18)	8.4	25.6 (N= 7)	13.6	NO DATA		.061
ID. SELF	13.6 (N= 19)	6.6	19.1 (N= 15)	11.8	10.6 (N= 19)	2.5	.003**

\* P < .05  
\*\* p < .01

a. Grid ratings of "self"

The overall level of significance for this variable was  $p = .002$ . The property and violent offender groups had similar ratings of "self" ( $p = .472$ ). The offender group ratings, with means of 21.6, property, and 21.6, violent, were significantly more negative than those of the contrast group, whose mean score was 16.2 ( $p = .001$ , property;  $p = .007$ , violent), indicating that the contrast group felt more positively about themselves.

b. Grid ratings of "father"

The overall significance level for ratings of fathers was  $p = .037$ . There was no significant difference between the violent, mean of 20.5, and the property offender, mean of 22.7, ratings of their fathers ( $p = .519$ ). The property offender groups viewed their fathers more negatively than did the contrast group, with a mean of 16.2 ( $p = .018$ ). The difference between the violent and contrast groups was not significant ( $p = .101$ ).

It is interesting to note that in the case of mother relationships, the overall level of significance was  $p = .092$ , with both inmate groups having a more negative view of their mother than did the contrast group.

c. Grid ratings of "person closest to you"

The ratings for the variable "person closest to you" had an overall significance of  $p = .020$ , and were significantly lower for the violent group of respondents (mean = 20.3) as compared with the contrast group, with a mean of 15.0 ( $p = .006$ ). There were also significantly more negative ratings for this variable for the violent group as compared to the property offender, with a mean of 16.7 ( $p = .029$ ). There was no significant difference between the property offender group and the contrast group. The violent offender respondent showed less positive regard than the property offender for "partner in crime", or friend who is doing crime with the subject, as well ( $p = .061$ ). Both groups had ratings for their "partner in crime" similar to their ratings for "person closest to you".

d. Grid ratings of "ideal self"

This variable showed an overall significance of  $p = .003$ . There was a significant difference between the property (mean = 13.6) and violent (mean = 19.1) offender groups ( $p = .015$ ), with the violent offender group registering the more negative ratings of ideal self. The contrast group respondents had the highest ratings (mean = 10.6). There was a significant difference between the contrast and violent offender groups ( $p = .001$ ), but not between the contrast and the property offender groups ( $p = .228$ ).

Of the 12/14 variables in this modified repertory grid, four proved to be significant in discriminating the three groups. The items dealing with self and ideal self showed the greatest significance. The contrast group had more positive feelings about self, father and their ideal self, than did the offender group. The violent offender had more negative feelings about person closest and ideal self than the property offender group and the contrast group.

viii. Non-verbal IQ

The Ravens Progressive Matrices was scored in the traditionally prescribed manner. The raw scores were weighted to account for the ages of the subjects. The contrast group did not complete this section. The weighted scores were analyzed using a one-way analysis of variance. The means, standard deviations, and probability of F are presented in Table 10 for both the violent offender and property offender groups. The difference between the offender groups on this variable was not significant. The means were in the average range (45.8, property offenders; 46.2, violent offenders).

TABLE 10  
MEANS, STANDARD DEVIATIONS, AND PROBABILITY OF F  
RAVENS PROGRESSIVE MATRICES  
(OFFENDERS ONLY)

	PROPERTY OFFENDER		VIOLENT OFFENDER		PROBABILITY OF F
	MEAN	SD	MEAN	SD	
WEIGHTED RAW SCORE	45.85	6.12	46.21	5.27	.065
PERCENTILE	56		58		

#### D. NON-CONTINUOUS VARIABLES

There were two non-continuous variables in this study. These were included to examine the relationships between the subjects and their parents. The two components of this relationship that were assessed are:

(1) the extent that the subject relied on their parents or parent figures for help with problems.

(2) the type of punishment received as a child.

##### i. Who helped

This question was worded as follows: "When you needed help from someone, who did you turn to most often, for that help?". The following five response options were provided: "parents", "friends", "no-one", "family members", "professional counsellor or social worker". Table 11 shows the percentage distribution for the five choices, across the three groups of subjects.

An overall Chi Square was carried out on the data, the results of which indicated that there is a significant difference between the subject groups at .05 level. This analysis indicated that 25% of the variance in the dependent variable was accounted for by this

variable.

TABLE 11  
PERCENTAGE DISTRIBUTION OF ALL  
RESPONDENTS TO "WHO HELPS?"

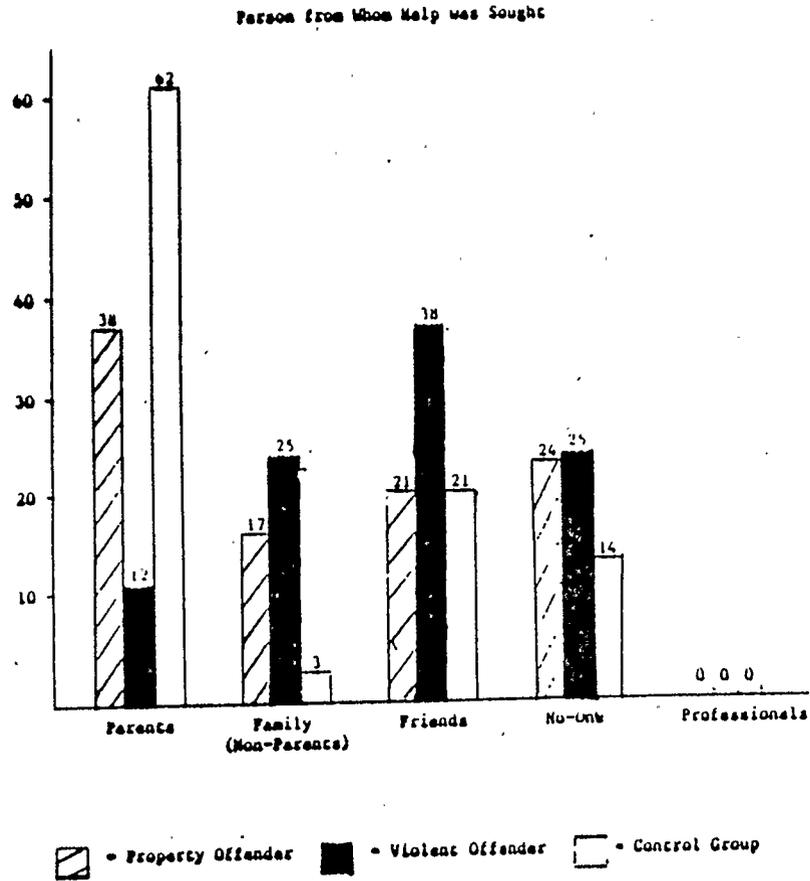
MEMBERS	PARENTS	FRIENDS	NO ONE	FAMILY
PROPERTY OFFENDER	38% N=11	21% N=6	24% N=7	17% N=5
VIOLENT OFFENDER	12% N=2	38% N=6	25% N=4	25% N=4
CONTRAST GROUP	62% N=18	21% N=6	14% N=4	3% N=1

Overall Chi Square, Significance  $p = .048$

Analysis of the results of the variable concerning "who helped" revealed that violent offenders turned to parents much less than did the other two groups, and turned to friends and other family members more frequently than did the other two groups. The property offenders turned to parents much more than did the violent offender group but still less than the contrast group. The contrast group turned to their parents almost 65% of the time, and friends, second most frequently.

To summarize the above, parents were said to be

most often used as a resource by the contrast group, and least by the violent offenders, who turned to friends most frequently. These results are represented visually in Figure 1.



The two inmate groups also reported turning to "no-one" more often than did the contrast group.

It is interesting to note that none of the 74 subjects in the study reported turning to professionals

for assistance.

### ii. Types of parental punishment

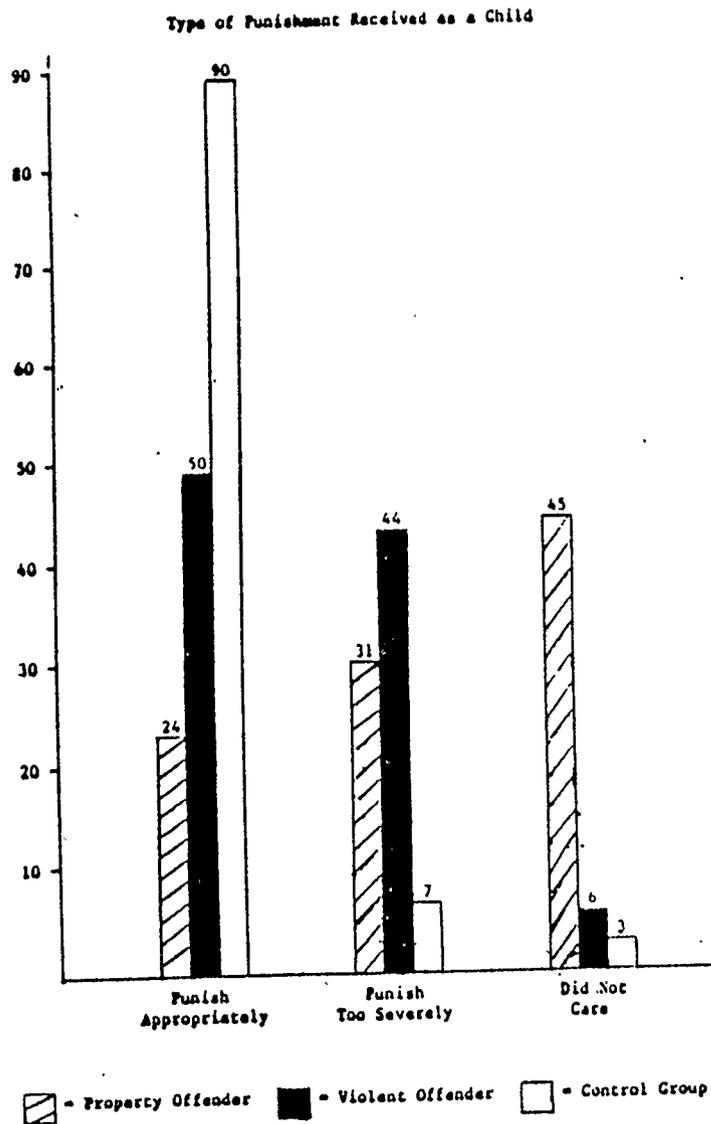
This non-continuous variable concerns the type of punishment the subjects received from their parents. The following four response options were available: (1) punished too severely; (2) punished appropriately; (3) did not care; and (4) other (specify). Table 12 shows the percentage distribution for only three of the four options since no-one chose the fourth, "other" option. Overall Chi Square analysis showed significance to be  $p < .001$ .

TABLE 12  
PERCENTAGE DISTRIBUTION OF ALL RESPONDENTS  
TO "PARENTAL PUNISHMENT"

	PUNISH TOO SEVERELY	PUNISH APPROPRIATELY	DIDN'T CARE
PROPERTY OFFENDER	31% N=9	24% N=7	45% N=13
VIOLENT OFFENDER	44% N=7	50% N=8	6% N=1
CONTRAST GROUP	7% N=2	90% N=26	3% N=1

Overall Chi Square value, 32.21;  $p < .001$

This variable, concerning parental punishment, indicated that violent offenders showed the highest percentage of responses in the "punished too severely" category. Property offenders had the highest percentage in the "didn't care" category. Nine out of ten in the contrast group responded in the "parents punished appropriately" category.



Both non-continuous variables contributed to the understanding of the differences between the three groups. The "type of punishment" variable showed greater discrimination between the groups than the "receiving help with problems" variable. This is perhaps less than surprising since punishment is likely to carry more emotional weight than the notion of help with problems. These two variables are not included in any further analysis.

#### E. DISCRIMINANT ANALYSIS

After completing the one-way analysis of variance on the continuous variables in the study, a discriminant analysis was carried out on those continuous variables with  $p < .05$ . Discriminant analysis enables an optimal separation between the groups (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). This analysis is effected by finding the best linear combination of variables that maximizes the separation between the group means in relation to the variance within each group. After the discriminant functions are determined, the subjects' responses are plotted using these functions.

Twenty-two of the 60 analysis of variance

variables achieved a significance of  $p < .05$ . By chance alone, it is expected that 3 variables would have a level of  $p < .05$ , while only one variable would have been expected to have a  $p < .01$ . The results are listed in Table 13 below.

TABLE 13  
ONE-WAY ANALYSIS OF VARIANCE  
21 VARIABLES

VARIABLE	PROBABILITY OF F
HEIGHT	.001
WEIGHT	.041
NO. JUVENILE CONVICTIONS	.006
AGE LEFT HOME	<.001
YEARS FOSTERED BEFORE AGE 16	.036
YEARS ON OWN BEFORE AGE 16	.006
FREQUENCY PARENTS HELP WITH HOMEWORK	.039
MOVING M/L	.009
LOVE M/L	<.001
CHURCH ATTENDANCE M/L	.004
HEIGHT M/L	.002
CLUB MEMBERSHIP M/L	.015
VERBAL IQ	<.001
DRINK WHEN UNDER STRESS	.001
TALK IT OUT UNDER STRESS	.020
SEEK MORE INFORMATION UNDER STRESS	.010
RELY ON PAST UNDER STRESS	.037
EXPECT WORST UNDER STRESS	<.001
USE DRUGS UNDER STRESS	<.001
FIRO-B, EXPRESS CONTROL	.007
TOTAL STRESS SCORE	.012

Of the 74 subjects in the original sample, three were deleted from the discriminant analysis because data for one of the 22 variables was missing. Two of the three were property offenders and one was a violent offender.

Step-wise discriminant analysis reduced the number of variables to nine. This reduction is

accomplished by eliminating the 13 variables that did not help separate the three groups. The variables that remained in the function are listed in Table 14. These nine variables were used in the functions to separate the three groups.

The nine variables correctly classified over 90% of the subjects in this study into one of the three categories of violent offender, property offender, and contrast group.

TABLE 14

DISCRIMINANT FUNCTION VARIABLES

VARIABLE	F VALUE
NO. JUVENILE CONVICTIONS	2.97
AGE LEFT HOME	4.83
YEARS ON OWN BEFORE AGE 16	7.52
LOVE M/L	6.27
HEIGHT M/L	13.85
SEEK MORE INFORMATION UNDER STRESS	5.21
EXPECT WORST UNDER STRESS	23.19
USE DRUGS UNDER STRESS	6.69
FIRO-B, EXPRESS CONTROL	6.94

Some variables were excluded from the discriminant analysis either because of the statistical requirements of this analysis or because of missing data. The two variables that were not continuous could not be included in this type of analysis. The four significant repertory grid results could not be included because of missing data. If the discriminating powers of these five additional variables could have been used, it might have been possible to improve still further on the predictive powers of the discriminant analysis.

This analysis produced two functions with the level of significance for each being  $p < .001$ . The first function accounted for 80.9% of the variance, while the second function accounted for 19.9% of the variance in the discriminant function analysis. The canonical function coefficients for each of the nine variables are reported in Table 15. These coefficients are used to plot each subject on a scatter plot diagram.

TABLE 15  
DISCRIMINANT FUNCTION COEFFICIENTS

VARIABLE	FUNCTION 1	FUNCTION 2
NO. JUVENILE CONVICTIONS	- .116	.059
AGE LEFT HOME	.198	.087
YEARS ON OWN BEFORE AGE 16	.588	-.786
LOVE M/L	.208	-1.006
HEIGHT M/L	1.084	-1.053
SEEK MORE INFORMATION UNDER STRESS	.494	-.535
EXPECT WORST UNDER STRESS	-1.014	.324
USE DRUGS UNDER STRESS	-.490	-.046
FIRO-B, EXPRESS CONTROL	.007	.341
CONSTANT	-5.066	5.773

The above coefficients can be used to classify subjects into one of the three groups of property offenders, violent offenders, and contrast group. This is accomplished by multiplying a subject's score by the function coefficients, as in the following equations. Function one discriminates the offenders from the non-offenders. The second function discriminates the violent offenders from the non-violent offenders.

$$x = (\text{no. of juv. convictions} * -.1164) + (\text{age left home} * .1984) + (\text{no. of years on own under age 16} * .5885) + (\text{want more/less love} * .2084) + (\text{want more/less height} * 1.0841) + (\text{coping with stress by seeking more info.} * .4983) - (\text{cope with stress by using drugs} * .4938) - (\text{cope with stress by expecting the worst} * 1.014) + (\text{FIRO-B express control scale} * .0067) - (5.0658).$$

$$y = (\text{age leaving home} * .0873) + (\text{no. of juv. convictions} * .0591) - (\text{no. of years on own under age 16} * .7865) - (\text{wanting more/less love} * 1.0062) + (\text{wanting more/less height} * 1.0533) + (\text{coping with stress by expecting the worst} * .3244) - (\text{cope with stress by seeking more information} * .5351) - (\text{cope with stress by using drugs} * .0456) + (\text{FIRO-B express control scale} * .3416) + (5.7734).$$

Using this method, the SPSS program correctly classified over 90% of the subject pool, although only 86% of the offender population. Table 16 shows the classification of subjects using the above method.

