CORRELATES OF SERIOUS OFFENDING, RECIDIVISM AND
ADJUSTMENT IN A SAMPLE OF YOUTHFUL OFFENDERS

by

LUC J. BOULAY, B.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of
the requirements for the degree of

Master of Arts

Department of Psychology

Carleton University
Ottawa, Ontario
April 5, 1993

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Thesis Supervisor

Chair, Department of Psychology

Carleton University
April 1993
Abstract
Past research has demonstrated that there are many predictors of youthful offending. This study examined an array of variables (ie. family variables, educational variables as well as individual variables) to determine which are most predictive of serious offending, recidivism, and adjustment. The subjects, males and females ($M = 15.2$ years, $N = 338$) from a large urban center in Canada, were in either custody or probation dispositions. The results revealed that females originated from more problematic backgrounds and experienced more emotional distress than did the males. Peer relationships emerged as being the most consistent predictor variable when predicting serious offending, recidivism and adjustment for males and females combined. Youths' response to their current offences was the most consistent predictor for males and aggressive behavior was the most powerful predictor of serious offending for the females.
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INTRODUCTION

The problem of criminality among Canada’s youth is widespread (Hendrick, 1991; Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1987). From 1990 to 1991, Statistics Canada (Hendrick, 1991) reported a 4% increase in criminal charges brought against persons under 18 years of age. This means that 60,101 cases were heard nation wide in Youth Courts last year excluding Ontario. However, Statistics Canada states that "when reporting a complete year of charges, [Ontario] may display the largest caseload in Canada" (Hendrick, 1991, p. 2).

A brief description of the types of charges brought against young offenders in 1990-91 is as follows: 1) property offences represented 58% of the total charges; 2) "Other" Criminal Code offences (ie. failure to appear in court, operation of a vehicle while impaired, disorderly conduct, and escapes from custody) represented 16% of cases; 3) Violent offences represented 14% of the charges; 4) Young Offenders Act (YOA) offences accounted for 10% of cases; and 5) drug related offences made up 2% of the cases (Hendrick, 1991).

It is evident from these figures that the research surrounding delinquency among Canada’s youths is worthy of attention. The focus of much of the research on this issue is aimed at finding correlates and predictors associated with youthful offending. Consequently, many
researchers (e.g., Hirschi, 1969; Raskin & Wells, 1990; Fagan & Wexler, 1987; Hill & Atkinson, 1983; Van Voorhis, Cullen, Mathers, Chenoweth Garner, 1988; Johnson, 1987) have attempted to find underlying factors predictive of youthful offending.

Loeber and Dishion (1983) assert that there are two main purposes for the identification of factors associated with youthful offending. The first is the detection of "early warning signs" which can be recognized by the child's parents, teachers, and therapists. According to Bell and Pearl (1982), risk identification is defined as:

the ability to identify groups of individuals who, on the average, do not show the disorder [youthful offending] or only show components of the disorder, [and] who have a statistically significant likelihood of showing the disorder [youthful offending] in full form at a later time, in comparison with the non-risk group. (p. 2)

If these warning signs are detected early enough, intervention directed at decreasing the likelihood of that child becoming a future offender may be possible (Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1987). This goal is consistent with the fundamental idea that the most effective way of dealing with crime is through preventative measures (Task Force on Juvenile Delinquency, 1987).
Loebel and Dishion (1983) state that the second purpose in the identification of factors associated with youthful offending is in "the construction of theories of delinquency" (p. 68). Such theories contribute to an understanding of the causes and dynamics of youthful offending. This form of criminological research perpetuates new research, the development of new theories and encourages the refinement of those theories already in existence (Andrews, Bonta & Hoge, 1990).

The role of prediction continues to be an important one during the rehabilitation of offenders as well. The risk of recidivism is described as the "risk principle" by Andrews et al. (1990). The risk principle is based on the following two premises: prediction and matching. Before youths are directed toward any type of treatment program, their risk factors must first be assessed to determine their risk of reoffending. This assessment encompasses risk factors related to the youths' "personal attributes and circumstances" (p. 24). Once these youths have been assessed and their level of risk identified, they can be matched to an appropriate treatment service. For example, low-risk cases would be referred to a less intensive service option while high-risk cases would be referred to a more intensive service option.

Andrews et al. (1990) have also stated that the prediction of risk of recidivism can be optimized by
tracking the young offender over time to determine "changes in the person and circumstances" (p. 31). The authors refer to this concept as the "need principle". This principle takes into account the dynamics of an individual as well as the individual's changing circumstances. Needs, also referred to as "criminogenic needs", are comprised of risk factors which have been identified through risk assessments. The objective is to control and rectify the criminogenic needs of the individual in the hopes of reducing their criminal activity.

Another meaningful reason to study and understand youthful offending, according to Loeber (1990), is that less serious acts of youthful offending tend to progress into more serious acts as a function of time. He refers to this process as the "progressional" path of youthful offending. He has also asserted that the number of antisocial significant predictors a youth is identified as having is directly related to the likelihood that delinquent acts will be of a serious nature. To illustrate this point, Loeber offered an example based on research findings. For example, only two significant predictors of youthful offending were observed for youths who committed theft at home, six significant predictors were found for youths who committed theft outside the home, 11 for those who physically attacked others and 17
for vandalism. Loeber postulated that factors acting together, such as youths who steal and who are aggressive, may commit more serious acts of youthful offending in comparison to youths who are solely aggressive and youths who solely steal. This is because youths who are both aggressive and who steal have a larger repertoire of delinquent behavior to draw from when it comes to executing other acts of youthful offending. Loeber concluded by asserting that the more offenders progress to increased levels of serious youthful offending, the less probable it is they will regress to less serious acts.