TABLE 16

CLASSIFICATION OF SUBJECTS  
BY DISCRIMINANT FUNCTION

GROUP	N	PROPERTY OFFENDER	VIOLENT OFFENDER	CONTRAST GROUP
PROPERTY	27	23 (85.2%)	3 (11.1%)	1 ( 3.7%)
VIOLENT	15	1 ( 6.7%)	13 (86.7%)	1 ( 6.7%)
CONTRAST	29	0 ( 0.0%)	0 ( 0.0%)	29 ( 100%)

A scatter plot diagram, obtained through the use of the SPSS computer program, is presented as Table 17 (Nie et.al., 1975). This plot demonstrates the extent of separation among the three groups produced by the procedure. Each point on the scatter plot represents one subject's scores on the two discriminant function equations.

The SPSS manual (Nie et. al., 1975) indicates that standardized canonical coefficients can be used to name the functions in the same manner that factor scores

can be used to name factors in factor analysis. This particular chapter in the SPSS manual was written by Klecka, who, in another article on discriminant analysis, suggested that pooled, within-group correlation should be used in determining how the variables within the group contribute to the function (Klecka, 1980). The within-group structure coefficients for this study are provided in Table 18.

TABLE 17

SYMBOLS USED IN PLOTS	
SYMBOL	LABEL
1	property offenders
2	violent offenders
3	control group
*	GROUP CENTROIDS

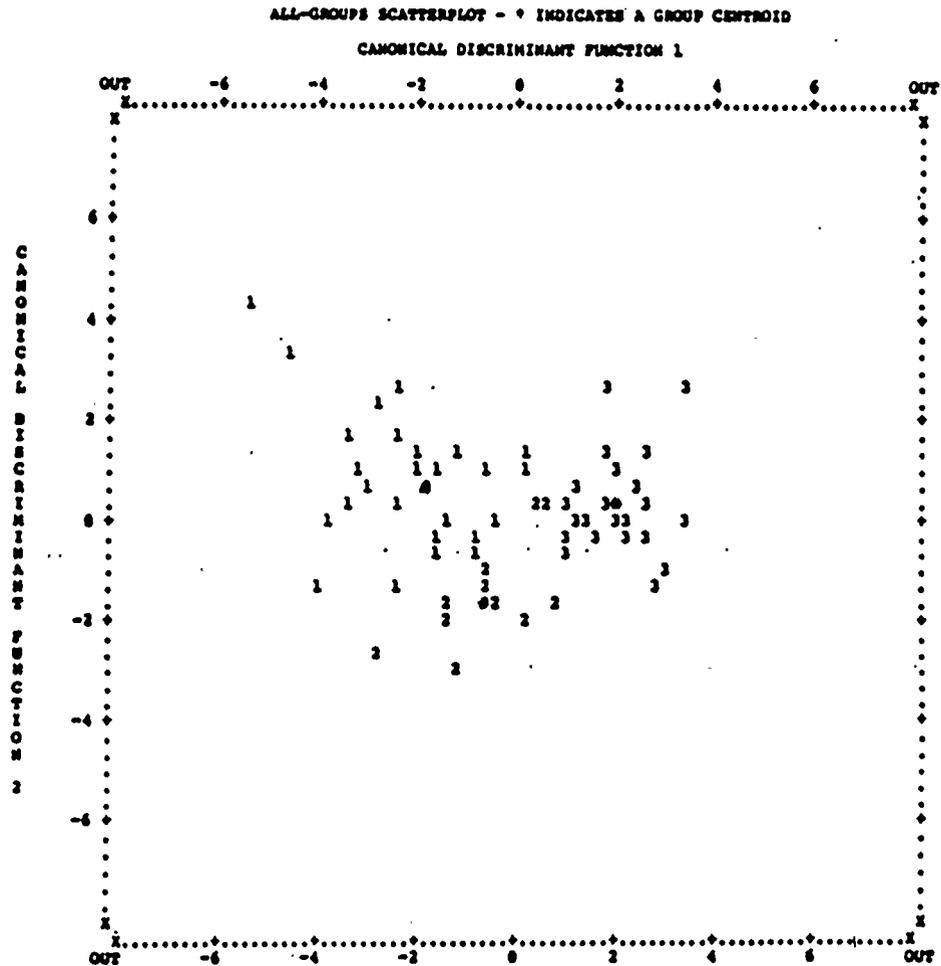


TABLE 18  
DISCRIMINANT FUNCTION CORRELATION COEFFICIENTS

VARIABLE	FUNCTION 1	FUNCTION 2
NO. JUVENILE CONVICTIONS	-.606*	-.134
AGE LEFT HOME	.626	.326
YEARS ON OWN BEFORE AGE 16	-.238	-.379*
LOVE M/L	-.364	-.520*
HEIGHT M/L	.416*	-.128
SEEK MORE INFORMATION UNDER STRESS	.394*	-.043
EXPECT WORST UNDER STRESS	-.658*	-.004
USE DRUGS UNDER STRESS	-.640*	-.135
FIRO-B, EXPRESS CONTROL	.187	.498*

\* P < .001

Some researchers believe that discriminant functions can be rotated to facilitate the interpretation of the results (Nie, et.al.,1975), although this author also states, in the same treatise, that little, if any, investigation into the consequences of such rotation, has been carried out. He concludes that the rotation should be experimental in nature and should be used only with caution. Under such advice, no such rotation was carried out on this data.

In conclusion, the discriminant function analysis served to reduce a large number of variables showing significant differences between the groups, to a considerably smaller number of much more powerfully

discriminating items. This process has selected a refined constellation of variables that are especially effective in separating the two offender groups from each other and from the contrast group.

## CHAPTER FIVE : INTERPRETATION AND DISCUSSION

### A. INTRODUCTION

The goal of the present study was to seek specific characteristics that might differentiate the violent offender and the property offender from each other and from a contrasting non-criminal group.

This chapter consists of a brief review of the procedures, followed by interpretation and discussion of the significant findings. Another section presents a tentative model for predicting criminal development. Finally, some concluding comments relate the findings of this study to the current circumstances surrounding the management of the criminal in today's society.

### B. PROCEDURE REVIEW

The subjects for this study consisted of three groups: (1) males serving a federal prison sentence for violent offences; (2) males serving a federal prison sentence for property offences; and (3) successfully functioning adult males employed as child-care counsellors.

All respondents in the inmate subject pool met specific criteria concerning their offence pattern. Respondents were asked to complete a questionnaire including some standardized psychological tests.

A one-way analysis of variance was performed on all continuous variables. These analyses were done for the purpose of establishing benchmarks which would allow development of insights which, in time, could lead to hypotheses. The use of the term statistical significance in this study does not indicate that the necessary assumptions for parametric statistics were made but indicates the strength of group separation on those specific variables. A Chi square analysis was performed on the two non-continuous variables. With the exception of the repertory grid, all variables with a probability of .05 or less were included in a step-wise discriminant analysis. Nine variables were included in the final discriminant functions. These functions accounted for 88% of the variance and correctly classified 92% of the subjects according to their group membership.

Function one separates the criminal from the non-criminal. This function represents the fact that the

criminal was more likely to cope with stress by expecting the worst, use drugs when under stress, leave home early, and have more juvenile convictions. He was less likely to report wanting more height as a child, and was less inclined to cope with stress by seeking more information about the stressor.

Function two separates the property offender from the violent offender. The violent offender appears to have spent more time living on his own before age 16, and wanted more love as a child. He also scored lower on the FIRO-B scale of "expressed control", suggesting, according to the Firo-B manual, that the violent offender behaviourally takes a leadership role or makes decisions less easily than the property offender.

By combining the results of the two functions, the subjects can be sorted into distinct groups as shown in Table 16 (Chapter Four).

### C. INTERPRETATION OF FINDINGS

#### i. Introduction

The majority of the findings, in the present

research, have been found to be statistically highly significant. It is important, however, to carefully examine the nature of the sampling method and data collection procedure in the course of interpreting the findings. These issues relate to reliability and validity of the findings and to the degree of generalization that can be applied to the results.

The offender subjects in this study were all federal inmates. The fact that the inmates were serving federal sentences means that they had been convicted of crimes of relatively greater seriousness than those committed by persons in provincial jails. The offender sample here, therefore, represents serious, repeating offenders. It is possible that this may magnify the differences between the offenders and the contrast subjects as well as between the property and violent offenders. It can only be speculated at this point, whether these results would apply to less serious offenders. While one might expect that less serious offenders would show less extreme differences, additional research would obviously be required to actually address this question.

ii. Current perceptions of early life experiences

These variables are current perceptions of past experiences and are therefore susceptible to a variety of distortions arising from the selective processes of memory as well as factors related to the current environment of the respondents. The contrast group, which is presently functioning successfully, may recall more positive past experiences, or see past experiences in a more positive light, while the less successfully functioning, offender group, may see the past more negatively. This possibility does not invalidate the usefulness of the data gathered. If the offender group does respond differently from the contrast group, then these variables can certainly be used to differentiate the three groups, even though the factual validity of the present impressions of early life experiences may be questioned.

The use of data based on subjects' perceptions is significant in at least one other respect. It is becoming much more common, in contemporary treatment approaches such as cognitive behavior modification, and systemic family therapy, to incorporate data about people's perceived reasons for their problems into

treatment and rehabilitation programs. This approach increases the client's sense of having input into and control over the process, generally raising the personal relevance of therapy, in contrast with the present approach of removing all sense of control from a person by placing him in prison.

a. Number of juvenile convictions

The finding that the number of juvenile convictions was higher in the criminal groups is supported by previous work. Wolfgang (1977) found that the chances of being an adult offender are almost four times greater if one has a juvenile record than if one does not. Robins (1966) evidence suggests that juvenile delinquents have more arrests and prison time as adults than the normal population. Guze (1976) found that previous criminal behaviour seemed to predict more criminal behaviour.

The data indicated that the two offender groups were not differentiated by their amounts of criminal activity as youths. It would have been interesting to know if the types of their offences were different from one another, but they appeared unable or unwilling to

recall the specifics of the offences for which they had been convicted as juveniles. Although the inmates were asked what juvenile convictions they had received, they failed to respond specifically. The juvenile convictions would have taken place an average of 15 years earlier, and it is likely the inmates would now find them to be petty compared to their present circumstances, and therefore did not or could not recall the specifics of their earlier offences. Future research in this area could include a request for offenders to approximate the percentages of their juvenile offences falling into different categories such as property, violent, and drug offences, for example, as a possible approach to this question. Another method of investigation would be to research the respondents' juvenile records for number and types of offences.

It may be fruitful to carry out such an analysis to determine if the prospective violent and property offender can be identified earlier in life. Such information would provide guidance for prevention measures. This may be a time-consuming approach, but if it were to become apparent that juvenile offence patterns could be used to predict adult offence patterns, then differential rehabilitation programmes at an early age

would become a realistic possibility.

b. Age of leaving home

The individual's personal definitions of "home" and "leaving" were involved in responding to this variable. It cannot be assumed that all respondents used the same definition for these terms. In any case, it is clear that the category of leaving home at an earlier age is associated with later criminal behavior to the extent that criminals tend to leave home earlier than non-criminals.

The life style and life experiences would be quite different for the 15 year old living on his own compared to the 15 year old living with his family. The former has less commitment to family relationships, and fewer responsibilities to his family. He also effectively disengages himself from a potentially effective support network. Alternatively though, it may be conjectured that he left home because these supports were absent. It is unlikely that leaving home was a sudden or precipitate action but one that had been contemplated over time. His support network, if it existed at all, may have been comprised of persons who

were in similar circumstances to himself.

The teenager living at home has more support and more direct pressure to conform to social norms. He finds that his rewards come from this support and conformity. Hence, he maintains and strengthens his relationship with his family. The teenager living on his own is more likely to learn not to depend on others for help, because of the failure of his support network. It is likely that he may not experience the same kind of love with both its positive and negative consequences that his counterpart does living at home. Again, it seems possible that leaving home, in the contrast group, represented part of a normal growth process, whereas for the criminal group this may have represented a breakdown of the normal growth process. This may tend to provide at least a partial explanation of why the offender uses ineffective coping strategies, has poor supportive relationships, does not trust others, and wanted more love as a child.

The reasons for criminals leaving home earlier than non-criminals were not clear. However, several specific or interacting possibilities exist to potentially explain the differences: (1) they coped with

stress by running away; (2) they had "adverse" homes and therefore moved out to avoid negative experiences; (3) they were conforming to a peer sub-group norm; or (4) they had lower dependence needs as indicated in their reported tendency to turn to no-one for help.

Of course it is not possible to identify what came first in the cause and effect relationship. It is likely the variables interact with each other to create a final outcome which in this case is criminal behaviour. The cause and effect circle of interaction is a difficult one to understand when, a large number of variables are involved. It is impossible to know what effect one variable or aspect of life may have on another or the secondary interactive effect there may be on still other aspects of living. Some research mentioned earlier (Moffitt et. al., 1981; Rasch, 1960; Burgess, 1972; Fitch, 1962) offers simple cause and effect relationships but it seems much more likely that crime results from a complex interaction of a constellation of variables. Further, the reasons for home being perceived as a place to leave early, or an environment with negative connotations is unclear. More direct assessment of the conditions which resulted in these responses might be of value.

c. Number of years with foster parents

The offender groups reported similar amounts of time in foster-care, while the contrast subjects reported no foster home experience. It is difficult to know which aspects of fostering may be relevant. Respondents who were in foster homes may have felt rejected by their natural parents, hence, withdrawing emotionally and socially. It may also be hypothesized that their disruptive behaviour caused their placement in foster homes which, in turn, caused feelings of rejection as children and, therefore, ultimate social isolation. It may be that both feelings of rejection and withdrawal developed simultaneously with increased disruptive behaviour and increased alienation from parents. It is clear that criminals report more foster care and yet not all foster children become criminals. One is left to question what other variables may interact with foster care experience to heighten the probability of criminal development.

Stott (1982) provides extensive examples of the developmental complexities that generally arise when children are taken into public care. As he indicates, the results of disrupting the affectional attachments of

children often lead to dramatic reactions that evade prediction or control. He argues that detachment of the child from the parent figure to whom he most looks for permanent attachment is critically destructive of faith in emotional connections and can lead to the development of hostility.

Rockwell (1978) has also observed that parental dis-engagement causes a repeating pain from the loss of parents. This pain can be manifested in an irrational feeling of being responsible for the loss; or rage at the deprivation. This may in turn be expressed in antisocial acting out, and/or a callousing toward close relationships, and ultimately, an intense rebellion against authority which becomes self-destructive.

d. Number of years on own before age 16

Just as the offender groups were found to leave their homes at earlier ages than the contrast subjects, they were also found to have separated from their families and therefore lived on their own for more years prior to the age of 16. Children were required to attend public school up to this age and it is suggested by the findings that the offenders either had to do this without

the basic support of their families or, what is perhaps more likely, dropped out earlier because of the collapse of family support.

Blakely, Stephenson, and Nichol, (1974) found that delinquents exhibited more deviant family functioning than non-delinquents. They found that delinquents more often came from broken or disorganised homes and had deviant or defective role models with many social problems. These findings are similar to McCord, McCord, and Howard (1961) and McCord (1979), who found that home environment was a discriminating variable in identifying offenders. It seems likely that, if the offenders came from stressful, dysfunctional homes, they might leave home earlier than the non-offender. The leaving of home may constitute an avoidance of problems or it may represent an attempt to seek support elsewhere. Without appropriate social and coping skills, any attempt to seek appropriate support is likely to result in failure. This is likely to lead to increased isolation and feelings of helplessness.

e. Frequency of parents helping with school work

The violent and property offenders similarly

reported that their parents seldom helped with homework. The contrast group reported significantly more frequent help from parents in this area. This suggests that the contrast group had perceived a more positive involvement with their parents. Since help with homework may be seen as a fairly typical nurturing interaction, it would appear to set the stage for a more profound degree of childhood identification with a relatively successfully functioning parental role model, thereby elevating the general level of nurturing. The lack of parental involvement may be one more factor contributing to school failure and leaving school earlier. Ahlstrom and Havinghurst (1971) found that parental attitudes toward school, their child's progress, their aspirations for the child, as well as their ability to supervise and assist him all played a critical role in the key period of late adolescent adjustment.

While no other studies could be located that dealt specifically with this variable, the finding seems generally consistent with the McCord et. al. (1961), McCord (1979), and Blakely et. al. (1974) studies of delinquency and criminal behaviour, all of which generally suggest that dysfunctional, non-nurturing homes are more likely to produce delinquent children.

f. Wanting more or less change of residence before age 16

The findings on this variable suggest that the inmate group tended to seek stability in their environment. They may have found it difficult to establish relationships with friends and neighbors if their families moved frequently. Frequent moving may have made prospective offenders more dependent on their family whom, it appears, they did not find to be strongly supportive. This may add to feelings of alienation and difficulty in trusting of others. It may also disrupt the formation of adequate learning structures and strategies, thus precipitating failure and consequent negative reactions to society. It is of interest that other disability groups show evidence of social and educational regression resulting from frequent moving (Brown and Hughson, 1983). In his extensive Philadelphia study, Wolfgang (1972) also found his chronic offender group to show a greater number of residential moves when compared to either non-chronic or one time offenders.

g. Wanting more or less love before age 16

The responses on this variable are current

reports of the adequacy of the amount of love received as a child. Again these reports may be subject to much distortion due to time and experiences. The offender group may see their family experiences as negative in an attempt to explain or excuse their current situation. There may also be an element of the need to resolve cognitive dissonance, in that, if the inmate sees himself as a failure, then he is more likely to see his past negatively. The contrast group may also be subject to distortions in that they are more likely to see themselves as successful. It would follow that they may see their past to be successful and pleasant and thus consistent with their present circumstances.

These results confirm that the relationships the inmates recall having with their family and friends were seen to be lacking in love. It is not known if the inmate group needed more love than the contrast group or if they received less love. In any case, the most important aspect of this result is the inmate group's stated perception of a lack of being loved. This may lead to later difficulties in developing loving relationships as adults; and difficulties in relying on these relationships for support in times of need.

h. Wanting more or less church attendance before age 16

Belson's (1975) finding that church attendance was more frequent among non-offenders appears to be supported in principal by the present study. Hirschi (1969) suggested that a commitment to more traditional activities tended to lessen the likelihood of later deviant development. Consistent with this line of thought, the offenders in the present study often added unsolicited comments on this item, that generally seemed to emphasize further their actual rejection of this activity. This may suggest that the rearing patterns experienced by the offenders included less actual parental or social control. In a more direct sense, the offenders could be seen to be exhibiting less appropriate self-control in responding to the test.

i. Wanting more or less height before age 16

The property offender group reported the highest actual height and also registered a desire for less height. Together these findings seem to suggest a desire for less difference or more conformity. It must be remembered that the results depend entirely upon the subjects' reported perceptions in both instances.

In a 1975 study by Prieto and Robbins, it was found that actual height of young adolescent males had no relationship to self-esteem. However, height, as perceived by self and others, did relate to self-esteem. Prieto and Robbins (1975) go on to state that height should be studied further to understand how perceived and actual height relate to personality development.

Gacsaly and Borges (1979) found that socially desirable personality traits were associated with increased height as well as body build. However, this study failed to consider the findings of Prieto and Robbins (1975), regarding the distinction between actual and perceived height. On the other hand, it would seem probable that perceived and actual height would correlate positively.

The present findings of the property offenders wanting less height and the contrast group wanting more height appears to relate to those of Prieto et. al. (1975), and Gacsaly et. al. (1979). It must be noted that Prieto et. al. studied adolescents, while the present study examines adults' perceptions of their adolescence. It might also be argued that, as indicated

by results on the repertory grid, offenders exhibit lower self-esteem. They might therefore be more self-conscious of any personal features, such as being taller, that would draw unwanted attention from others.

It should also be noted here that the reports of actual height show the property offender to be the tallest and the violent offender to be the shortest of the three groups. There was no significant difference between the reported height of the property offender and the contrast group. However, there was a significant difference between the two groups on the desire for more height. This apparent inconsistency suggests that as adolescents, they obviously have had different experiences of their height and its significance. The need for height as an adolescent appears to have some meaning but it is not possible from either the present study or from the limited amount of other research that has been done on this construct, to form any firm hypothesis as to the specific relationship.

j. Wanting more or less club membership before age 16

The violent offender group appeared to wish not to engage in this type of socializing. This may have

been because of poor social skills, a sense of isolation, or because of previous negative experience with social groups. Perhaps this finding also reflects once again the tendency, identified by Hirschi (1969), for criminals to be less committed to traditional social activity.

Justice, Justice and Kraft (1974) reported four "early warning signs" for violent behavior which included fighting, temper tantrums, school problems, and an inability to get along with others. These tendencies would seem to combine to create a situation where the child would have difficulty interacting successfully in social situations such as clubs. He might well develop a pattern of avoiding such activities.

Coopersmith (1967) presents a discussion of self-esteem that appears relevant to these findings. Low self-esteem is said to be manifested in less congenial and stimulating social experiences. The reduced self esteem found in the violent offender groups would seem to impede their active involvement in the social behavior of clubs.

k. Who is turned to for help?

Parents were turned to most often by contrast subjects and least by violent offenders, the latter turning to friends most often. It may be speculated that the violent offender was involved with a peer group of friends that did not help in a manner that would assist in keeping that person out of trouble and provide the type of strong and loving support that may be needed. It could also be argued that those who did not turn to their parents for help made that choice based on negative past experiences with them.

The Coopersmith (1967) paper offers some understanding of the implications of level of self-esteem for the bonding process. It is suggested that persons with high self-esteem feel more at one with their families and are more favorably disposed toward their views, whereas children with low self-esteem are more likely to perceive their parents as negative or destructive influences, to whom they are more liable to respond with frustration and rejection. He also presents evidence, conversely, that parents with lower self-esteem are more likely to be rejecting toward their children.

This may have led to a situation where there was reduced opportunity for problem solving through discussion. Failing to make use of the experience and guidance available from parents may also have placed the individual beyond normal social controls and precluded valuable learning experiences. It would also suggest that the individual would be deprived of socially acceptable channels of catharsis, a process which might well result in extreme emotional behaviour. Criminals appear to have learned early in life not to trust others and not to show any vulnerability in the form of needing or requesting assistance. This is said by several other workers (Ahlstrom and Havinghurst, 1971; Coopersmith, 1967; McCord et. al. 1958) to result from low family cohesiveness rather than the more superficially obvious factor of completeness.

The property offenders appear to have relied more on their family than the violent offenders. This finding would tend to indicate that the property offender was less estranged from his family than the violent offender. They also reported turning to no-one eight times more than the contrast group.

The violent and property offenders had

experienced some problems of feeling unloved, poor discipline from parents, and moving too often, but none of these people turned to professionals for help. This point underlines a problem with the access to professional helpers for a significant group of persons requiring that help. These findings indicate that professional helpers need to improve their public image and accessibility to this segment of the population.

Le Shan (1981) discovered in his conversations with criminals that they were usually ignorant of the options and resources available to help them interrupt developing personal and ultimately criminal problems. In addition, he argues that they may have found it difficult to ask for help even if they knew of services because of their self-hatred and anger toward others. In addition, other findings of the present study indicate that, in the face of stress or problems, criminals are much more likely to assume that the problem is impossible and to seek immediate escape as opposed to longer term solution.

Perhaps intervention with this population would be more effective if the approach was focused on the problem of short term planning with very concrete solutions. It may be that the poor coping strategies used

are a result of an inability to use abstract reasoning. If one considers a developmental model, suggesting that the offender has not progressed past the concrete stage of problem solving, then it would appear that it may be best to begin with a concrete mode of therapy. Brown (1976) states that rehabilitation must follow prescribed steps from very concrete solutions, with immediate gratification, before one can normally progress to more abstract operations. Some insight approaches to therapy tend to be more abstract in nature. It is possible that this approach may not be effective unless the inmate was first able to take advantage of a more concrete approach such as behaviourism, followed by a cognitive behaviour modification approach, then followed by progressively more abstract methods. This model of cognitive development would indicate that it is imperative for therapists to proceed along the concrete-abstract continuum to successfully install long term, abstract, problem solving skills.

It is interesting to note that when Robins (1966) asked what helped adolescent individuals to reduce their delinquent actions, he found that therapy was not reported to be effective, but instead, that maturity, loss of interest in crime, marriage, and financial

responsibilities were considered to facilitate change.

1. Perceptions of parental punishment

The property offenders reported that their parents "didn't care" fifteen times more often than the violent offender. This finding is a strong indication that the property offenders held a very different impression of their parents' methods of punishment than the other two respondent groups. This is consistent with previous findings stating that family environments of delinquents are characterized by inadequate discipline, and absent or poor role models (Blakely et. al., 1974; and McCord et. al., 1958).

The McCord et. al. (1958) study found that the consistency of discipline related to transmission of values more strongly than the actual technique of discipline. Perhaps a question concerning consistency of discipline would have provided additional useful information and allow more specific conclusions regarding this variable. In her 1979 study, McCord detailed a lack of supervision and mothers lacking self-confidence as increasing the likelihood of later convictions. This finding was consistent with the earlier work of Glueck

and Glueck (1950), who suggested that supervision and discipline by the mother only, in the absence of fathers, predicted later crime in adolescent boys.

The violent offenders reported, at a rate almost seven times greater than the contrast group, that their parents "punished too severely". This was about three times more often than the property offender group. Their adult violence may be, to some degree, a mere acting out of the manner in which they had been treated as children. Duncan and Duncan (1971) found a history of brutal parenting to be common in violent adolescents. Miller (1979) found that violence was more prevalent in adolescents who had been beaten as children. Gray and Gray (1978) venture an intriguing opinion that revenge is the main motivation for the armed robber, who seeks retaliation for his brutalization when he was young. They see the gun as an equalizer against an overpowering father. An earlier worker (Schutz, 1977) had indicated that one predictable result of what he called harsh discipline was autocracy in future interpersonal relationships. McCord (1979) concluded in her 30 year follow-up study that boys who had been exposed to parental aggression were subsequently convicted frequently for personal crimes.

It is important to note that property offenders felt that their parents cared less about them than the other two groups. It is possible that some of the property offenders interpreted severe punishment as being equivalent to not caring in the sense that the parental behavior was seen as being insensitive to the hurt experienced by the child.

It was not possible to know objectively which of the three groups actually experienced the more severe punishment, because no direct data was collected on the specific punishment meted out. These results may be easier to interpret if the actual severity of punishment for the three groups of respondents could have been measured. In any case the perception of "severe punishment" appears to be an important factor.

The contrast group indicated that 90% of the time, they were punished appropriately. The violent offender group indicated 50% appropriate punishment and the property offenders reported appropriate punishment only 24% of the time.

The modal response for the contrast group was

appropriate punishment. The violent offender group had a by-modal response pattern of appropriate punishment and harsh punishment. The property offender had a modal of did not care.

Forty-four per cent of the violent offenders reported that they were punished too severely and 50% reported that they were punished appropriately. It may even be that, for the violent offender, appropriate punishment is what others would call too severe, and these figures could possibly underestimate the actual severity. The violent offender may have believed and accepted a more violent approach to child rearing than the other groups, and they grew up knowing and accepting a violent life style.

The property offender very dramatically differs from the the other two groups. The property offender group felt much more that their parents did not care about them as children. If this is an accurate measure of their present feelings of their parents then it is bound to have a profound effect on their interactions with others. This group also showed the most dislike for their fathers, thus lending some validity of this measure. As this is a non-continous variable it is not

included in other analysis but it deserves further investigation. These results may be explained by the adolescent who feels his parents do not care about them may begin stealing at an early age and the uncaring parents may tend to ignore this behaviour and therefore allow this activity to continue and strengthen with the reinforcement that naturally occurs from the proceeds of the theft. Or maybe they begin stealing from their parents in an attempt to "get back" at them. No matter what the specific relationship there is between having the feelings that one's parents do not care about you and stealing, just having this feeling is likely to have far reaching consequences for one's life, especially in the area of interpersonal relationships.

Additional research with more objective measurement of this variable needs to be carried out to confirm whether the severity of punishment is in fact different for the violent person compared with the non-violent person.

### iii. Findings regarding present state

In contrast with the previous section, which dealt with the subjects' perceptions of past experience,

the following discussion considers the findings of the study that relate more to the present state of the individuals. While the earlier section discusses, for example, whether subjects remember having wanted more or less height when they were young, the following interpretations relate to the actual present height reported. Only a small number of the past experience constructs are represented in the form of a corresponding, present state item. The majority of the variables included in the following category, originate from more standardized psychological testing sources.

a. Height

It is difficult to make any psychological or causal interpretation of the property offender actually being taller. In earlier discussion, it was suggested that it may be the offender's perception of his height as it interacts with other psychological and social variables that may be of critical significance.

b. Weight

The finding that the contrast subjects weighed more than the inmates seems most likely to indicate

circumstances of present or recent lifestyle. There is neither prior research nor any obvious logical relationship to suggest any more meaningful connection.

c. Verbal Intelligence

The fact that the contrast group scored higher on the verbal intelligence measure than the inmate groups is consistent with the fact that the contrast group had achieved greater success in school, and apparently, at the work place as well. This difference may be attributable to poorer school adjustment and leaving school earlier in the inmate groups. It is also consistent with more effective family patterns of child rearing and better self-image in the contrast group. The importance of the educational factor is underscored by the relatively low re-admission rate amongst offenders who receive university education after conviction. Offenders scoring at an average or slightly higher level of intelligence is consistent with the finding of Moffitt et. al. (1981).

The intelligence and delinquency debate has persisted for twenty years. Yet there are still no consistent results regarding this association. The

present study was not an intensive examination of the connection between IQ and delinquency, and contributed little to the question. In a study more devoted to the issue, Moffitt et. al. (1981) suggest that intelligence may relate to a third variable that is, in turn, related to delinquency, as discussed in more detail in Chapter Two.

d. Total life stress for a six month period

It has been shown that life stress relates to physical and mental illness (Holmes and Rahe, 1967, Cooper and Shephert, 1979, Rahe and Arthur, 1967). Thus, it seems reasonable to find that stress may also relate to acting out criminal behaviour. The present study lends some marginal support to the idea of life stress contributing to criminal development, since the criminal groups reported more stress than the contrast group. However, because of the difficulties the subjects appear to have had with this portion of the questionnaire, interpretation must be guarded.

e. Coping with stress by using alcohol

Reported frequency of use of alcohol increased

from contrast, to violent, to property offender group. The use of alcohol is usually seen as a non-effective method of coping. Given the different frequency of general usage, it would also be interesting to determine if the property offenders were drunk when they committed their offences more often than the violent offenders.

Tinklenberg and Ochberg 1981 state that alcohol is the most abused drug in the U.S. being the most frequently implicated in accidents, assaults and crime. Alcohol has been shown to facilitate a subjective expression of aggression (Lang, Goechner, Adesso, and Marlatt, 1975).

f. Coping with stress by talking it out with others

The contrast group "talked it out" more often than the inmate groups. This activity is generally recognized as being an effective method of coping with stress, showing some trust and confidence in others as well as an ability to take an interpersonal risk. This finding is consistent with the notion that inmates have a negative self-image.

g. Coping with stress by seeking more information

Seeking more information was a method of coping with stress that the property offenders used least compared to the other groups. It could be argued that the property offender has learned through use of other ineffective coping methods that they are not able to affect the situation causing the stress, hence they develop a feeling of impotence and vulnerability.

It is interesting to note that the violent offender reported seeking more information as a method of coping with stress, and was, in this instance, similar to the contrast group. The violent offender did use other ineffective methods of coping with stress. However, this particular finding may suggest that the violent offender is not content to let situations control him, but is instead actually trying to understand and control his own destiny to a greater extent than the property offender. This would be consistent with the Gray and Gray (1978) postulate that violent offenders are frustrated and seek revenge. Resorting to violence may be a last resort after a number of other attempts to solve a problem prove futile.

h. Coping with stress by drawing on past experience

The property offenders used their past experiences to cope with stress significantly less often than did the violent offenders or the contrast group. This variable is a simplification of one of the descriptors for the psychopathic personality which identifies the "inability to learn from past experiences" (Hare, 1970). It is important to note, when trying to understand the dynamics of the offender, that not only can he not make a direct transfer of learning from past experiences, he is also not able to abstractly use past experiences to assist in forming successful strategies for coping with future problems and life plans. This picture of the inmate is not one of total inability to learn or positively transfer from the past. It would be most valuable to gain an understanding as to how the process of learning and generalizing of information does take place and what factors interfere with the process.