The identification of youths at risk of becoming delinquent as well as the identification of their needs as individuals are directly linked to the development of theories of youthful offending. These theories allow for an expansion of our knowledge base regarding the correlates of youthful offending, and bear ramifications not only for researchers, case workers and professionals, but also for those responsible for social services. For example, with increased knowledge surrounding the intricacies of youthful offending, policy makers are better equipped to initiate and fund effective preventative services for those youths requiring such assistance (Loeber & Stouthamer-Loeber, 1987).
Operationalizing "Serious Young Offender"

The focus of this study is on the serious and chronic offender. Therefore, before reviewing correlates of youthful offending, it is important to recognize that there are differing conceptualizations and operational definitions with regard to the word "serious" in "serious young offender" (refer to Appendix A for criteria used in this study in the determination of serious youthful offending). McDermott (1983) stated that the word "serious" is a subjective term "which in practice is often used interchangeably with "violent" and "chronic"" (p. 68). According to McDermott, researchers typically ask two questions when trying to conceptualize a definition of "serious" offender. Firstly, they must ask: "What constitutes a serious crime?" Secondly, they must determine: "Who is a serious juvenile offender?"

To aid in answering the first question, the Sellin-Wolfgang (1964) and the Zimring (1977) scales are two examples of scales which provide a standard by which the seriousness of a youth's delinquent activity can be determined. McDermott (1983) has indicated that the Sellin-Wolfgang (1964) scale measures:

the seriousness of crime incidents through a complex scheme that takes into account such elements as the number of victims of bodily harm and the degree of injury, weapon use, and the dollar value of property
stolen, damaged or destroyed. (p. 70)

The Federal Bureau of Investigation (FBI) in the United States uses a definition of serious crime set forth by Zimring (1977). The Uniform Crime Report (UCR) Crime Index is in fact based on Zimring's definition (McDermott, 1983). The Crime Index is determined by the combination of two other indices. The first index is the Violent Crime Index which is made up of four types of crimes: homicide, rape, aggravated assault, and robbery. The second index is the Property Offence Index which consists of burglary, larceny, motor vehicle theft, and arson.

Turning to the next question, McDermott (1983) stated that one of the criteria used in the determination of the serious juvenile offender is the chronicity or number of repeated offences he/she has committed. For example, "on the basis of offence history, three offender types can be identified: one-time offenders, repeat offenders (two to four times, and chronic offenders (five or more times)" (p. 73). With what is known of the young offender's criminal history and the information obtained from the two scales measuring the seriousness of offence mentioned above, it becomes possible to identify the serious young offender.

However, McDermott has maintained that there is a problem with this type of approach in identifying the serious young offender. This is because not all serious
offenders commit only serious offences. In most cases these offenders commit both serious as well as non-serious crimes. She therefore asks, "which of the mixed-record [i.e., those whose criminal records consist of both serious and non-serious crimes] chronic offenders are serious offenders?" (p. 73). It quickly becomes evident that difficulties lie in the identification of serious offenders in absolute terms. A possible solution to this dilemma is offered by the American Justice Institute (AJI) which proposes that:

a serious offender is one whose offence history includes adjudication for five or more serious offences ([based] on the Sellin-Wolfgang scale), or one who is adjudicated for one or more offences whose severity is equal to homicide or forcible sexual intercourse as measured by the Sellin-Wolfgang scale. (in McDermott, 1983, p. 75)

**Correlates of Youthful Offending**

Upon reviewing the literature concerning correlates of youthful offending, it is evident that no single cause or risk factor has been identified as being the sole contributor of delinquency. Through continued research into the causes of youthful offending, it is apparent that young offenders do not comprise a homogeneous group. The primary reason being that there are many components which
contribute to delinquent behavior in individuals (Loeber & Dishion, 1983; Andrews, Hoge & Leschied, in press; Blaske, Borduin, Henggeler, & Mann, 1989; Laub & Sampson, 1988; Reiss, 1951; Buikuisen, 1979; Hanson, Henggeler, Haefele, Rodick, 1984).

In Andrews et al's. (in press) review of the literature, 12 factors have been identified as being among the "major risk factors" for youthful offending. These factors share some commonalties and can therefore be classified into two main categories. The first includes family variables and the second personality and behavioral variables (see Figure 1). The following discussion is an overview of the literature centering on these 12 factors.

**Family Variables**

To a large extent, the family determines the kind of environment in which a child will develop. As a result, the type of family from which an individual originates is crucial to the understanding of youthful offending (Laub & Sampson, 1988; Hanson et al., 1984; Loeber & Dishion, 1983). In fact, "it is culture and/or subculture that defines/dictates the expectations, norms, and values that children are to internalize" (LeFlore, 1988, p. 630). It is Brandt and Zlotnick's (1988) view that delinquent youths come from families which have "failed to provide some important essential ingredient" (p. 93).
Figure 1. Correlates of Youthful Offending.

**FAMILY VARIABLES**

A) Social Class Origins:
- Neighbourhood characteristics
- Parental education and occupation

B) Family of Origin:
- Long term reliance on welfare
- Subsidized housing projects
- Criminality in the family (with parents, siblings or other relatives)
- Multiple psychological handicaps in the family (i.e. low verbal intelligence, emotional instability, alcoholism and parenting skill deficits)

C) Early and Current Family Conditions:
- Low levels of affection and cohesiveness within the home
- Low levels of supervision and poor discipline within the home
- Neglect and abuse

**PERSONALITY AND BEHAVIORAL FACTORS**

1) Individual Factors:
A) Personal Temperament, Aptitude, and Early Behavioral History:
- Aggression and early and generalized misconduct
- Restlessly energetic, impulsive, adventurous/pleasure seeking, a taste for risk
- Below average verbal intelligence
- Response to frustration more likely to involve resentment and anger than composure or anxiety/guilt/depression
- Lack of conscientiousness
- Egocentrism (below age-based norm for perspective taking)
- Moral immaturity (below age-based norm for moral thinking)
- Poor problem solving/coping skills
- If diagnosed as a child, more likely to be diagnosed externalizing (conduct disorder) than internalizing (neurotic/depressive/withdrawn)
- Early and generalized misconduct (lying, stealing, aggression, early experimentation with sex and drugs including tobacco)
Figure 1. Continued

B) Personal Attitudes/ Values/ Beliefs/ Feelings:
- High tolerance for deviance in general
- Rejection of the validity of the law in particular
- Applies rationalizations for law violations to a wide variety of acts and circumstances
- Interprets a wide range of stimuli as reasons for anger
- Generally, thinking style and content is antisocial

C) Behavioral History:
- Criminal history, juvenile as well as adult, look for an uninterrupted history, beginning early, including a variety of different types of offences, and violations that continue even while under sentence
- Alcohol and drug abuse
- Aimless use of leisure time

D) Psychopathology:
- High scores on measure of "antisocial personality/psychopathy"
- Many forms of emotional/ behavioral disturbance when combined with a history of antisocial behavior (e.g., conduct problems plus shyness)

EDUCATION VARIABLES

A) School Based Risk Factors:
- Below average effort; lack of interest; being bored not worrying about occupational future
- Conduct problems such as truancy

B) Personal Educational/ Vocational/ Socio-economic Achievement:
- Low level of achieved education
- Long periods of unemployment rather than low levels of occupational prestige
- Reliance on welfare as opposed to sometime use of welfare services

RELATIONSHIPS WITH OTHERS

A) Inter-personal Relationships:
- Generalized indifference to opinions of others
**Figure 1. Continued**

**B) Companions:**
- Associated with antisocial/drug using others
- Being a member of a gang or organized criminal unit
- Isolation from anticriminal others

**OTHER RISK FACTORS**

A) Being male
B) Being young
C) A variety of neuropsychological anomalies

**Note.** From "Report Two: Review of the Profile, Classification and Treatment Literature" by D. Andrews, A. Leschied and R. Hoge, in press. Adapted by permission.
Two dimensions must be considered in studying the family and its relation to youthful offending. The first dimension includes family structural variables and the second family functional variables. Family structural variables refer to factors relating to the actual composition and organization of the family unit (e.g., family size, birth order, broken homes, working mothers, LeFlore, 1988; and social class origins, Andrews et al., in press; Lempers, Clark-Lempers & Simons, 1989; Loeber & Dishion, 1983). The second dimension embodies family functional variables which center on factors associated with the workings of the family unit (e.g., parental affection and acceptance, family relationships, parental supervision and discipline, abuse and neglect, and criminality in the family, LeFlore, 1988, Andrews et al., in press; Patterson & Stouthamer-Loeber, 1984; Rankin & Wells, 1990; Henggeler, Hanson, Borduin, Watson & Brunk, 1985; Hanson et al., 1984). The following discussion of family variables gives an overview of structural as well as functional variables.

Family of origin and parenting. Andrews et al. (in press) have identified the following family factors as being related to youthful offending: long-term reliance on welfare; subsidized housing projects; criminality in the family of origin which includes parents, siblings as well as other relatives; multiple psychological handicaps in
the family which include low verbal intelligence, emotional instability, alcoholism; and types of parenting skills (see Figure 1). Parenting factors include variables such as affection and cohesiveness (e.g. Henggeler, Edwards & Borduin, 1987; Rankin & Wells, 1990; Henggeler et al., 1985; Campbell, 1987; Kroupa, 1988; Cochran & Bo, 1989; Simons, Robertson & Downs, 1988; Johnson, 1987) parental control and levels of discipline as well as supervision (e.g. Wells & Rankin, 1988; Hill & Atkinson, 1988; Rankin & Wells, 1990; Patterson & Stouthamer-Loeber, 1984; Glueck & Glueck, 1950; Dornbusch, Carlsmith, Bushwall, Ritter, Hastorf, & Gross, 1985).

Grenier and Roundtree (1987) state that the following family factors are important ingredients in the prediction of general and serious youthful offending as well as recidivism: familial history of alcoholism and drug abuse; negative relations between parents and the young offender; marital discord; parents' reports of lack of control over the youth; and evidence of neglect. For example, Fendrich (1991) observed that family problems accounted for 65% of the variance in the prediction of "parole maladjustment", or recidivism, in his sample. According to Hollander and Turner (1985), young offenders who come from "stressful and disorganized" families have an increased risk of recidivism. In Loeber and Stouthamer-Loeber's (1987) review of the literature summarizing family factors
predictive of general youthful offending, the authors conclude that, of the family variables, poor supervision of a child was the strongest predictor. They further note that "parents' lack of involvement with the child, and their rejection of him/her predicted youthful offending moderately well, while poor discipline was the weakest predictor" (p. 352).

With reference to criminality in the family of origin, Loeber and Dishion's (1983) examination of the literature has revealed that this factor is one of the more powerful predictors of general delinquency and to a lesser extent serious delinquency (Loeber & Stouthamer-Loebber, 1987). The authors contend that the prediction of youthful offending as well as recidivism improves by 50% if one or both parents, a sibling or grandparent has/have had previous contact with the law by the time the child is 13 years of age. Brandt and Zlotnick (1988) reported similar findings with 14.4% of fathers in their study having had a history of criminal involvement. It is Loeber and Dishion's (1983) assumption that parents who have been found to be antisocial may possess poorer child rearing skills than parents who have not come into contact with the law.

Neighborhood characteristics as well as parental education and occupation are recognized as being possible precursors to youthful offending. However, the magnitude
of this relationship has generally been found to be weak (Tolan, 1988; 1988; Cochran & Ro, 1989; LeFlore, 1988; Hanson et al., 1984; Lempers et al., 1989; Laub & Sampson, 1988; Glueck & Glueck, 1950). For example, in their review of the literature, Andrews et al. (in press) have found an average correlation coefficient of -.09 between social class origins and youthful offending. In addition, Loeber and Dishion's (1983) review of the literature revealed that Socio-economic Status was the poorest predictor of delinquency.