Property offenders also feel they have little control over their lives and may therefore, simply attempt to escape stress by drinking, expecting the worst, or using drugs, rather than facing the stress and utilizing positive coping mechanisms such as seeking more

information about the stressor or drawing on past experiences.

i. Coping with stress by preparing to expect the worst

This is an obviously deficient strategy for coping with stress. There was a significant difference between all three groups of respondents on this variable. It is apparent that the offenders expected their interventions to be failures, with the property offenders strikingly more inclined to expect the worst.

There are at least two possible related explanations for these results. The prophecy may be self-fulfilling because expecting the worst, may interfere with effective use of resources to avert disaster. The inmates may also be realistically representing their life experience. These findings probably indicate that the inmate respondents felt they had no control over their problems, with the result that they did not solve problems well. This conclusion finds some support in the work of Richard and Dodge (1982) who established that aggressive children verbalized fewer potential solutions to interpersonal problems. These authors speculate that when initial problem solving

efforts are thwarted in these children, they then select from poorer reservoirs of alternatives.

Presenting a cognitive restructuring approach initially would provide the type of concrete therapy that may have more meaning for this individual. Perhaps this may then be followed by more abstract approaches offering a model for abstraction and generalization, which of course implies an ability to delay gratification. This line of reasoning would predict that an insight approach may be less effective until the individual is capable of applying more abstract constructs.

j. Coping with stress by using drugs

The contrast group used drugs as a coping method significantly less often than did the property and violent offender groups. It is not clear if the contrast group denied the use of drugs because they were concerned about admitting drug usage in a work-place related questionnaire, or if they believed that if they did use drugs, it was not a response to stress. Again, the use of drugs is not considered an effective coping method, and the inmate groups reported use of this ineffective method of coping more often. Pritchard (1977) in his

review article, reports a strong connection between pre-prison drug use and future criminal recidivism.

While the present study found greater drug use in the criminal population, other authors have found both a lack of association or, in some instances, superficially contradictory relationships. Valzelli (1981) following numerous similar studies, reported that the use of marijuana actually seemed to inhibit aggressive behavior. Kieth (1984), in his review, concluded that the general lack of data, and the many possible alternates or mixtures of drugs available may make the link with criminality difficult to clarify.

#### k. Summary of coping methods

Methods of coping with stress have not received extensive attention in previous research. It would appear that this variable discriminated the three respondent groups in the present study very well. The inmate groups generally used less effective coping methods than the contrast group, and the violent offender coped somewhat better than the property offender. This finding has direct implications for intervention with the prison population. It would appear that the use of "life

skills" type of programs would be most effective in teaching inmates a repertoire of effective skills to cope with stress in their lives, to increase their self-confidence, and to gain a sense of power over their own lives. The results suggest that this type of intervention would be particularly effective with the property offender.

Fitts and Hamner (1969) in their review, observe that there is evidence for a relationship between self concept and locus of control. They claim that subjects with positive, healthy self concepts typically display an internal locus of control and are more apt to rely on themselves for control over their decisions, choices and behavior. They claim subjects with poor self concept tend to have an external sense of locus of control. These authors, in summary, conclude that individuals who report more positive, less deviant, and generally more healthy self concepts can be predicted to also display the following features:

1. Having fewer problems with other inmates.
2. Being more involved in rehabilitation programs.
3. Having fewer problems with authority.
4. Being more likely first offenders rather than recidivists.

5. Having shorter sentences, suggestive of less serious offences.

6. Having more favorable philosophies and attitudes about human nature.

7. Showing, on a personality questionnaire:

a. more emotional stability

b. less shyness

c. more self assurance

d. more conscientiousness

8. Showing more internal locus of control.

The work of Jessor and Jessor (1977), while confirming the relationship between antisocial behaviour and externalized perception of control in adolescents, adds a somewhat paradoxical element. Evidently, this study found these same adolescents, who perceived themselves to be less able to satisfy their own needs successfully, appeared to expect and desire to reject external controls and to rely on their own personal attitudes, beliefs and efforts.

1. FIRO-B - expressed control

It initially seems incongruous that the violent

offender would score the lowest on the "expressed control" variable. This finding, in the present study, also differs markedly from the work of Schutz (1977) who predicted higher expressed control scores for offenders. Schutz's remaining predictions of lower scores in wanted control, inclusion, and affection tended to be supported by the present study but to a less than significant level.

If violent offenders do try to control others to a lesser extent than the average population, then it may be that the violent offender is generally submissive and accommodating or tends to remain uninvolved with others but occasional experiences a "reaction formation" to this submissiveness and then takes control through violence (Megargee, 1966). A possible alternative suggestion may be that the violent offender lacks leadership skills and attempts to compensate for his social impotence through the use of the power of violence.

m. Repertory grid ratings of "Self"

As suggested by Heather (1979) and Scimecca (1977), the modified repertory grid did, in fact, distinguish normal and offender groups rather well. The

offender respondent would be expected to have a poorer self-image than the contrast group respondent, and the results substantiated the expected differences between them. The contrast group was chosen on the basis of being a group of individuals who were functioning effectively in society. With the premise that the offender population was not functioning effectively, they would be expected to have a lower self-concept.

This line of reasoning appears to be supported by the work of Coopersmith (1967) who shows that children with low self-esteem are more likely to begin developing as loners, withdrawing from siblings as well as non-familial peers, generally reducing the positivity and congeniality of their personal and social experiences. Le Shan (1981) concludes from his interviews of convicted criminals that they perceived themselves to be bad human beings who deserved to be punished, and that these feelings of self-hatred begin in childhood as the single most important root of crime.

Dietche (1959) compared delinquents and non-delinquents in their responses to the Tennessee Self-Concept scale. He found significantly lower self and behavioral satisfaction, as well as reduced scores on

self-perception in moral-ethical, family and social categories. Over-all, he found a more positive mean self-concept for non-delinquents. Kim (1967), in a Korean study, essentially confirmed Dietche's findings, providing a convincing cross-cultural perspective. In yet another related study, Fitts and Hammer (1969) examined female inmates and found that those who had been rated by staff as having greater difficulty functioning in the "family" of the prison milieu, also showed the lowest family based self concept scores. This group also displayed poorer defences, neurotic self-perception and general maladjustment. In this same report, these authors examined groups of property and violent offenders but found no significant differences in self concept between the two.

The fact that the present findings for the two offender groups were also similar would seem to indicate that the violent offender felt no worse about himself than did the property offender. The violent offender may have been assumed to have had a lower self-concept because of the nature of his offence, perhaps because society generally considers violent offences to be more serious than property offences. However, if these individuals reject society's behavioural values, then

they may find it easier to accept themselves, despite society's condemnation.

n. Repertory grid ratings of "Father"

Both criminal groups viewed their fathers more negatively than did the contrast group. These results support the idea that criminal offenders had poorer relationships with their parent, than did the contrast group, and are consistent with many other findings suggesting the father, including how he is perceived, is important in determining criminality, at least in males. The father appears to be important to the delinquent in terms of the impact that modeling and identification have on developing behavior. Goldstein (1974) included a childhood history of poor father identification in his list of predictors of violence.

Robins (1966), in a 30 year follow up study on delinquent boys, found that fathers' social and psychiatric adjustment was the single best predictor of future adjustment of children. Lewis (1978), found that fathers of more violent, seriously delinquent adolescents tended to have serious psychiatric problems. He also found that the fathers were more violent towards their

children. Stewart, Cummings, and Singer (1981) found that one third of mothers of aggressive boys were neurotic. Keith (1984) summarizes numerous findings indicating that behaviour problems in the parents were significantly related to rates of antisocial behaviour in offspring. However Keith insightfully observes that the fact that a certain behaviour pattern consistently arises in a family context does not necessarily shed any causal light on how such behaviour might be transmitted from parent to offspring.

o. Repertory grid ratings of "Person Closest To You"

These findings would appear to suggest that the violent offender does not have people close to him whom he respects, trusts, and emulates. The violent person appears not to have as positive a feeling about his closest friend as others might have. Therefore, it might be argued that the violent offender does not have people whom he can readily trust, or talk openly with. As a result, it is likely that he does not allow anyone to have a strong impact on his behaviour and is more likely to keep his feelings bottled up inside, only to have them explosively released in episodic violence.

p. Repertory grid ratings of "Ideal Self"

It is apparent that the violent person saw even his ideal self more negatively than the other groups. He did not have as high a goal for himself compared to the other groups. It may be, of course, that the violent offender does not value truth, honesty, kindness, warmth, and the other traits represented by the nine rating scales. It is more likely that the violent offender is generally more negative about relationships with others and, hence, has given up trying to develop deeper relationships based on these factors. This attitude can lead to a cold and isolated existence, which may make violence more likely. The alienation and negative feelings about others may make it easier to justify violent actions.

iv. Summary of findings with individual variables

In an attempt to summarize the above results, descriptions of how each of the three groups of subjects responded differentially to the 26 significant variables are provided.

a. Property Offender

The property offenders reported more often than any other group that their parents "didn't care". They also had the fewest responses of "punished appropriately". The property offender had the lowest average ratings on the variable "wanting more height". Expecting the worst, when under stress, was characteristic of the property offender. They were also least likely to seek more information about the situation when experiencing stress.

The property and violent offender responded in a similar fashion, though differently from the contrast group on six of the fifteen variables. The two inmate groups both reported poorer feelings about themselves compared with the contrast group. They had similarly lower ratings of their fathers as well. The inmates left home and lived on their own earlier than the contrast group. Wanting more love was more important to the offenders than the contrast group. The inmates reported having more juvenile convictions than the contrast group. The collective picture of problematic family environments portrayed by both offender groups is consistent with earlier findings (McCord et. al., 1958; Gray et.

al.,1978).

It is difficult to explain the relationship between impoverished coping methods and property offences. It could be argued that having parents who were perceived not to care, and meted out inappropriate punishment would result in poor self concept. In turn poor self concept would be expected to lead to deficient coping strategies, including a greater tendency to expect failure, and to use alcohol. Some additional evidence for this proposition is found in the author's direct experience with incarcerated offenders. The profits from theft are often spent on flashy items and partying with friends. These parties frequently can be seen as attempts to buy friends, with the thief providing for his guests. The thief seldom uses his illgotten gains wisely or to buy necessities. Few suddenly wealthy thieves make wise investments or open savings accounts. It becomes obvious that the gains from the thieving are not financially necessary, but there appears to be an emotional necessity for the spending and sharing of the sudden wealth. This appears to be another example of defective coping strategies.

Is the thief asking for recognition and

friendship? It appears that one of the effects of stealing is a chance to escape an emotionally unfulfilled past and possibly present as well, for a few hours or days of being important to others. It is also a frequent concomitant activity to escape by using drugs or alcohol. Of course the funds from stealing last only a limited time and then one is forced to return to a depressing reality, until a new opportunity for escape and excitement presents itself.

It seems as though the continual re-offending may function as an emotional "fix" from the offender's perspective. Frequently the thief will speak of the excitement and "rush" that is involved in committing the offence. It seems possible that this desire for excitement is a chance to feel: 1) more in control; 2) a diversion, or an escape from an unhappy existence; 3) a rush of excitement; and 4) the anticipation of achieving the goal of escape, friendship, and importance. This is an example of a concrete response to a stressful situation with no long term goal to remedy the problem.

b. Violent Offender

The characteristics that are of higher incidence

in the violent offender include reports of: 1) having been severely punished as a child; 2) being emotionally estranged from their parents; 3) having more negative feelings about persons important in their lives including father, friends, etc.; 4) not having positive images of their "ideal selves". On the other hand, violent individuals appear not to have the same poor coping strategies as the property offenders. The violent offender appears to have a more negative outlook on the world around him, and has learned not to expect too much of others or himself. This generalized negativism appears to result in the violent offender isolating himself emotionally from others. When frustration builds, it is perhaps much easier to respond in a violent fashion. This position is analogous to war-time situations where, if the soldier knows his enemy's wife and children, and his hopes and fears, then it becomes much harder to kill. The violent offender has isolated himself and finds it easier to respond to his own irritation with violence toward the perceived source of frustration. This understanding of the violent offenders would indicate that through learning empathy they may be less likely to find violence an attractive solution to frustration. As was mentioned earlier however, the teaching of an abstract concept such as that of empathy

may prove difficult with this population.

The violent offenders turned to their parents least often for their help, and to their friends and non-parent family members most often for help. Being punished too severely was reported most frequently by the violent offender group. The violent offenders scored the lowest of the three groups on the "expressed control" variable on the FIRO-B.

c. Contrast Group

The contrast group responded differently from the offender group to twelve of the fifteen variables. The contrast group had either the highest or lowest means of the three subject groups for 80% of the variables that contributed the most to discrimination of the three groups.

The factors that separate the contrast group from the inmate group are: 1) they reported positive relationships with parents represented by reports of being punished appropriately, asking parents for help, and having positive feelings about father; 2) they felt positive about their present and their ideal selves; 3).

they left home at an older age; 4) they reported the fewest juvenile convictions; and 5) they coped with stress more by seeking more information and less by using drugs or expecting the worst. The above description portrays individuals who learned early in life to trust and rely on parents and others, and have positive feelings about themselves and others. Through positive and mutually dependent relationships, they presumably learned to cope effectively. They have been rewarded through seeking help and having confidence in their own abilities. Crime would hardly seem to be a rewarding or even exciting experience for these people. Their rewards come to them through everyday life experiences, and they have enough confidence in themselves that they can cope effectively with stress or failure.

#### v. Discriminant function analysis

The results of the discriminant analysis data were surprisingly impressive. The nine variables correctly classified the vast majority of the subjects into one of the three categories of violent offender, property offender, and contrast group. Function one discriminates the offenders from the non-offenders. The second function discriminates the violent offenders from

the non-violent, property offenders.

a. Discriminant Function One

For Function One, four variables loaded highly. In descending order, they were:

1. Coping with stress by expecting the worst.
2. Age of leaving home.
3. Coping with stress by using drugs.
4. Number of juvenile convictions.

According to these findings, the individual most likely to develop a significant criminal offence pattern was more likely to expect the worst in a tense situation, to leave home at an early age, to use drugs to cope with stress, and to have many juvenile convictions.

It would appear that such people cope with stress poorly as adults, and this may result from having suffered childhood disruptions including leaving home at an early age, and receiving many juvenile convictions. While it is difficult to know the precise effect of these variables upon offenders, it would appear that they combine to become major factors in later criminal offending.

b. Discriminant Function Two

For Function Two, three variables were loaded highly in discriminating the property offender from the non-property or violent offender. The three variables most strongly correlated to this function were:

1. Expressed desire to control others (FIRO-B).
2. Wanting more love while under age 16.
3. Number of years living on their own before age 16.

According to the study data, persons most likely to be convicted of violent offences are not likely to show behaviourally that they want to control others. They feel that, as children, they did not receive sufficient love and they spent more time living on their own before age 16 than the others.

It is difficult to say if "wanting more love" was a result of living on their own, or if they decided to live on their own because they were not receiving the love they needed at home. It could also be argued that they were "bad children" and, therefore, did not get much love, so they left home. The low score on the "expressed

control" variable is also difficult to explain. Do the violent offenders go along with others and behave in a passive way in social groups? Perhaps this is why they feel uncomfortable in social groups, as evidenced by their low ratings of "significant others" on the repertory grid. It may be that the violent offenders suppress their feelings until they explode in violence.

### c. Summary

The discriminant function analysis is a particularly significant feature of the present study. Earlier sections of this discussion, and indeed, much of the existing research in the field, examines individual variables for simple differences between criminals and normals. Attempts have been made by others to extend such findings with isolated variables into possible indications of causal factors, presumably at least partly for the purpose of understanding and therefore being more able to predict criminal development. Unfortunately, as has been indicated in a variety of ways, this approach may have generated more confusion than clarity. A large number of variables have been identified but interpretation is plagued with complexities sense many variables seem to be at least interactive, and, in some cases, actually contradictory in nature.

It is in this respect that the discriminant function analysis appears especially promising. This procedure statistically screens the variables to identify those that most powerfully discriminate the offender groups from each other and from normals. A relatively small selection of highly predictive variables can be isolated from the larger range of variables showing differences. As other groups or combinations of variables are studied, it would seem possible to constantly refine the discriminant functions by the obvious mechanism of discovering more powerfully discriminating variables to re-order or replace the less powerful factors in the present functions.