Hanson et al. (1984) looked at psychological as well as sociological correlates of serious youthful offending in 163 families with delinquent sons. Levels of serious youthful offending were specified using a 17 point scale. For example, the scale ranged from "1= truancy, 4= disorderly conduct, 8= assault/ battery, 11= grand larceny, 13= unarmed robbery, 17= murder" (p. 530). Family relationship patterns were assessed using the Unrevealed Differences Questionnaire (URD; Henggeler & Tavormina, 1980) which provides an objective means to quantify interactions observed between: the mother and the youth; the father and the youth; and the mother and father and the youth. As well, family relationship patterns were investigated by using self-reports as measured by the Family Relationship Questionnaire (Henggeler & Tavormina, 1980). It was observed that for the father-absent
families, low levels of affection between the mother and the son and high rates of interruption by the son during interaction was predictive of the seriousness of criminal activity of the adolescent. For the father-present families, a lack of warmth, affection and maternal supportiveness toward the youth as well as interruptions by the youth were also indicative of the seriousness of offender status. Hanson et al. also observed that "cold and conflictual father-son relations in these families are predictive of criminal activity among children" (p. 536). Fendrich's (1991) research of 247 paroled youths yielded similar results. He stated that a lack of supportiveness and increased conflict between parents and youths accounted for 63% of the variance when predicting recidivism. Maskin and Brookins (1974) summarize by asserting that when there does exist a strong family unit, and marital accord as well as accord between the youths and their parents, the youth's risk of recidivism decreases.

Psychological problems within the family are also potential predictive actors of youthful offending. However, according to Andrews et al. (in press), the effects of such problems in the family on delinquency are not well understood. They report that only one study examined this factor in relation to youthful offending (Glueck & Glueck, 1950; cited in Andrews et al., in press).
for which only a moderate correlation was revealed. More recently, Brandt and Zlotnick (1988) have reported that 15% of parents in their sample had at one time received some form of psychological intervention. As well, the authors note that there does exist a relationship between "psychologically damaged families" and youths who reoffend.

Turning to the issues surrounding abuse, Andrews et al. (in press) have stated that the abuse-delinquency link has not been as vigorously investigated as other factors. Consequently, it is difficult to draw any definitive conclusions on the topic. An example of a study investigating the abuse variable was conducted by Dembo, LaVoie, Schmeidler and Washburn (1987). Their results revealed that up to 68% of their sample had in some way been physically abused. In addition, 46% reported being sexually assaulted by an adult (18 years and older) before the age of 13 years. However, Andrews et al. (in press) have pointed out that "the abuse variable is embedded in such a complex of other factors (e.g., parental alcoholism, mental illness) that it is difficult to isolate the effects of the abuse variable" (p. 97).

**Individual Variables**

It is necessary to explore individual factors to obtain a comprehensive understanding of the dynamics
operating within the young offender (Andrews et al., in press). Individual factors can include variables such as temperament, aptitude, antisocial behavior, early behavioral history, personal attitudes, values, beliefs, feelings, behavioral history and psychopathology (Andrews et al., in press, see Figure 1). Many personal factors have been found to be linked to youthful offending. Only those considered to be the most predictive will be discussed here.

Stealing, Lying and Truancy

Literature reviews by Loeber and Dishion (1983), Andrews et al. (in press), and Loeber and Stouthamer-Loeber (1987) have indicated that behavioral problems such as stealing, lying and truancy are among the most predictive factors of youthful offending in general as well as of serious youthful offending (Loeber & Stouthamer-Loeber, 1987). Research has also determined that prior youthful offending, stealing, and lying are among the "earliest predictors" of future youthful offending (Loeber and Stouthamer-Loeber, 1983; Loeber & Dishion, 1983).

Stealing, lying and truancy can be thought of as being interrelated since lying is an intricate part of the stealing and truancy practices of the young offender (Loeber & Dishion, 1983). For example, Mitchell and Rosa's (1981) study indicated that male and female youths
who had been described by their parents as "stealing and lying" were twice as likely to incur at least one criminal conviction in comparison to a control group. It was also observed that these youths were more likely to appear in court repeatedly and to be involved in theft.

To illustrate the high incidence of truancy in delinquent youths, Glueck and Glueck (1950) reported that 77.2% of their delinquent sample had a history of truancy compared to 12.5% of the non-delinquent control group. Loeber and Stouthamer-Loeber (1987) have stated that the high incidence of truancy in relation to youthful offending may result from these youths having more free time therefore giving them the opportunity to conduct delinquent acts such as stealing.

**Aggression**

According to Loeber, Stouthamer-Loeber (1987) and Loeber and Dishion (1983), aggression has been shown to be one of the more stable predictive factors of general youthful offending over time and to a lesser extent serious youthful offending. Essentially, persons who were not aggressive as children will not be aggressive as adults. However, children who are aggressive at an early age and whose aggression persists, are more prone to engage in crimes directed against other persons rather than crimes involving property (Loeber & Stouthamer-Loeber, 1987). Hanson et al's., (1984) findings, for
example, indicate that aggression in delinquent youths is the "most consistent and powerful predictor of serious and repeated arrests" (p. 535) among males in their sample. As well, Hollander and Turner (1985) have reported that youth between the ages of 13 to 15 years who reoffend were more likely described as aggressive by their teachers.

**Drug Use**

The role of drug use in the prediction of youthful offending is not as well understood as some of the other correlates. Loeber and Stouthamer-Loeber (1987) have stated that only three studies have attempted to isolate the exact nature of drug use in youthful offending. The only conclusion to be drawn from the research is that the incidence of general youthful offending, serious youthful offending (Loeber & Stouthamer-Loeber, 1987) as well as recidivism (Hollander & Turner, 1985) is higher among those who use drugs when compared to non-drug users.

**Psychopathology**

Andrews et al. (in press) have observed that youths' self reports of delinquency are significantly related to measures of psychoticism. For example, Blaske et al., (1989) stated that delinquency exhibited by youths is often due to "more deep rooted problems [that] they have personally and in their relationships with others" (p. 313). The authors also stated that case workers and professionals tend to concentrate on more evident problems
such as alcohol and drug abuse therefore neglecting or de-emphasizing the psychological factors which may in fact be at the heart of the youth's offending. For example, Blaske et al. found that delinquent youths, when compared to a control group of nondelinquent youths on two measures of personality disorder, scored higher on measures of ruminative-paranoid and anxiety disorders. As well, youths being diagnosed as suffering from various types of personality disorders such as narcissism and impulsivity, as well as being diagnosed as psychotic, are more at risk of recidivism (Brandt & Zlotnick, 1988). Also, Hollander and Turner's (1985) research revealed that 34% of recidivists in their sample were found to be suffering from some type of "severe personality disorder".

In a study of serious young offenders, Jaffe, Leschied, Sas, Austin and Smiley (1985) used the Basic Personality Inventory (BPI; Jackson, 1974) to assess 453 delinquent boys and 148 delinquent girls. Their objective was to determine whether or not differences between levels of seriousness among serious offenders could be detected. Though Jaffe et al. did not specify what criteria differentiated serious from less serious offenders, they concluded that serious offenders differed significantly from less serious offenders on four scales. These scales included impulse expression, alienation, ideation and interpersonal problems. In brief, serious offenders
"tended to act more impulsively, to be more alienated from societal values, to be less trusting of others and to be in more conflict interpersonally with others" (p. 7). In a similar study by McManus, Brickman, Alessi and Grapentine (1985), levels of serious youthful offending were compared, it was revealed that all of the subjects had "diagnosable psychopathology" which included categories such as "schizophrenial schizotypal personality disorder, major affective disorder/ dysthyemic disorder, borderline personality disorder, mild mental retardation" (p. 482) and the remainder of these youths received "other" psychiatric diagnoses.

Attitudes

Delinquent youths tend to have anti-social as well as anti-authoritarian attitudes, values and beliefs (Andrews et al., in press). Based on their review of the literature, Andrews et al., concluded that "delinquent youths tend to hold beliefs minimizing the importance, probability and severity of the consequences of deviant and illegal actions" (p. 96). For the most part, deviant attitudes and beliefs tend to be highly predictive of criminal behavior and are fundamentally related to other predictive factors of youthful offending (Andrews et al., 1990).
Educational Variable

Not surprisingly, school performance has also been identified as a contributing factor of general youthful offending (Andrews et al., in press; Loeber & Dishion, 1983) as well as serious youthful offending (Loeber & Stouthamer-Loeber, 1987). These adolescents have also been found to have negative attitudes toward education and school performance (Andrews et al., in press). In addition, school problems such as poor school behavior and frequent truancy have been found to be predictive of recidivism (Grenier & Roundtree, 1987).

Young offenders are often classified as emotionally disturbed, mentally retarded and learning disabled within the school system, as a result, Reilly, Wheeler, and Etlinger (1985) felt it necessary to compare these three groups with a group of young offenders in an attempt to discover if they do in fact differ in terms of their academic capabilities. Their findings revealed that significant differences did exist between these four groups on measures of intelligence and academic achievement. In essence, the young offender group was found to be operating at "comparable levels" to the learning disabled group. Reilly et al. determined that "these results suggest that young offenders are not meeting their academic potential according to their intellectual capacity" (p. 206).
Peer Relationships

Although the role and importance of peer relationships with respect to youthful offending is an important one (Andrews et al., in press), Loeber and Stouthamer-Loeber (1987) have noted that very few longitudinal studies have investigated the influences of peer relations on youthful offending. For example, Farrington (1978) has asserted that involvement with antisocial peer groups at an early age is highly correlated with serious youthful offending as well as recidivism (Zarb, 1978). Grenier and Roundtree (1987) found that association with delinquent peers accounted for 65% of the variance when predicting recidivism. Also, Loeber and Dishion (1983) stated "that committing crimes alone discriminates between persisting offenders and offenders who cease delinquent activity in late adolescence" (p. 81). Hanson et al.'s (1984) results indicated that socialized-aggressive behavior "was the most consistent and powerful predictor of serious and repeated arrests among the male adolescents" (p. 535). Socialized-aggressive behavior refers to the involvement of these youths with delinquent peers. As a result, Hanson et al. concluded that it is their involvement and loyalty to their deviant peer group which "most strongly relates to the adolescent's repeated and serious criminal activity" (p. 535). However, reporting on Hirschi's data,
Andrews et al. (in press) stated that although peer relations is a strong predictor of youthful offending, delinquent peers will have little effect on youths who have strong bonds to convention and conformity.

To illustrate the types of relationships different groups of youths have with their peers, Blaske et al. (1989) studied peer relations among youths who were assaultive offenders, sex offenders, nonviolent offenders and nondelinquent adolescents. Results revealed that mothers of assaultive offenders perceived their sons relationships with their peers as more aggressive than the other three groups mentioned above. Moreover, it was observed that assaultive offenders tended to associate with deviant peers more so than the other three groups studied. The mothers of the nondelinquent group rated their sons relationships with peers as "higher in emotional bonding". Blaske et al. have posited that general youthful offending is related to poor family relations thus resulting in bonding with delinquent peers. In addition, Andrews et al. (in press) maintain that delinquent youths tend to associate with other delinquent peers because of "the tendency for most all juvenile offenses to involve the participation of others (hence, being delinquent and having delinquent associates tap overlapping events) and by delinquent behavior bringing one into contact with other delinquents (two-way
causation)" (p. 94).

**Purpose**

It is evident from the discussion above that there are a wide range of correlates associated with the prediction of youthful offending. For the most part, research conducted in this area has investigated specific correlates of offending (i.e. looking at family variables but not individual factors) therefore overlooking "the possibility that the independent variables may be intercorrelated, or that they may interact in their effects on the dependent variable" (Pedhazur, 1982, p. 6). Through stepwise multiple regression analyses, the purpose of this study was to examine a variety of variables found to be predictive of serious offending, recidivism and adjustment.

**Method**

**Subjects**

The subjects in this study were young offenders assigned to Probation Offices in the Toronto area between May 1 and October 30, 1989. The final group included 338 youths, 270 boys and 68 girls ranging in age from 12 to 17 years with a mean age of 15.2 years.

**Measures**

Two measures were used in this study: (a) the Toronto Case Management System Intake Form (TO-CMS Intake; see
Appendix B) and (b) the Client Information Card (CIC).

The TO-CMS was administered to the young offenders upon case intake by probation officers trained in the use of this instrument. The TO-CMS provided a young offender's predictor scores on 26 potential risk factors of youthful offending (see Appendix B). A youth was scored as being "high risk", "moderate risk", "low risk", or "strength" on each of these predictors. Strength signifies that that particular factor works to the benefit of the youth.