This process would seem to promise two related outcomes. In the application of this model to the offender population there may be many modifications that would make it a more useful tool for predicting the probability and variety of criminal development. This would also have enormous impact on intervention techniques as well. In addition, at this stage of investigation into criminality, this procedure might well offer the strongest guidance to the development of a theoretical model representing those factors and

combinations of variables that play the most central and perhaps causal role in criminal development.

It may be reasonable to suggest that the testing of individual variables has a more preliminary function in the investigation, with refinement through the use of discriminant function analysis being the fundamental goal. It could perhaps be argued that single factors such as isolated perceptions of early experience or present state may be more useful in the design, selection, and allocation of prevention and treatment resources; while the discriminant functions may be more applicable to modelling in the theoretical process, and to the sorting and prediction tasks in practical applications.

At the risk of some oversimplification, a somewhat ideal example is indicated. Perhaps, after additional research, at some point in the criminal justice system, such as the pre-sentencing assessment of juvenile offenders, a discriminant function could be used to prioritize individuals most likely to proceed to more serious criminal behavior. Similarly, it could be possible to identify and sort high risk individuals into categories such as violent or property groups. Then, in

the way that the present study suggests a program such as life skills training specifically for property offenders, specific remedial programs could be designed and implemented within the prison system. Alternately, using a further example from the present study, the high risk prospective violent offender might be channeled toward psychotherapeutic programs emphasizing interpersonal interaction skills where he might acquire and develop confidence in a functional ability to influence others more acceptably in social situations.

#### D. A PROPOSED MODEL OF CRIMINAL DEVELOPMENT

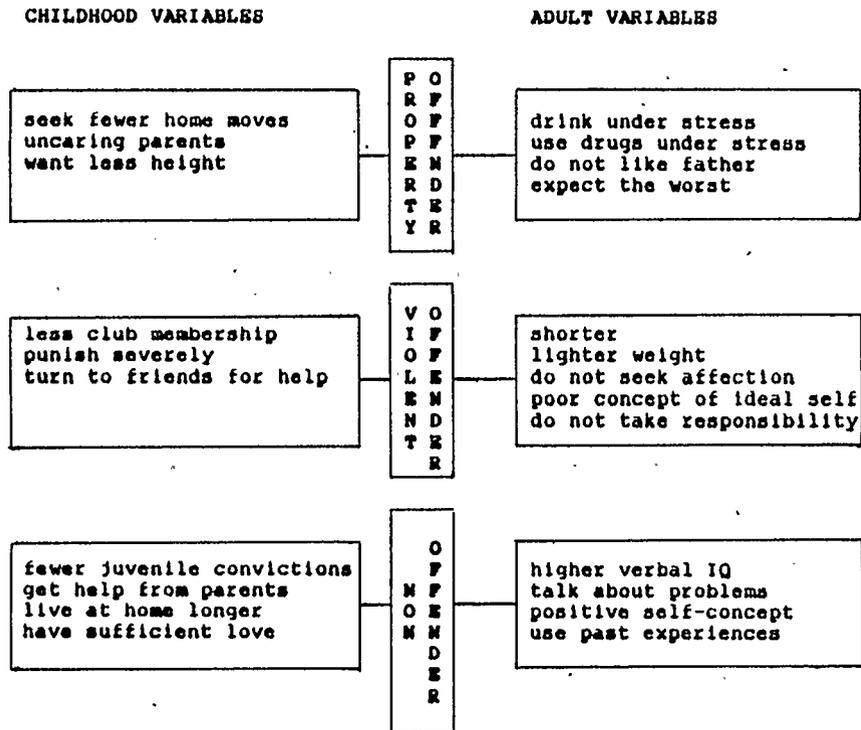
A tentative model of the origins and development of criminal behaviour is set forward in this section. While the model attempts to provide a summary of this study's findings, it is not intended to explain all criminal behaviour or all property and violent offences, but is intended instead as a starting point for discussion.

Figure 3 represents a model derived from these findings. It includes variables which appear to identify a person at risk. There are two main sections of the model containing present state and childhood variables.

These variables are sorted into categories that have been found to differentiate the offender groups from each other and from the contrast group.

It is important to note once again that many of these factors are the reported perceptions of those subjects involved in the study. It is not possible to validate the responses as being accurate representations of fact, but it is important to realize that the "truth" in this case is not as important as the individual's perception of what is true.

Figure 3 A model of criminal development



#### E. CONCLUSION

Although many of the results are highly significant, from a statistical point of view, the fact that the findings are based on a sample of only 74 subjects, suggests that any direct application to the field of criminality would be premature. This research indicates that the search for the causes and treatment of some criminal behaviour should be centered on early life experiences and the importance of love, support, and stability during the early years. This study attempted to isolate factors which are particularly associated with the two groups of violent and property offenders and which also differentiate these offenders from the normal population. These goals were, to a large degree, attained, and the results show promise of isolating the pertinent factors relating to the serious offender.

These results may assist in the development of remediation programs for these offender groups. It is only through greater understanding of the offender that the destructiveness of the present attitude of punishment can be eliminated and be replaced by earlier intervention and more effective rehabilitation programs.

A number of questions are raised once again by this study. A clearly central issue is the question of sequencing in the cause and effect relationship. Were the offenders conduct disordered children to whom the parents responded with excessive punishment or withdrawal, or did the parents neglect or abuse the children, spawning deficiencies in self-image which led in turn to deviant behavior. It is not possible, at this point, to discern which variables, if any, are the cause of criminal behavior or which variables may be the effects of a criminal lifestyle. This research cannot answer the question of which came first, but the establishment of clear association is an important step toward further understanding of the causes of criminal behaviour.

A related issue is represented in the question of why these people become criminals instead of developing alternative patterns of mental illness or self-destruction. The concept of stress has gained much popular support as a possible contributing factor in physical and mental illness. It appears that life stress may play a part in criminal development as well. The present study indicates that the criminal may experience early personal and social stress that is uniquely and

highly related to inadequate emotional preparation for relationships and living, in general.

It is likely that through a more intensive investigation of the offender's early life experience, coping strategies, and his current social supports that some more understanding of the factors contributing to eventual criminal behaviour may be obtained. This type of investigation should be carried out on offenders ranging widely in terms of age, as well as types and numbers of offences. It would also be helpful to compare offender's responses to other groups of poorly functioning individuals so as to begin to examine the question of why some people become criminals and others instead develop different mental or physical dysfunction.

The offenders reflected on their early childhood experiences with very different perceptions from those of the contrast subjects. Many of the written comments made by the offenders and the contrast group illustrate the difference of discord and detachment, contrasted with love and togetherness. The finding of the importance of strong interpersonal support, typical of the traditional family, seems to support Rogers' concept of unconditional positive regard being an important impetus for mental

health and personal growth. The offender has very few positively supportive resources that he feels he can rely on. He seems to have had little opportunity to learn adequate emotional functioning. With little or no experience of trust and emotional support, he displays primitive anger which may be seen as a displacement for fear. In essence, he has been provided with inadequate unconditional support to allow for sufficient early exploration and learning of effective strategies for living.

Early detection of those at risk for criminal activities may be another important aspect of applying these results, once again, if they are confirmed by other research. By identifying the adolescent who is at risk, intervention programs can be created to help the prospective offender to learn effective coping and life skills, thereby interrupting the criminal development process.

On the basis of a number of studies, Fitts and Hamner (1969) propose that there is considerable evidence of a delinquency or antisocial self-concept pattern. They elaborate that different kinds of handicaps present different self concept patterns, suggesting that the

public offender, whose handicap is antisocial behavior, would require different kinds of assistance to accomplish self concept change and rehabilitation. They describe a cyclical process whereby negative self concept leads to negative behavior which leads to negative responses from society which then leads to more negativity in the self concept. They suggest that to interrupt this spiralling process, delinquents need firm and effective controls. They offer the following conclusions:

1. The self concept is intimately related to behavior.

2. Treatment should begin with an understanding of an internal frame of reference involving the self concept.

3. Continued delinquent behavior has a continuingly negative effect upon the delinquent's self image.

4. The self concepts of delinquents can only be modified and improved through long term and intensive treatment programs.

5. The extent to which delinquent subjects share in the responsibilities of treatment may be a key to effectiveness.

Keith (1984) concludes that careful design and control of treatment intervention studies is needed

before family intervention approaches can claim specific effectiveness with specific subgroups of adolescents. Keith's (1984) use of family approaches with adolescents suffering from conduct disorders appears promising. Lavin, Trabka, and Kahn, (1984) reviewed treatment approaches to delinquent adolescents concluding that group therapy can produce encouraging results, and a here-and-now focus is desirable. Varley (1984) states that operant conditioning and cognitive behavioural methods appear most useful based on published research and his clinical experience. Varley states that a treatment programme must fade out concrete reinforcers, fade in social reinforcers and move from constant to intermittent reinforcement. He also stresses the importance of stress inoculation, and coping skills training in the later stages of treatment. Sutker, Archer, and Kilpatrick (1981) feel that an important aspect of treatment is whether the client achieves a positive relationship with at least one staff member.

Lipton, Martinson, and Wilks (1975) examined some 231 treatment projects and concluded that there was little appreciable effect upon recidivism gained. Hartjen (1978) suggests, in his review of this article, that most current models of criminality overlook the

normality of crime in our society, and the normality of those who are convicted for engaging in it.

A further question arises in regard to the matter of assisting the emotionally limited offender in the process of change. No accepted psychological theory suggests that locking up such a person in prison helps to change the loneliness or the confusion about people and relationships. This approach can not help the criminal to learn to trust others. It is difficult to imagine how he could learn about love and support being locked in prison.

On the other hand, there are a number of conditions underlying the serious lack of effective rehabilitation programs for the offender. Criminals are not seen as an easy group to work with. The helpers are often seen by the offenders to be using or manipulating them for their own short term goals. Since most of the offenders are not mentally ill, the traditional mental health programs are not effective. The criminal has little social status so less importance is placed on his treatment. Perhaps of paramount importance is the fact that there has been a long tradition of punishment for criminal behaviour and this continues to be a more

pervasive concept in our society than helping the offender.

However, the currently unimpressive approach to social management of the criminal must also be partly due to the state of knowledge in the area. The study of criminal behavior has a long history and yet, today, we still have no accepted model with which to predict or understand the motivation and development of the criminal offender, or upon which assessment or treatment programs can be confidently based. If the present findings are confirmed by other research, then this may be at least the beginning of an answer to this fundamental question.

## CHAPTER 6 : CLINICAL INVESTIGATION OF THE STUDY FINDINGS

### A. INTRODUCTION

As a part of the author's current clinical practice, psychological assessments are carried out on offenders. Since completing the main research, the author has incorporated some of the main results of the study into his standard practice of forensic assessment. This chapter presents a detailed look at four property offenders and two violent offenders. The material on these six individuals is presented in a post-hoc attempt to examine the practical applicability of the results of the original study, by determining which significant study variables appear in actual case presentations. It is also anticipated that presenting these results from a clinical setting will help to lend more practical meaning to the study results.

The chapter consists of four main sections. A brief description of the method of obtaining interview subjects is followed by presentations of the interview format and data collected. Finally, there is a concluding discussion comparing the main results of the study with the results of the interviews.

## B. SAMPLING METHOD

The clinical practice of the experimenter is comprised of community mental health as well as forensic assessment and treatment. The forensic portion of the practice involves individuals who are referred either for assessments or counselling after being sentenced. In some cases individuals are referred for pre-trial assessment but these were not included in this study, since their guilt had not yet been established and therefore, allocation to one of the two categories utilized in the first part of the thesis could not be made reliably. The results of the interviews conducted with forensic clients were included in this section if the individuals met the following criteria drawn from the original study:

(1) convicted of four or more offenses with 80% of these offenses in the same category, so that the current offense is consistent with the past history of offending.

(2) convicted of the last offense less than six months prior to the interview.

It should be noted that this is not a random

sample of inmates entering the institution, but a sample of those referred for counselling and assessment. Although this may be less than ideal, it was the only population available at the time of the study. There was again, difficulty in achieving a large enough sample of violent offenders. There were four property offenders and two violent offenders that met the criteria. There were no drop-outs in this section of the study.

#### C. INTERVIEW METHOD

The case histories presented here were gathered in the course of routine forensic assessments. Only those aspects of the interviews that focussed on perceptions of childhood experience, and the particular aspects of current functioning dealt with in the present study are included here. The interview structure essentially consisted of direct questions regarding the issues of interest.

The case histories are presented in the following section. The actual names of the offenders and their locations have been altered to protect their privacy.

D. PROPERTY OFFENDERS

i. Offender #1

Andy was a rather large individual, approximately 190 cm. in height, weighing about 100 kg. He smiled easily and appeared initially to be rather shy. He was originally referred for an assessment, and later for ongoing counselling in relation to feelings of anxiety and difficulty in sleeping.

Andy stated that he had a problem with stealing. He reported that he had been charged with stealing between fifteen and thirty different times. He was unsure of the number of separate times he had been arrested or, for how many offences. He estimated that he could have had as many as one hundred charges on the six or seven different occasions that he had been before the courts. His present incarceration resulted from a number of break and entry convictions involving homes, one of which belonged to a neighbor who was away on holidays.

Andy's work history was unimpressive. He did obtain a temporary position as a child care worker in a

recreational facility where, he felt, he had been quite effective and successful. When Andy was not re-hired the next season by the recreation centre, he began another spree of extensive stealing where he broke into several homes and one business establishment. Andy reported that each time the police picked him up, he generally confessed readily to the offences. At age twenty four, Andy had already spent some three and a half years in jail on theft related offences.

Andy reported that his school experience was quite positive until approximately grade ten, at which time his achievement deteriorated from a B average to a near failing level. He did not proceed to grade eleven. He had absolutely no explanation for this dramatic change in his educational performance except that he "just didn't try".

Andy was the only male in a family of four children, with two older sisters and one younger. Although none of his sisters had served time in jail, they were reported to have kept company with criminal males. Andy's recollection of details of his home life was limited and incomplete. He found it very difficult to describe his family. He seemed to feel that it was a

relatively normal, average, unremarkable family. Andy spent all but one year living with both his parents up to the age of sixteen. They evidently separated periodically as he was growing up. He calculated that, for the approximate total of one year they were apart, he lived with his mother and sisters. Andy's mother worked some of the time as a secretary and his father worked as a laborer in construction.

Andy reported that his father sometimes drank too much and that on a few occasions during elementary school years his father would "beat him up". He felt however, that his family was able to provide for all physical necessities. Andy appeared to have very little involvement or attachment to either of his parents or his sisters. Amongst family members, he spoke least often of his father.

Andy appeared to have no close friends either as a child or as a young adult. He did report one relationship with a girlfriend that had meant a great deal to him. Growing from a friendship, this relationship lasted for approximately eight months, ending shortly before Andy began committing his most recent offences. He indicated that the loss of his

girlfriend caused a great deal of stress and trauma for him, and that he acted rather "crazy" as a result. He was concerned about the possibility of becoming violent in the future. He apparently made numerous indirect and some rather direct threats toward his girlfriend. Andy appeared to be unable to understand how this would cause his previous girlfriend to feel even more distant and distrustful of him. He was also very hurt that her parents no longer welcomed him in their home.

Andy said that he left home when he was about seventeen to live on his own. However, when he was granted a Christmas pass from the jail, he returned home again to be with his parents. He also spent a few days with his new "girlfriend", whom he had met some eight months previously, approximately one week before he was sentenced to jail.

Andy seemed to have difficulty dealing with stress, tension, and problems. He commented that, as a child, when he had a problem, he generally would not talk to anyone about it. He claimed that no-one at home would help him with his homework, although, he would occasionally be severely punished for poor performance in school. Andy reported that currently, when he feels

especially bothered by a problem, or is under a great deal of tension, he tends to drink alcohol. He claimed that his use of alcohol was not excessive. When he was asked directly about what he expects to happen when he starts feeling uptight and anxious, or when there is a particular problem that is bothering him, he readily said he expected that he would get into a lot of trouble and that there was nothing he could do to help solve the problem or to reduce the severity of the situation.

Even while serving his time in jail, Andy readily admitted that he frequently thought about plans for other thefts and crimes that he could commit upon his release. He explained that he steals because he likes "nice things". His general appearance tended to confirm this statement in that he does keep his inmate clothes wrinkle free and clean. He reported however, that he had stolen nearly two hundred thousand dollars worth of goods. He had nothing at all to show for this. He reported that he had never stolen because of hunger or a lack of clothes. It was always because he "wanted to". He observed that his crimes were ususally impulsive acts almost never committed under the influence of alcohol and, that he was always neat and careful in the homes that he entered. A common occurrence that he fails to understand is that he

frequently steals towels and yet, really has no need for these items.