The Client Information Card (CIC), which was the young offender's official court record, provided information about the youths' current and past offences. Quarterly reassessments of the young offenders were conducted by probation officers to detect any changes in their status.

**Predicted Variables**

**Serious Offending.** The Client Information Card (CIC), a youth's official court record, was used to calculate a seriousness index. This index was based on a count of all current and past serious offences as recorded in the CIC form; the list of serious offences may be found in Appendix A.

**Recidivism.** Recidivism was based on file data and on any evidence of offending following disposition. The average follow up after disposition was 12 months.
Adjustment. Quarterly reviews of the youths' files were conducted to determine their overall adjustment. The child's overall adjustment was rated in terms of their behavior while in custody or on probation.

Predictor Variables

For the purposes of this study, twenty risk factors based on the TO-CMS Intake Form (see Figure 2) were used in the prediction of Serious of Offending, Recidivism and Adjustment. Each of the predictor variables was rated based on a four point ordinal scale ranging from Strength (1) to Serious Problem (4). As well, each of these predictor variables was clustered into one of five classifications.

Family Circumstances. This first classification was comprised of four predictor variables which took into account various family conditions present in the youth's family unit. The first factor, Family History of Crime, investigated the involvement of family members in criminal activity. Second, Family Emotional History assessed the presence of emotional or psychiatric problems in the youth's family. Third, Stability of Living Environment determined changes in family constellation as well as the frequency in moves within the same community or to other communities. The final variable in this classification was Family Crisis. This factor took into account various
Figure 2. Classification of Predictor Variables.

1) Family Circumstances:
   - Family history of crime
   - Family emotional history
   - Stability of living environment
   - Family crisis

2) Family Dynamics:
   - Communication
   - Roles
   - Discipline
   - Problems solving

3) Education Factors:
   - School behavior
   - Academic performance
   - School attendance

4) Individual Factors:
   - Aggressive behavior
   - History of emotional distress
   - Current emotional distress
   - Response to current offences
   - Response to authority

5) Other Contributing Factors:
   - Peer relationships
   - Drug/ alcohol abuse
   - Sexuality/ sexual behavior
   - Use of leisure time
types of familial hardships the youth may have had to endure.

**Family Dynamics.** The second classification, Family Dynamics involved four risk factors which measured the functioning of the youth's family unit. The first factor, Communication, assessed the type and effectiveness of communication used within the family unit. Second, the Roles factor examined the appropriateness and determination of roles within the youth's family. Third, the Discipline factor assessed the consistency and appropriateness of discipline in the family and finally, the Family Problem Solving Skills variable measured the effectiveness of the family's problem solving ability.

**Education Factors.** This third classification examined variables involved with education. These risk factors included School Behavior, which rated the youth's problem behaviors in the school setting, the youth's Academic Performance as well as his/her School Attendance.

**Individual Factors.** The fourth classification, Individual Factors, encompassed predictor variables which explored the youth's individual characteristics. First, Aggressive Behavior assessed the type and frequency of aggressiveness exhibited by the youth. Second, his or her History of Emotional Distress was also explored to ascertain the presence of any emotional or psychiatric problems the youth may have had. The third variable,
Current Emotional Distress, was concerned with the current presence of any emotional or psychiatric problems. Fourth, the youth's Response to Current Offences gave an indication of the extent to which the youth accepted responsibility, had concern for and understood the crimes he or she had committed. And fifth, the youth's Response to Authority looked at the degree to which the youth complied to authority.

Other Contributing Factors. The final classification, Other Contributing Factors, involved predictor variables associated with the youth's unsupervised activities. First, Peer Relationships evaluated the type of friends the youth chose as associates. The second factor, Drug/Alcohol Abuse, assessed the extent to which drugs and or alcohol interfered with the youth's everyday functioning. Third, Sexuality/Sexual Behavior addressed many different aspects of the youth's sexuality. The fourth predictor variable in this classification, Use of Leisure Time, looked at how the youth chose to utilize his/her free time.

Procedure

All forms were coded on-site at one of the five Toronto probation offices. Information was be coded to protect the identity of the young offender. Coding was be completed by one of six coders working with coding
 manuals. All coders were trained in the coding of information and inter-rater reliability data were collected in five percent of the cases. The levels ranged from .65 to 1.00.

Results

Descriptive Data

T-test comparisons between males and females on all variables revealed several significant differences\(^3\) (see Table 1). Among the three Predicted variables, Serious Offending was the only variable for which a significant gender difference was found, with males scoring higher than females. All four of the factors in the Family Circumstances classification revealed significant gender differences, with females obtaining higher means than males. As well, females had significantly higher means on all four factors from the Family Dynamics classification. No significant differences were found to exist between males and females on any of the three factors belonging to the Education Factors classification. Two predictors from the Individual Factors classification were found to have significant gender differences, with females scoring higher than males. The first was History of Emotional Distress and the second was Current Emotional Distress. Of the four predictor variables in the Other Contributing
Table 1
Descriptive Data

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<th>Females</th>
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35
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<th>Std. Dev.</th>
<th>Females n</th>
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<th>Std. Dev.</th>
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<td>.49</td>
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<td>1.08</td>
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<td>1.09</td>
<td>1.33</td>
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<td>.84</td>
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<td>.91</td>
<td>60</td>
<td>1.17</td>
<td>.98</td>
<td>2.97***</td>
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<td>1.10</td>
<td>1.27</td>
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<td>1.04</td>
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<td>1.13</td>
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<td>.94</td>
<td>58</td>
<td>1.54</td>
<td>.98</td>
<td>1.91</td>
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<td>.71</td>
<td>60</td>
<td>.83</td>
<td>.87</td>
<td>3.26***</td>
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<td>.13</td>
<td>.51</td>
<td>58</td>
<td>.71</td>
<td>1.17</td>
<td>5.51****</td>
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<td>.99</td>
<td>59</td>
<td>1.32</td>
<td>1.11</td>
<td>1.57</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .005; ****p < .001
Factors classification, two showed significant gender differences. These were the Drug/Alcohol Abuse factor and the Sexuality/Sexual Behavior factor where in both instances, females obtained higher means than did males (for correlations see Appendix C).

The Prediction of Serious Offending, Recidivism and Adjustment

The prediction of Serious Offending, Adjustment, and Recidivism for males and females, males only, and females only was determined by a series of stepwise multiple regression analyses carried out in two phases. First, 45 regression analyses (3 predicted variables x 5 classifications x 3 categories [males and females combined; males only; females only]) were performed to determine which predictor variables in each of the five classifications were significant in the prediction of the three outcome variables for each category. The second phase of the analysis consisted of combining the significant predictor variables (composite regressions) to determine which of those were most predictive of the three outcome variables for each category.

Prediction of Serious Offending. Two predictor variables were found to be positively related to Serious Offending for males and females (see Table 2). The first was Aggressive Behavior from the Individual Factors
Summary table: Regression analyses when predicting serious delinquency

<table>
<thead>
<tr>
<th>Significant Predictor Variables</th>
<th>Male and Females</th>
<th>Males only</th>
<th>Females only</th>
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<tbody>
<tr>
<td></td>
<td>r</td>
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<td>24</td>
<td>06</td>
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<tr>
<td>Response to current offences</td>
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<td>21</td>
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<td>Poor relationships</td>
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<td>04</td>
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Composite regression analysis

<table>
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<th>Significant Predictor Variables</th>
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<td></td>
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<td>17</td>
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<tr>
<td>Poor relationships</td>
<td>24</td>
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</table>
classification, $F(1, 240) = 18.35$, $p < .0001$, and the second was Peer Relationships from the Other Contributing Factors classification, $F(2, 239) = 11.36$, $p < .0001$. Together, these two variables accounted for 9% of the variance in the outcome variable.

Two significant predictors emerged in the prediction of Serious Offending for males only (see Table 2). These were Response to Current Offences from the Individual Factors classification, $F(1, 194) = 12.78$, $p < .0005$, and Roles from the Family Dynamics classification, $F(2, 193) = 8.68$. Both Response to Current Offences and Roles were positively related to Serious Offending and accounted for 8% of the variance.

Only one variable was found to be significantly predictive of Serious Offending for females only (see Table 2). Aggressive Behavior from the Individual Factors classification was positively related to the outcome variable $F(1, 54) = 14.71$, $p < .0005$, and accounted for 21% of the variance.

**Prediction of Recidivism.** Regression analysis revealed three significant predictor variables when predicting Recidivism for males and females (see Table 3). These were: a) Peer Relationships from the Other Contributing Factors classification, $F(1, 215) = 48.16$, $p < .0001$; b) Family Crisis from the Family Circumstances classification, $F(2, 214) = 30.53$, $p < .0001$; and c)
<table>
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<th>Variables</th>
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<tr>
<td>Communication</td>
<td>.94  .57  .18</td>
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<td>School attendance</td>
<td>.84  .64  .11</td>
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<td>Current emotional distress</td>
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<td>.80  .80  .15</td>
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<td>Use of leisure time</td>
<td>.84  .44  .17</td>
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</table>

Note: The table shows correlation coefficients (r) and squared multiple correlations ($r^2$) for different variables.
<table>
<thead>
<tr>
<th>Significant Predictor Variables</th>
<th>Males and Females</th>
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</tr>
<tr>
<td></td>
<td>18</td>
<td>26</td>
<td>20</td>
</tr>
</tbody>
</table>
Academic Performance from the Education Factors classification, $F(3, 213) = 23.33, p < .0001$. Each of these three variables was positively related to the outcome variable and collectively accounted for 25% of the variance.

When predicting Recidivism for males only (see Table 3), three predictors emerged as being significant. These were: a) Peer Relationships from the Other Contributing Factors classification, $F(1, 163) = 56.32, p < .0001$; b) Response to Current Offences from the Individual Factors classification, $F(2, 162) = 37.98, p < .0001$; and c) Family Crisis from the Family Circumstances classification, $F(3, 161) = 28.80, p < .0001$. Each was positively related to Recidivism for males only and together accounted for 35% of the variance.

No significant predictors were found for females only when predicting Recidivism.

**Prediction of Adjustment.** Three predictors emerged as being significant in the prediction of Adjustment for males and females (see Table 4). These were: a) Use of Leisure Time from the Other Contributing Factors classification, $F(1, 210) = 53.73, p < .0001$; b) Response to Current Offences from the Individual Factors classification, $F(2, 209) = 33.30, p < .0001$; and c) Peer Relations from the Other Contributing Factors classification, $F(3, 208) = 24.12, p < .0001$. All three
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Table 4: Summary Table of Regression Analyses When Predicting Adjustment
predictors were negatively associated with the outcome variable and collectively accounted for 26% of the variance.

The prediction of Adjustment for males only revealed three significant predictors (see Table 4). These were: a) Use of Leisure Time from the Other Contributing Factors classification, $F(1,171) = 46.92$, $p < .0001$; b) Response to Current Offences from the Individual Factors classification, $F(2,170) = 31.12$, $p < .0001$; and c) Problem Solving from the Family Dynamics classification, $F(3,169) = 22.59$, $p < .0001$. All three predictors were negatively related to Adjustment and accounted for 29% of the variance.

Use of Leisure Time from the Other Contributing Factors classification was the only variable found to be predictive of Adjustment for females only, $F(1,46) = 12.84$, $p < .001$ (see Table 4). Use of Leisure Time was negatively associated with the outcome variable and accounted for 22% of the variance.

Discussion

Several interesting gender differences were observed in this sample of youthful offenders. Overall, girls appeared to have come from more problematic families than males, with females scoring significantly higher on
all family variables. This means that their family backgrounds were characterized by 1) more criminality; 2) more problems of emotional distress; 3) less stability in their living environment; 4) more crisis within their family; 5) less positive constructive communication; 6) roles which are unclear, reversed or inappropriate; 7) discipline which is inconsistent, ineffective or inappropriate; and 8) poor problem solving skills.