In summary, it appeared that Andy had little or no commitment to anyone but himself. He had no life goals or plans. He had nothing to look forward to upon his release. He did not expect his relationship with his girlfriend to last. He expected to be unable to get a job. He felt that he had no-one who cared about him and he cared about no-one else. The activity that he knew best was stealing. He had learned to get along quite well in jail and reported that he had become quite a good bridge player. He learned at a relatively early age, in his mid-teens, to satisfy his feelings of detachment and being alone by amassing possessions, and, by giving some of these possessions to "friends" and acquaintances, he had been able to buy some momentary friendship and loyalty. Andy appeared to have given up reaching out for help and assistance from others.

The history in this case is one of some family disruption of an undramatic but varied nature, ranging from instability in the parental marital relationship to specific pathologies such as alcohol abuse and severely punitive and inconsistent discipline. Andy's development

seems to have been increasingly characterized by alienation and withdrawal from his family and peers, as well as academic and occupational failure. It might be surmised that as Andy's personal and social failures grew, so did a general feeling of unhappiness and self-dissatisfaction. His reactions to his own accumulating misery gradually assumed a more immediately gratifying, distracting or superficially compensating quality. This cycle of now self-perpetuating misery, constantly worsening for lack of effective, long term solutions, itself became the motivation for future impulsive thefts that promised both immediate gains and potential to enhance social connections through material gifts.

This case typifies the property offender to the degree that he felt uncared for by his parents with his father being remembered most in this respect. He also exhibits a lack of childhood assistance from either parents or friends, the two sources turned to by contrast subjects and violent offenders, respectively. Andy also displayed the property offender tendency to use alcohol and expect the worst under stress.

ii. Offender #2

At the youthful age of nineteen, Bob had already served approximately three years in jail. All of his convictions had been for stealing. Bob was referred for assessment because of excessive anxiety that he had been experiencing while in jail. Bob was of short stature, measuring about 160 cm. in height, and slightly overweight, at approximately 80 kg. He was somewhat nervous on the initial contact but he quickly relaxed and seemed to be able to talk freely about his childhood and his feelings.

Bob tended not to be involved in simple break and entries on homes, and instead, attempted more challenging and lucrative endeavors such as safecracking. He also reported being quite involved in drugs, generally preferring LSD and marijuana. He indicated that, at times, this was quite a severe problem for him.

Bob had one brother two years younger than himself. When Bob was approximately two years old, his parents separated. He seemed to spend much of his life living with one parent or the other. His father worked in the logging industry and moved quite frequently.

Bob's mother eventually re-married when he was in his mid-teens, although he claimed that this had had little effect on him. Bob married a year and a half ago when he was almost eighteen. He believed that this marriage had occurred because the couple enjoyed being intoxicated together and generally enjoyed each others' company. After only a few months of marriage, Bob was arrested for breaking into a neighbor's house, where he stole all the food that was in the freezer. Evidently, Bob and his new wife were short of funds. By stealing food, they could use their limited money for recreational drugs. Bob claimed that this temporary money shortage arose because of his unemployment insurance cheque being delayed.

Bob appeared to have a rather poor work history and school performance. Because he moved quite frequently, he explained, he had very little interest in school. He preferred to work with his father, felling trees in the bush. He found that he could make an appreciable amount of money, and he was more successful at this than at school. He indicated that he usually committed his offences with another individual. The offence for which he was currently serving time consisted of the theft of a vault from a gas station. He estimated the value of all the goods that he had stolen to be

nearly two hundred and fifty thousand dollars. He reported that he had almost no remnants of these financial assets except for memories of many days of being intoxicated with drugs and alcohol.

Although Bob had been living for the last couple of years within a twenty minute drive from his mother's residence, he had had very little contact with her. He reported seeing her in town on one occasion. He had lost contact with his father but felt that, if he wanted to locate him, he would be able to do so. Bob claimed that his parents alternated between rather harsh discipline and ignoring him. He registered a belief that both parents have drinking problems.

Bob reported that he tended to steal only when he needed the money. When asked what he might do with five thousand dollars cash which he might gain from a theft, he reported that he would buy gifts for his friends, drugs, and possibly some food. He said he would go to a nice restaurant and generally appear to be very important. He guessed that such a sum of money would last him from two to five days. He had never owned a car, a motorcycle or had a bank account.

This property offender resembles the group's profile to some notable extent. Once again there are indications of considerable family home instability with numerous moves, family disintegration, and parental alcoholism. Judging by the current emotional distance in parent-child relationships, it would seem that the level of caring was low. However, as much as this man claimed uncaring parents, as do property offenders in general, he also reported episodically severe punishment which, in the present study appeared more often as a feature of the violent group. On the other hand, Bob does show the property group tendency to utilize drugs under stress. There is also the low level of academic, occupational and interpersonal adjustment that distinguishes the property criminal from normal subjects.

iii. Offender #3

Charlie presented as an overweight twenty-six year old male, weighing 120 kg. with a height of 160 cm. He was the second from youngest, in a family of seven children. He spoke with a distinct Maritime accent, a result of having grown up in a relatively small village in Newfoundland.

When he was starting school, his father began periodic admissions to the psychiatric ward of a local hospital. This continued until his father died when Charlie was eighteen. His mother never worked full time while she was attempting to raise the children. Needless to say, there was a shortage of money in his family. Charlie reported that he had enjoyed a positive relationship with his mother, as well as his brothers and sisters.

He reported that, at about the age of fourteen, he started engaging in relatively minor delinquencies. He remembered that he drank excessively, and drove while underage and impaired. He avoided his home, and stole objects from friends and neighbours. It was at about this time that Charlie began to have a great deal of difficulty at school. He eventually dropped out, in grade eight, at the age of sixteen. Charlie gave the impression of an intelligent individual and indeed, on the Ravens Progressive Matrices, he scored in the above average range. However, he indicated that, as he was growing up, he had the impression that he was not terribly bright. No-one seemed to expect him to succeed.

Charlie was convicted on numerous occasions as a

juvenile but served no time in an institution until he was seventeen. He had, by that time, left home in Newfoundland to travel about the country. He calculated that he had spent about seventy percent of his time, since age seventeen, in jails. His offense history had included break and entry, theft, possession of stolen property, and shoplifting. He did report that he had at times succeeded with some rather large thefts. However, he also said that he typically disposed of this money quite quickly.

Charlie had never had a significant, stable, heterosexual relationship, although he had fathered one son. For girlfriends, he tended to choose individuals with little education or motivation, and a high interest in alcohol and other drugs. Charlie acknowledged enjoying drinking and, as a younger individual, indulged in moderate use of hallucinogenic drugs.

Charlie reported that he has very little interest in returning to his home or family, although he talked a great deal about specific family members. He mentioned repeatedly that one of his goals for his life was to return to his small home town, driving an expensive new sports car.

Charlie's occupational experiences were reported to be varied but extremely limited. He had worked in gas stations pumping gas and at other odd jobs, as a day labourer. Currently, he was very interested in salvaging old cars and other scrap metal for sale to junkyards, a business that he considered to be quite lucrative.

Charlie indicated that he tells himself that he is going to be successful. It appeared important for him to receive some expression of love and affection from those around him. Although his interaction with others tended to be initially rather hostile and distant, once he allowed individuals to get to know him, he could be friendly and considerate.

Reflecting upon early childhood experiences, Charlie reported that the most bothersome features included the absence of his father, no really close friends, and not finding a girlfriend before leaving home. However, he felt very good about having left home and believed that he had encountered experiences that he would have missed had he stayed in the small Newfoundland village. Because Charlie was rather short, we discussed the matter of height. He seemed to feel that it was

never a problem for him. He did enjoy being hefty as well.

Currently, Charlie felt quite optimistic even though he really had very little to be optimistic about. Upon release, he expected to have neither a job, nor a girlfriend, nor any other meaningful relationship, and no savings. He exhibited rather limited social skills although he did display a great deal of enthusiasm.

This offender seems to show some characteristics similar to other property offenders. These include, very limited emotional attachments, leaving home early, numerous juvenile convictions, as well as feeling alienated from his home and family. In this case the roots of family problems seemed to lie in mental illness of a parent. Nevertheless there is the rather familiar pattern, beginning to emerge in early adolescence, of increasing failure to meet normally heightening social expectations and demands. As Charlie failed more, he turned to alcohol and other drugs, as seems so typical of this offender group. Both his behavioral record and his future intentions suggest a strong tendency toward short term, impulsive attempts to replenish a diminished self-esteem. Charlie's case shows neither the family

violence or extra-family support of the violent offender. Neither had he experienced the extensive family support nor the eventual acquisition of effective stress coping strategies of the normal male.

iv. Offender #4

Daniel was a 20 year old male inmate. He was adopted at the age of two weeks. He had one sister who was also adopted. Daniel had experienced quite severe problems in school beginning at his initial entry. He was placed in special classes for children who had difficulty conforming to the school environment and structure of the normal classroom. He remembered more difficulties with the teachers and administration than with other students, although his relationships with peers were also less than positive. Daniel appeared to have very few close friends in school and was frequently involved in fighting with other youths. He became seriously active in stealing when he was thirteen. His criminal behaviour had increased steadily since then.

Daniel was originally referred because of a depressive episode precipitated by his conviction. He presented as an extremely immature individual who did not

cope well with stress or failure. He appeared to frequently resort to emotional blackmail with authority figures, and seemed to have no positive allegiances.

Daniel observed that his relationship with his parents had been constantly stormy. It appeared as though much of this conflict began with Daniel's difficulties outside the home, in school, and with neighbour children. Indications were that these extra-family conflicts soon erupted into intra-family conflicts which became more pronounced as his behaviours became more delinquent. Daniel was first institutionalized because of his delinquent behaviour at the age of fifteen. Over the next six years, he spent less than a year outside of institutions.

Daniel has had few successful relationships with females with short duration being a common characteristic. It appeared to have been difficult for him to commit himself to being responsible for, or sharing in the happiness of some other individual. He appeared extremely egocentric. In discussions with Daniel about this trait, he suggested that it stemmed from past experiences of relying on other people for help and support, and finding only pain and disappointment.

He felt that by avoiding any commitments to others he could reduce the amount of emotional pain that he experienced.

Daniel generally spoke of his parents quite positively, although the only time he had had any contact with them was when he was asking for a favour. He seemed to miss having a close relationship with his father and occasionally communicated this fact in emotional terms.

Daniel had used alcohol and other drugs excessively since approximately the age of ten. He tended to be presently more interested in alcohol but in the past he had used a wide variety of illicit drugs. Daniel envisioned himself vocationally as a cowboy or ranch hand. His primary goal was to build a small cabin in the woods, to have a farm with a horse and to live an isolated existence, protected from any kind of involvement with others. One was impressed in talking with Daniel that his parents may also have shared some of these values. He frequently and spontaneously discussed the pleasure he imagined having from living out in the woods in a small house with his country music, his blue jeans, his cowboy boots and hat.

It appeared that Daniel had little insight into why he felt so much anger and frustration. He had no explanation for his criminal activities. He seemed to feel that his perceptions were correct and accurate and, that any suggestion of other ways to perceive the world and interact with people, was of no real interest to him.

Daniel exhibited differences in his behaviour and history from the typical property offenders in the study. He was adopted. He was younger than most inmates. He did not leave home until he was almost sixteen and, at that time, departure was forced by his placement in a penal institution.

In other areas he did show similarities to the property offender group. He did have very little positive interaction with his parents. He belonged to no clubs or social groups. He had many juvenile convictions. He did not talk about his problems and he tended to use drugs and alcohol when under stress. He had negative feelings about his father. He reported a high level of general stress.

E. VIOLENT OFFENDERS

i. Offender #1

Fred was a twenty-five year old male measuring about 170 cm. in height, weighing approximately 160 kg. Fred had rather long hair and appeared careless about his appearance. His upbringing was reported to be rather chaotic, including an early parental divorce. He was raised by his mother until he was seven years old. At that time, she died suddenly and he began living with his older sisters. Fred had four older sisters and an older brother. At age fourteen Fred and the two children nearest his age went to live with his father and his father's new wife. This living arrangement did not work out very well and, after two years, Fred returned to living with his sister. He did not get along with his stepmother and felt that she disliked him intensely. It appeared that his father was seldom available and took little interest in him. He reported that he considered his father to be extremely wealthy, but that he had had no contact with him in five years and believed that his father had absolutely no interest in him. Fred reported wanting to prove to his father that he could be

successful. He claimed that his goal was to be wealthy, more to prove a point than for the sake of wealth itself.

Fred had not participated in any meaningful female relationships. He had a great deal of trouble with drinking and almost all of his assaults had occurred when he was drunk. He had a tendency to fight in bars and these fights had frequently involved weapons such as clubs and knives.

In spite of Fred's rather chaotic upbringing it was surprising to note that he had completed grade twelve and had taken a limited amount of technical training as well. Fred claimed a rather positive outlook on his future and had achieved relatively more success than other subjects in this study. He reported approximately six to eight convictions for violent offences, with most of these being of a relatively minor nature.

In terms of Fred's childhood relationships with others, it appeared as though he felt positively about his relationship with his sister, who cared for him, and generally felt his relationships with other siblings were adequate. Although he was rather young when his mother died, he remembered his relationship with her positively

as well. Fred seemed to generally possess fairly good problem solving skills when he was not drinking. He reported that he was able to make plans for himself and follow through with these plans at least to some extent. He claimed to be able to establish and maintain friendships although the individuals he tended to choose as friends may have been of questionable social merit. Fred did not have numerous juvenile convictions and he did not leave home at an early age.

This case appeared to contain almost no features that would identify the subject as one of the violent group described in the present study. In fact, Fred reported a degree of early family disruption that actually seems much more typical of the property offender. He also tends to resemble the property group in his reported difficulties with alcohol. Indeed, it may have been the substance abuse with the consequent reduction of self-control that most potentiated the development of violent behaviour. While this case does not appear to be well differentiated according to offender type, there are marked differences from the normal males in the study, particularly when viewed in terms of childhood and family background. Interestingly, Fred displayed the increased social success and

sophistication in stress management of the more normal population when he was able to avoid using alcohol.

ii. Offender # 2

George was a thirty-six year old male who had served extensive jail terms over the past fifteen to twenty years. He was a rather small, heavy set individual about 140 cm. in height and weighing about 80 kg.

George was referred because of a chronic problem of violence when intoxicated. George reported that, since he was twelve years old and started to drink, he periodically had had this trouble. He would frequently become violent towards authority figures such as police, his parents, and foremen at work. Although George reported that his drinking was a social activity, he admitted that he found it difficult to abstain if he was with people who were drinking. Once he began to drink, he stated, he found it very difficult to stop.

George had been married twice and had four children from ages seven to twelve years old. He reported that he had a very satisfactory relationship

with his present wife and he appeared to enjoy the love and admiration of those around him when he was sober.

In terms of coping style, George found it very difficult to understand why he becomes violent. He also expressed difficulty in understanding exactly why he drinks although, in detailed conversation, it became apparent that there was a remote connection to feelings of insecurity and self-doubt. His perception of his history of violence was that the situations generally dictated violent behaviour. He denied having any direct input or control over the eventual violence. He tended to disassociate himself from his violent actions and to use the drinking as an excuse for his behaviour.

The early life history reported by George suggested that his family did not display a great deal of violence at home. George was evicted from his home at the early age of fourteen and did not return until he was an adult. He left school at that time, and had since spent much of the time working. George claimed a brother and two sisters, who have adjusted well. His mother died when he was two years old. He was raised by his father and step-mother. There was not a positive relationship between George and his step-mother. George

reported that there was very little emotional involvement between himself and his parents. He appeared to feel somewhat stronger bonds with his siblings than toward his parents.

This violent offender also seems to exhibit nearly as many features of the property offender as of his own group. He shows the consistent pattern of the early adolescent onset of social problems including alienation from home, school failure, alcohol abuse and initial criminal offences, that the study found to be typical of the property group. This man also experienced little of the family violence reported to such a noticeably greater extent in the violent group studied. This case also resembles the previous violent case in that there are indications of substantially higher interpersonal success evidenced by his reportedly favourable marital, family and friendship relationships. As with the first violent offender the criminal behavior problem appeared strongly related to alcoholism. Alcohol abuse was found to be more frequent in property offenders in the main study.

#### F. SUMMARY OF CASE STUDIES

These individual case studies were sequentially

chosen from psychological practice. There is no way of confirming that this is a random sample of the prison population. Indeed, it may be that this is a somewhat biased sample since all of these individuals were referred for counselling or assessment. Nevertheless, it has proven advantageous to take a more personal and detailed look into the lives of these criminals to gain a more human understanding of a small sample of individual offenders. It appears from these short descriptions that these men are unable to understand the reason for their criminal activity. They all seemed to be unsure of how they might prevent a return to jail.

Table 19 presents an attempt to relate the results of the counselling interviews with the four property offenders and the two violent offenders to the experimentally determined variables. The three clusters of variables relate to the model described in Chapter Five. The offenders were rated by the author on each variable according to the offender's specific responses as well as general impressions given by him.

It is apparent that this small sample of offenders clearly do not share the same characteristics as non-offenders. According to this table though, the

property and violent offender groups do not as easily distinguish from one another using these variables.

	VARIABLE	PROPERTY OFFENDER				VIOLENT OFFENDER	
		#1	#2	#3	#4	#1	#2
	-----						
P	seek fewer moves	N	S	N	N	Y	
R	uncaring parents	S	Y	N	S	Y	Y
O	want less height	N	N	N	N		
P	drink under stress	Y	S	Y	Y	Y	Y
E	use drugs under stress	S	Y	S	Y	S	S
R	do not like father	S			S	S	S
T	expect the worst	Y		Y	Y		
Y	* * *						
	less club membership	Y		Y	Y	Y	Y
V	punished too severely	S	S	N		N	N
I	turned to friends for help			N	N	N	S
O	shorter	N	Y	Y	N	Y	Y
L	lighter weight	N	N	N	S	N	N
E	do not seek affection	S			Y	Y	Y
N	poor concept of ideal self	S		N		N	N
T	do not take responsibility	Y	S	S	Y	N	S
	* * *						
O	fewer juvenile convictions	N	N	N	N	S	S
F	get help from parents	N	N	N	N	N	N
F	live at home longer			N	N	N	N
N E	have sufficient love			N	S	N	S
O N	higher verbal IQ	S	N				
N D	talk about problems	N	N	N	N	S	N
E	positive self concept				N	Y	
R	use past experiences to help	N					

N=NO; y=YES; S=TO SOME EXTENT

Table 19. Summary of characteristics of six interviewed offenders on significant variables.

One possible explanation for these discrepancies

may be that they result from applying data obtained in a counselling situation to variables derived from a self-report questionnaire. It may not be unexpected that a more thorough discussion with regards to any one of these topics, in a clinical interview, would result in a wide range of emotions being explored. This process, in itself, may alter or have an impact upon an individual's perceptions, especially when dealing with such topics as childhood punishment or memories of feeling unloved, for example. A second possible explanation for these results may be that all six persons were referred for counselling, and this, in itself may have contributed a selection factor which may have constituted a substantial departure from a random sample of property and violent offenders.

The home and family backgrounds of these offenders seems to be rather varied. The property offenders appeared to have rather disorganized homes with very little attachment to parents. Their friendships appeared to be rather shallow and transitory in nature. Their school performance appeared to have been punctuated by numerous conflicts with teachers and other authority figures. Poor academic performance resulted in early separation from the school environment. The significance

of these early tendencies toward alienation would seem to be that, in the absence of other resources such as home and friendship bonds, the disappearance of this last bit of structure in their lives, predisposed them toward drifting into an environment where criminal activities are more the norm.

It is important to note that these individuals all appeared to have very poor methods of reacting to stressful situations. The property offenders in particular tended to exhibit very negative attitudes and seemed to generally feel that they had no control over their environment. They were not able to plan any long term solutions for difficulties that did arise in their lives. They appeared to choose rather short term solutions such as drinking and conflict avoidance instead of problem solving techniques designed to attack the stressors in their lives or to seek out and effect lasting solutions. This pattern emerged repeatedly in detailed discussion of the individuals' responses to stresses that they experienced. The specific source of these stresses, whether conflict within the family or loss of a job, appeared inconsequential. It generally appeared as though the first response was typically to try to avoid any internal tension or anxiety. These

offenders were unable to institute any problem solving techniques themselves or to seek assistance with these problems from others. It is interesting to note that although all of these individuals have had stresses throughout their lives, none had previously sought professional help. Until this point in their lives, none had considered the mental health professions to be potentially helpful.

In terms of treatment implications for these two samples of inmates, it would appear that they need to learn to assess conflict and stressful situations appropriately, and to be able to respond in a positive manner. This would seem an obvious beginning to helping these individuals to react in a less self-destructive manner to life stress.

They also seem to have very little insight into the inter-relationship of their behaviour with their environment. They appeared to have developed few inter-personal resources that could be relied on for support in times of crisis. Since it is not practical for a therapist or social worker to be continually available to assist individuals in crisis, it seems important to help these individuals to learn how to

develop their own support network, as well as how to recognize crisis and take advantage of an existing support network. This would clearly involve changing established patterns of interaction and might well prove difficult in a short term treatment situation.

Regarding differences between offender types, such a small sample poses numerous difficulties in determining differences between the two groups. There is the indication that the two violent individuals have learned to use violence as a short term way of coping with their stresses. Using violence and intimidation had likely been frequently reinforced and could easily have become an habitual choice for reacting to unpleasant situations.

It must be noted that the two violent offenders, while seeming similar to each other and distinct from the study profiles of both the property and contrast groups in some respects, also appeared to exhibit several patterns that were found to more uniquely characterize the property offender in the main study. Even though the extremely small sample may alone account for this apparent lack of difference, it is tempting to speculate slightly beyond the original findings.

The property offenders interviewed displayed rather diffuse dysfunction across a broad spectrum of their experience. The violent offenders, while sharing some family and social problems, also seemed to have achieved at least marginally greater maturity and success in some significant aspects of their lives. Perhaps the violent offender, having experienced less generalized dysfunction and failure, feels a little less hopeless. In marked contrast, one of the more significant findings of the original study showed the property offender tended to expect the worst in times of difficulty. If the violent offender does in fact tend to retain more positive expectations of life, and yet has not acquired the positive sense of self or other personal strengths necessary to success, is he perhaps more prone to disappointment with its attendant emotional stresses, and therefore more likely to react with anger and violence? At least somewhat consistent with this notion is the observation that the two violent offenders reported their violence to be associated with alcohol consumption. Whether one considers the alcohol chemically disinhibiting or a rationalization for aggression, it could be thought to increase the expression of violent emotion.

Information gathered through examining a small number of convicted offenders, in terms of the variables shown to be significant in the initial study, has proven to be at least somewhat consistent with the earlier conclusions. Unstable family background, defective methods of coping with stress, and the absence of personal resources or friendships to rely on in times of crisis, seem to be predominant characteristics of the criminal offender. While these brief case presentations do not amount to a substantive field test of the study findings, they do tend to demonstrate some interesting clinical examples of the variables examined in this study.

REFERENCES

Abrahamsen. D., Family Role in Diagnosis and Treatment of Offenders. Journal of Nervous and Mental Disorders, 1956, 112, 311-322.

Banay, R., Alcoholism and Crime. Quarterly Journal on the Studies of Alcoholism, 1945, 2, 686-716.

Bandura, A., Principles of Behaviour Modification, New York, Holt, Rinehart and Winston, 1969.

Barclay, A., Linking sexual and aggressive motives: Contributions of "irrelevant" arousals. Journal of Personality, 1971, 39, 481-492.

Barnes, H., & Teeters, N., New Horizons in Criminology, Englewood Cliffs, N. J., Prentice-Hall, 1959.

Bartell, T., & Winfree, L., Recidivist impacts of differential sentencing practices for burglary offenders. Criminology, 1977, 3, 386-396.

Bell, J., Stressful Life Events and Coping Methods in Mental Illness and Wellness Behaviours, Unpublished Masters Thesis, Loma Linda University, 1975.

Bell, J., Unpublished document, 1983.

Belson, W., Juvenile Theft: Causal Factors, London, Harper and Row, 1975.

Bieri, J., Cognitive complexity-simplicity and predictive behaviour. Journal of Abnormal and Social Psychology, 1955, 55, 263-268.

Bieri, J., Atkins, A., Briar, S., Leaman, R., Miller, H., & Tripodi, T., Clinical and Social Judgement: The Discrimination of Behavioural Information, New York, Wiley, 1966.

Blakely, B., Stephenson, P., & Nichol, H., Social factors compared in a random sample of juvenile delinquents and controls. International Journal of Social Psychiatry, 1974, 20, 203-217

Brenner, M., Does employment cause crime? Criminal Justice Newsletter, 1977, 5.

Brown, R., & Hughson, E., Training of the

Developmentally Handicapped Adult - A Practical Guide to Habilitation, Springfield, 1980.

Burgess, P., Eysenck's Theory of criminality: A new approach. British Journal of Criminology, 1972, 12, 74-82.

Buros, O., Personality Tests and Reviews, Highland Park, Gryphon, 1975.

Canada Yearbook, Ottawa, Minister of Supply & Services, Canada, 1977.

Canada Yearbook, Ottawa, Minister of Supply & Services, Canada, 1981.

Cattell, R., & Sells, S., The Clinical Analysis Questionnaire (CAQ), Champaign, Institute for Personality and Ability Testing, 1974.

Clarke, A., & Clarke, A., Recent Advances in the Study of Sub-Normality, London, Mind, 1975.

Cochrane, R., Crime and personality: Theory and evidence. Bulletin of the British Psychological Society, 1974, 27, 19-22.

Cohen, M., Garofalo, R., Boucher, R., Seghorn, T., The psychology of rapists. Seminars in Psychiatry, 1971, 3, 307-327.

Cooper, B., & Shephert, M., Life change stress and mental disorders: The ecological approach. In Modern Trends in Psychological Medicine (Ed.) J. Price, London, Butterworth, 1979.

Coopersmith, S., The Antecedents of Self Esteem, San Francisco, Freeman, 1967.

Deitche, J., The Performance of Delinquent and Non-Delinquent Boys on the Tennessee Self-Concept Scale, Unpublished Doctoral dissertation, Indiana University, 1959.

Dollard, J., Dob, L., Miller, N., Mowrer, O., & Sears, R., Frustration and Aggression, New Haven, Yale University Press, 1939.

Dressler, D., Sociology: The study of Human Interaction, New York, Knopf, 1969.

Duck, S., Friendship, similarity and repest. Psychological Reports, 1972, 31, 231-234.

Duck, S., & Spencer, C., Personal constructs and friendship formation. Journal of Personal and Social Psychology, 1972, 23, 40-45.

Dugdale, R., The Jukes, New York, Putnam, 1910.

Duncan, J., & Duncan, G., Murder in the Family: A Study of Some Homicidal Adolescents. The American Journal of Psychiatry, 1971, 127, 1498-1502.

Edmunds, G., Extroversion, neuroticism, and different aspects of self reported aggression. Journal of Personality Assessment, 1977.

Edmunds, G., & Kendrick, D., The Measurement of Human Aggressiveness, Chichester, Ellis Horwood Ltd, 1980.

Eysenck, H., Crime and Personality, Boston, Houghton Mifflin, 1964.

Eysenck, S., & Eysenck, H., Personality differences between prisoners and controls. Psychological Reports, 1977, 40, 1023-1028.

Eysenck, H., Crime and personality reconsidered. Bulletin of the British Psychological Society, 1974, 27, 23-24.

Eysenck, H., Eysenck Personality Inventory, Educational and Industrial Testing Service, San Diego, 1963.

Eysenck, H., & Eysenck, S., Manual for the Eysenck Personality Inventory, San Diego, Educational and Industrial Testing Service, 1968.

Eysenck, H., & Eysenck, S., Personality Structure and Measurement, San Diego, Knapp, 1969.

Eysenck, S., Rust, J., & Eysenck, H., Personality and classification of adult offenders. British Journal of Criminology, 1977, 17, 169-179.

Farrington, D., Environmental stress, delinquent behaviour, and convictions. In I. Sarason and C. Spielberger (Ed.), Stress and Anxiety, Vol. 6, New York, Halstead Press, 1979.

Feldman, M., Criminal Behaviour: A Psychological Analysis, London, John Wiley & Sons, 1977.

Feshbach, S., Aggression. In Mussen, P. (Ed.) Charmichael's Manual of Child Psychology, Vol. 2, New York, Wiley & Sons, 1970, 159-259.

Fink, Arthur E., Causes of Crime: Biological Theories in the United States, 1938, Philadelphia, 1800-1915.

Fisher, D. R., Crime and Criminal Justice in Iowa, Vol. 1, Statistical Overview, Des Moines, Iowa Office for Planning and Programming, 1979.

Fitch, J. H., Two personality variables and their distribution in a criminal population: An empirical study. British Journal of Social and Clinical Psychology, 1962, 1, 161-167.

Fitts, W., & Hamner, W., The Self Concept and Delinquency, Nashville, Counselor Recordings, 1969.

Forrest, R., Personality and delinquency: A multivariate examination of Eysenck's Theory with Scottish delinquent and non-delinquent boys. Social Behaviour and Personality, 1977, 5, 157-167.

Fox, R., The XYY offender: A modern myth? The Journal of Criminal Law, Criminology and Police Science, 1971, 62, 59-73.

Fransella, F., & Bannister, D., A Manual for Repertory Grid Technique, New York, Academic Press, 1977.

Fransella, F., & Joyston-Bechal, M., An investigation of conceptual process and pattern change in psychotherapy groups. British Journal of Psychiatry, 1971, 119, 199-206.

Gacsaly, S., & Borges, C., The male physique and behavioural expectations. Journal of Psychiatry, 1979, 101, 97-102.

Glaser, D., Kenefick, D., & O'Leary, V., The Violent Offender, Washington, D.C., U.S. Department of Health, 1968.

Glueck, S., & Glueck, E., One thousand Juvenile Delinquents, Cambridge, Harvard University Press, 1934.

Glueck, S., & Glueck, E., Unraveling Juvenile Delinquency, New York, Commonwealth Fund, 1950.

Glueck, S. & Glueck, E., Physique and Delinquency, Harper, New York, 1956.

Goddard, H., The Kallikah Family: A Study in Heredity of Feeble-mindedness, New York, 1925.

Goldstein, M., Brain Research and Violent Behaviour: A Summary and Evaluation of the Status of Bio-Medical Research in Brain and Aggressive Behaviour. Archives of Neurology, 1974, 30, 1-34.

Gray, W., & Gray, L., Court Clinic Therapy: Theory and Practice. International Journal of Offender Therapy, 1974, 18, 143-152.

Gray, W., & Gray, L., System Specifics in "Break In": A therapeutic approach. International Journal of Offender Therapy, 1977, 21, 31-40.

Gray, W., & Gray, L., System specifics in offender therapy. International Journal of Offender Therapy and Comparative Criminology, 1978, 22, 56-67.

Guttmacher, M., Sex Offenses, New York, Norton, 1960.

Hare, R., Psychopathy Theory and Research, Toronto, Wiley & Sons, 1970.

Hathaway, S., & Monachesi, E., Analyzing and Predicting Juvenile Delinquency and Crime, Minneapolis, University of Minnesota Press, 1963.

Heather, M., The structure of delinquent values: A repertory grid investigation. British Journal of Social and Clinical Psychology, 1979, 18, 263-275.

Heckel, R., & Mandell, E., A factor analytic study of the demographic characteristics of adult and juvenile incarcerates. Journal of Clinical Psychology, 1981, 66, 430-433.

Hirschi, T., Causes of Delinquency, Berkley, University of California Press, 1969.

Holland, T., Holt, N., & Beckett, G., Prediction of violent versus non-violent recidivism from prior violent

and non-violent criminality. Journal of Abnormal Psychology, 1982, 91, 178-182.

Holland, T., Levi, M., & Beckett, G., Associations between violent and non-violent criminality: A Canonical Contingency Table Analysis. Multivariate Behavioural Research, 1981, 16, 237-241.

Holmes, T., & Rae, R., The social re-adjustment rating scale. Journal of Psychosomatic Research, 1967, 11, 213-18.

Hooton, E., Crime and Man, Harvard University Press, Cambridge, 1931.

Hooton, E., The American Criminal: An Anthropological Study, Harvard University Press, Cambridge, 1939.

Hunter, H., YY chromosomes and Klinefelter's syndrome. The Lancet, 1966, 98, 984-997.

Jacobs, P., Brunton, M., & Melville, M., Aggressive behaviour, mental subnormality and the XYY male. Nature, 1965, 208, 1351-1352.

Jesse, F., Murder and Its Motives, London, Harrar, 1952.

Jessor, R., & Jessor, S., Problem Behaviour and Psycho-Social Development: A Longitudinal Study of Youth, New York, Academic, 1977.

Jeyasingh, J., Social and economic aspects of theft. Indian Journal of Criminology, 1980, 8, 100-105.

Jorm, A., Personality and type of criminal offence. Australia and New Zealand Journal of Criminology, 1977, 10, 115-119.

Justice, B., Justice, R., & Kraft, J., Early Warning Signs of Violence: Is a Triad Enough? American Journal of Psychiatry, 1974, 131, 457-459.

Keith, C., The Aggressive Adolescent: Clinical Perspectives, New York, Free Press, 1984.

Kelly, G., A Theory of Personality, New York, Norton & Co., 1955a.

Kelly, G., The Psychology of Personal Constructs, New York, Norton, 1955b.

Kelly, G., The Psychology of Personal Constructs, New York, Norton & Co., 1963.

Kelly, G., The role of classification in personality. In B. Mather (Ed.), Clinical Psychology and Personality: The Selected Papers of George Kelly, New York, Wiley, 1969.

Kim, Y., A Comparison of Self-Concept of Delinquent and Non-Delinquent Boys, Seoule, Korea, Seoule National University, 1967.

Klecka, W., Discriminant Analysis, London, Sage, 1980.

Kretchner, E., Physique & Character, London, 1921.

Lane, P., Bibliography of the overcontrolled-undercontrolled assaultive personality literature and the overcontrolled-hostility (O-H) scale on the MMPI. Journal Supplement Abstract Service, Washington D.C., American Psychological Association, 1978.

Lang, A., Goechner, D., Adesso, B., & Marlatt, G., Effects of Alcohol on Aggression in Male Social Drinkers. Journal of Abnormal Psychology, 1975, 84, 508-518.

Lavin, G., Trabka, S., & Kahn, E., Group Therapy With Aggressive and Delinquent Adolescents. In C. Keith (Ed.), The Aggressive Adolescent: Clinical Perspectives, New York, Free Press, 1984, 240-267.

Leek, S., Phrenology, New York, Macmillan, 1970.

Lefkowitz, M., Eron, L., Walder, L., & Husemann, L., Growing Up to be Violent, New York, Pergamon Press, 1977.

Le Shan, E., The Roots of Crime: What You Need to Know About Crime and What You Can Do About It, New York, Four Winds, 1981.

Le Unes, A., & Christensen, L., The Eysenck theory, personality inventory and criminal classification. Journal of Community Psychology, 1974, 2, 88-91.

Lewis, D., Psycho-Biological Vulnerabilities to Delinquency, Introduction: A Historical Perspective. Journal of American Academy of Child Psychiatry, 1978,

17, 193-196.

Lindzey, G. & Hall, C., Theories of Personality: Primary Sources and Research, New York, Wiley, 1965.

Lipton, D., Martinson, R., & Wilks, J., The Effectiveness of Correctional Treatment, New York, Preager, 1975.

Little, A., Professor Eysenck's Theory of Crime: Empirical test on adolescent offenders. British Journal of Criminology, 1962, 4, 152-163

Lombroso, C., Crime: It's Causes and Remedies, Boston, Little, Brown, 1911.

Lorenz, K., On Aggression, New York, Horcott, Brace & World, 1966.

Mazis, M., Cognitive training and receptivity to novel information. Journal of Experimental Social Psychology, 1973, 9, 307-319.

McCord, J., Some Child Rearing Antecedents of Criminal Behaviour in Adult Men. Journal of Personality and Social Psychology, 1979, 37, 1477-1486.

McCord, J., & McCord, W., The Effects of Parental Role Model on Criminality. Journal of Social Issues, 1958, 14, 66-74.

McCord, W., McCord, J., & Zola, I., Origins of Crime: A New Evaluation of the Cambridge-Sommerville Youth Study, New York, Columbia University Press, 1959.

McCord, W., McCord, J., & Howard, A., Familial correlates of aggression in non-delinquent male children. Journal of Abnormal and Social Psychology, 1961, 62, 79-93.

McGurk, B., Davis, J., & Grehan, J., Assaultive behaviour and personal space. Aggressive Behaviour, 1981, 7, 317-324.

McReynolds, P., Advances in Psychological Assessment, Volume 4, London, Jossey-Bass, 1978.

Megargee, E., Under-controlled and over-controlled personality types in extreme anti-social aggression. Psychological Monographs, 1966, 80.

Megargee, E., & Bohn, M., Classifying Criminal

Offenders, A New System Based on the MMPI, Sage, 1979.

Miller, P., Female Delinquency: Fact and Fiction. In M. Sugar (Ed.) Female Adolescent Development, New York, Brunner, Mazel, 1979.

Mischel, W. Personality and Assessment, New York, Wiley, 1971.

Moffitt, T., Gabrielli, W., Mednick, S., & Schulsinger, F., Socioeconomic status, IQ and Delinquency. Journal of Abnormal Psychology, 1981, 90, 152-156.

Monahan, J., Predicting Violent Behaviour: An Assessment of Clinical Techniques, London, Sage Publications, 1981.

Monk, A., & Gervais, P., Fact and Fiction About Crime in Oregon, Salem, Oregon Law Enforcement Council, 1979.

Motlitch, M., Endocrine disturbance in behaviour problems. American Journal of Psychiatry, 1937, 1179-1183.

Murchison, C., Criminal Intelligence, Worcester, Clark University Press, 1926.

Neustatter, W., The Mind of the Murderer, New York, Philosophical Library, 1957.

Nie, N., Hull, C., Jenkins, J., Steinbrenner, K., & Bent, D., Statistical Package for the Social Sciences, 2nd ed., Toronto, McGraw-Hill, 1975.

Passingham, P., Crime and personality: A review of Eysenck's Theory. In Nebylitsyn, V., & Gray, J., (Eds.), Biological Basis of Individual Behaviour, New York, Academic Press, 1972, 342-371.

Perkins, M., & Reeves, J., The Cattell 16PF as a measure of inmate offense types. Journal of Clinical Psychology, 1975, 31, 35-40.

Peterson, R., Pittman, D., & O'Neal, P., Stabilities in deviance: A study of assaultive and non-assaultive offenders. Journal of Criminal Law, Criminology, and Police Science, 1962, 53, 44-48.

Price, W., & Whatmore, P., Behaviour disorders and pattern of crime among XYY males identified at a maximum security hospital. British Medical Journal, 1967, 1,

533-562.

Prieto, A., & Robbins, M., Perception of height on self-esteem. Perceptual and Motor Skills, 1975, 40, 395-398.

Pritchard, D., Stable predictors of recidivism. Journal Supplement Abstract Service, 1977, 7, 72.

Rahe, R., & Arthur, R., Life change patterns surrounding illness experience. Journal of Psychosomatic Research, 1977, 11, 341-45.

Rasch, G., Probabilistic Models for Some Intelligence and Attainment Tests, Copenhagen, Danish Institute for Educational Research, 1960.

Raven, J., Standardization of Progressive Matrices. British Journal of Medical Psychology, 1938, 19, 137-150.

Raven, J., The Comparative Assessment of Intellectual Ability. British Journal of Psychology, 1948, 39, 12-19.

Raven, J., The principle of individuation and the co-ordinates of conduct. British Journal of Psychology, 1956, 47, 95-100.

Raven, J., Guide to Using the Colored Matrices, London, Lewis, 1965.

Raven, J., Court, J., & Raven, J., Manual for Raven's Progressive Matrices and Vocabulary Scales: Section 3, London, Lewis, 1977.

Reker, G., Interpersonal concept structures of Emotionally disturbed and normal boys. Journal of Abnormal Psychology, 1974, 83, 380-386.

Reid, S., Crime & Criminology, Toronto, Holt Rinehart, 1979.

Reid, W., & Holley, B., An application of repertory grid techniques to the study of choice of university. British Journal of Educational Psychology, 1974, 44, 52-59.

Richard, B., & Dodge, K., Social maladjustment and problem solving in school-aged children. Journal of Consulting and Clinical Psychology, 1982, 50, 226-233.

Robins, L., Deviant Children Grown Up, Baltimore,

Williams & Wilkins, 1966.

Rockwell, D., Social and Family Correlates of Anti-Social Disorders. In W. Reid (Ed.), The Psychopath: A Comprehensive Study of Anti-Social Disorders and Behaviours, New York, Mazel, 1978.

Roy, M., Patterns of Crime and Delinquency in Massachusetts, Boston, Massachusetts Commissioner of Probation, 1979.

Ryan, L., Clinical Interpretations of the FIRO-B, Palo Alto, Consulting Psychologist Press, 1970.

Sarason, I., & Johnson, J., Life stress, organizational stress, and job satisfaction. Psychological Reports, 1979, 44, 75-79.

Sarason, I., Johnson, J., & Seigel, J. M., Assessing the impact of life changes: Development of the life experiences survey. In I. Sarason and C. Spielberger (Eds.), Stress and Anxiety, Vol. 6, New York, Halstead Press, 1979.

Schafer, S., Theories of Criminology, New York, 1969.

Schlapp, M., & Smith, E., The New Criminality, New York, Liveright, 1928.

Schutz, W., FIRO-B, Palo Alto, Consulting Psychologists Press, 1977.

Schutz, W., FIRO: A Three Dimensional Theory of Interpersonal Behaviour, New York, Rinehart, 1958.

Schutz, W., Manual for the FIRO Scales, Palo Alto, Consulting Psychologist Press, 1967.

Scimecca, J., Labelling theory and personal construct theory: Toward the measurement of individual variation. Journal of Criminal Law and Criminology, 1977, 68, 652-659.

Scimecca, J., Personal Communication, 1981.

Sears, R., Maccoby, E., & Levin, H., Patterns of Child Rearing, Evanston, Row, 1957.

Sellin, T., & Wolfgang, M., The Measurements of Delinquency, New York, Wiley, 1964.

Shaw, C. & McKay, H., Juvenile Delinquency and Urban Areas, Chicago, University of Chicago Press, 1969.

Shaw, S., & Roth, L., Biological and psychophysiological factors in criminality. In D. Glaser (Ed), Handbook of Criminality, Chicago, Rand McNally, 1974, 101-173.

Sheldon, W., Varieties of Human Physique, New York, Harper, 1940.

Sheldon, W.; Varieties of Temperament, New York, Harper, 1942.

Sheldon, W., Varieties of Delinquent Youth, New York, Harper, 1949.

Silver, I., Criminology - An Introduction, New York, Harper and Row, 1981.

Sjoberg, L., & Olsson, G., Volitional problems in carrying through a difficult decision: The case of drug addiction. Goteborg Psychological Reports, 1979, 9.

Spencer, C., A Typology of violent offenders, Sacramento, California Department of Corrections, 1966.

Statistics Canada, Personal Communication, 1983.

Stewart, M., Cummings, C., Singer, S., & deBlois, C., The Overlap Between Hyper-Active and Unsocialized Aggressive Children. Journal of Child Psychology and Psychiatry, 1981, 22, 35-45.

Stott, D., Delinquency: The Problem and Its Prevention, London, Spectrum Publications, 1982.

Sutherland, E., Mental Deficiency and Crime. In Kimball Young (Ed.), Social Attitudes, New York, Holt, Rinehart, 1931.

Sutker, P., Archer, R., & Kilpatrick, P., Sociopathy and Anti-Social Behaviour: Theory and Treatment. In S. Turner, K. Calhoun & H. Adams (Eds.) Handbook of Clinical Behaviour Therapy, New York, Wiley, 1981.

Syverson, K., An Attempt to Differentiate Violent From Non-violent Offenders Using Psychological Tests, Unpublished Masters Thesis, University of Calgary, 1983.

Tennenbaum, D., Personality and criminality: A summary and implications of the literature. Journal of Criminal Justice, 1977, 5, 225-236.

Tinklenberg, J., & Ochberg, F., Patterns of Adolescent Violence: A California Sample. In D. Hamberg & M. Trudeau (Eds.) Behavioural Aspects of Aggression, New York, Liss, 1981.

Toch, H., Psychology of Crime and Criminal Justice, Toronto, Holt, Rinehart, & Winston, 1979.

United States Department of Commerce, Bureau of the Census. Crime and Seasonality, Washington, D. C., U. S. Department of Justice, 1980.

Valzelli, L., Drugs and Aggressiveness. Advances in Pharmacology, 1967, 5, 79-108.

Varley, W., Behaviour Modification Approaches to the Aggressive Adolescent. In C. Keith (Ed.), The Aggressive Adolescent: Clinical Perspectives, New York, Free Press, 1984.

Vecc, N., & Vecc N., An adaptation for children of the modified role repertory test - A measure of cognitive complexity. Psychological Reports, 1973, 33, 771-776.

Vold, G., Theoretical Criminology, New York, Oxford Press, 1958.

Vold, G., Theoretical Criminology, Second Ed., New York, Oxford Press, 1979.

Witte, A., & Schmidt, P., An analysis of the type of criminal activity using the Logit Model. Journal of Research in Crime and Delinquency, 1979, 16, 164-179.

Wolfgang, M., From Boy to Man - From Delinquency to Crime, Minneapolis, National Symposium on the Serious Juvenile Offender, 1977.

Wolfgang, M., Delinquency in a Birth Cohort, Chicago, University of Chicago Press, 1972.

Yochelson, S., & Samenow, S., The Criminal Personality, V I, 1976; V II, 1977, New York, Jason Aronson, 1977.

Zeleny, L., Feeblemindedness and Criminal Conduct. American Journal of Sociology, 1933, 38, 569-577.

Zimbardo, P., The psychological power and pathology of imprisonment. Catalog of Selected Documentation Psychology, 1973.

**APPENDIX 1**

**GENERAL INFORMATION**

age \_\_\_\_\_ height \_\_\_\_\_ weight \_\_\_\_\_

current conviction(s) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

previous conviction(s) \_\_\_\_\_ year \_\_\_\_\_  
\_\_\_\_\_ year \_\_\_\_\_  
\_\_\_\_\_ year \_\_\_\_\_  
\_\_\_\_\_ year \_\_\_\_\_

1. When you were growing up as a child did you feel your family was:

VERY POOR      POOR      AVERAGE      ABOVE AVERAGE      WEALTHY

2. Did you have any convictions as a juvenile? \_\_\_\_\_

How many? \_\_\_\_\_

2a. What were these offences? \_\_\_\_\_  
\_\_\_\_\_

3. At what age did you move out on your own? \_\_\_\_\_
4. From birth to age 16; how many years did you live in the following situations?

natural mother and natural father \_\_\_\_\_

natural mother BUT NOT natural father \_\_\_\_\_

natural father BUT NOT natural mother \_\_\_\_\_

adopted \_\_\_\_\_

foster parents \_\_\_\_\_

on your own \_\_\_\_\_

BE SURE THAT THESE ADD UP TO EQUAL 16 YEARS.

5. How often did your parents help you with homework when you were in elementary school?

never \_\_\_\_\_ seldom \_\_\_\_\_ occasionally \_\_\_\_\_ often \_\_\_\_\_

6. When you needed help from someone, whom did you turn to for that help?

parents \_\_\_\_\_ friends \_\_\_\_\_ no one \_\_\_\_\_ family members \_\_\_\_\_

professional counsellor or social workers \_\_\_\_\_

7. How often would you talk to the above person about problems?

daily \_\_\_\_\_ weekly \_\_\_\_\_ monthly \_\_\_\_\_ twice yearly \_\_\_\_\_

annually \_\_\_\_\_

8. When (if) you got into trouble did your parents generally:

punish too severely \_\_\_\_\_ punish appropriately \_\_\_\_\_

didn't care \_\_\_\_\_ other (specify) \_\_\_\_\_

9. Below is a list of things that you may or may not have had when you were a child (up to age 16). I would like to know your feelings about them.

Please rate the following items from 1 to 5.

As a child do you feel that more, less, or same, of the following would have been helpful to you as you were growing up.

friends	1	2	3	4	5
time with parents	1	2	3	4	5
change of residence (moving)	1	2	3	4	5
holiday trips with parents	1	2	3	4	5
weight	1	2	3	4	5
brothers or sisters	1	2	3	4	5
understanding	1	2	3	4	5
money	1	2	3	4	5
love	1	2	3	4	5
church attendance	1	2	3	4	5
time with professional counsellor	1	2	3	4	5
height	1	2	3	4	5
intelligence	1	2	3	4	5
club membership	1	2	3	4	5
appropriate discipline	1	2	3	4	5

10. I would be very interested in any other comments you may have about your relationship with your family when you were growing up.