Similar results have been reported by other researchers in the field. For example, Henggeler, Edwards and Borduin (1987) as well as Lewis, Yeager and Cobham-Portorreal (1990) found that female youthful offenders tended to originate from more dysfunctional and abusive families than did male youthful offenders.

As well as having more problematic family backgrounds, females in this study were found to have experienced more emotional distress than their male counterparts, with higher incidences of depression and suicide ideation and episodes of irrational thinking, hallucinations or delusions were reported by females.

Similar results have been reported by McCormack, James and Burgess (1986) and Dembo, Williams, LaVoie, Berry, Getreu, Wish, Schmeildler and Washburn (1989).

Drug and alcohol abuse and problems with sexuality were also significantly more prominent among the females in this sample. These problems include the possibility of
pregnancy, having contracted a sexually transmitted disease, having been abused sexually or having interpersonal conflicts as a result of their sexuality or sexual behavior. Again, these results echo previous research (see Lewis et al., 1990; Dembo, Richard, Dertke, LaVoie, Borders, Scott, Washburn & Schmeidler, 1987).

Based on the results of the present study and of past research, it appears that overall, female youthful offenders originate from more dysfunctional family backgrounds and also experience more personal problems than do male youthful offenders. However, the nature of the dynamics involved with these factors is not well understood. For example, why is the incidence of alcohol and drug abuse higher among females? It can be hypothesized that is so because female young offenders are consistently found to have suffered more sexual abuse and experience more emotional problems than male young offenders (Weber, Elfenein, Richards and Davis, 1989). Thus, females may abuse substances to escape from or cope with emotional distress (Windle & Barnes, 1988). Perhaps female young offenders abuse alcohol or drugs because they grew up in a family where such practices were common, or in another case, the young offender may have begun to abuse alcohol or drugs because of peer pressure. It is virtually impossible to generalize from present data as to how all of these factors are related to one another.
As well, gender differences are clearly evident pointing to the fact that the female young offender's needs are different than the male young offender's needs. Therefore, specific treatment programs aimed at helping female youthful offenders need continued enhancement and development.

Peer relationships emerged as being the most consistent predictor variable when predicting serious offending, recidivism and adjustment for males and females combined. These results are consistent with earlier findings (e.g., see Hanson et al., 1984; Farrington, 1978; Zarb, 1979; Grenier & Roundtree 1987). The strongest relationship was found when predicting a young offenders risk of recidivism. This suggests that there is an increased chance young offenders will reoffend if they continue to associate with peers who are a negative influence. If this occurs, it would be reasonable to expect that their level of adjustment will also be negatively affected. The data also indicated that peer involvement influences the seriousness of crimes committed. It is possible that by associating with antisocial peers, young offenders are able to expand their repertoire of delinquent knowledge to include more serious acts of crime. As well, "group think" may play a role in that these youths may engage in serious criminal activities in the presence of their peers, whereas they
may not if alone (Hanson et al., 1987).

A youth's response to their current offences was the most consistent predictor of serious of offending, recidivism and adjustment for the males only and when predicting adjustment for the males and females combined. The youth's response to their current offences are characterized by not admitting any responsibility for their offences, not showing concern about the impact of their crimes on the victims or they may even blame the victims or they may not show an understanding of the harm their offences have caused or could have caused. This finding is not surprising, youths as who are not at all concerned about the potential impacts of their criminal acts are probably more likely to commit more serious criminal offences. Also, if they do not see anything wrong with what they are doing, they will most likely continue to reoffend. Clearly these are youths who have not "owned up" to their offences and do not take responsibility for them, therefore it is not at all unreasonable to expect them to have poor adjustment within their disposition.

Aggressive behavior was found to be the most powerful predictor of serious offending for females only. Females who committed more serious criminal offences tended to be more aggressive either physically or verbally. Aggressive behavior was also found to be a significant predictor
variable for males and females combined and according to Loeber and Stouthamer-Loeber (1987), aggressiveness has generally been found to be linked to serious offending for both male and female young offenders.

Use of leisure time was the most consistent and powerful predictor of the overall level of adjustment for males and females combined, males only and females only. The youths in this sample tended to have a lack of positive or structured leisure activities, used unstructured time negatively or were neither attending school nor had employment. This finding suggests that positive use of leisure time is necessary to enhance the youthful offender's levels of adjustment. The implementation of effective programs that would aid these youths in redirecting their energies toward more positive goals may help in their overall adjustment.

Family crisis was found to be predictive of recidivism for males and females combined as well as for males only. The family crisis variable is characterized by a death in the family, divorce, health or financial problems. When crises such as these occur, a family's focus may be shifted away from the children in the family to the crisis at hand. Without the guidance of family members, these youths may be more at risk for recidivism. They may not be given the support they need in order to cease their offending behavior. As well, it is important
to note that other factors such as discipline and parental supervision and support, key factors in a healthy family, are more likely to become problematic when a crisis is present in the family (Wells & Rankin, 1988; Henggeler et al., 1985). Here again, interactions among variables are evident making it very difficult to isolate their specific roles.

In addition to youths' responses to their current offences, family roles were also found to be predictive of serious offending for males only. Roles within the family are chronically unclear, reversed or inappropriate. Also, for the males only, problem solving was found to be predictive of adjustment. The youth's overall adjustment was determined by their behavior while in custody or on probation. While proceeding through custody or probation, depending on the type of disposition they receive, youths must deal with probation officers, case management officers, officers of the court, and institutional staff only to mention a few. Males in this sample who have poor problem solving skills demonstrated poorer levels of adjustment. This evidence suggests that these males are not interacting with or dealing with these people effectively.

Based on the results from the descriptive statistics, it is evident that this sample of male and female youthful offenders is similar to other
populations studied, therefore, these findings can be
generalized to a certain extent. However, a few points
regarding this sample must be kept in mind. First, the
subjects in this study were from a large urban region in
Canada. Second, the youthful offenders in this sample
received probation or custody dispositions, thus excluding
other disposition types. And third, because the sample of
females was comparatively smaller than the sample of
males, caution should be exercised when interpreting their
composite regression analyses.

Although this study presents some interesting
findings with regard to the predictors of youthful
offending, it must also be kept in mind that the
criteria used to quantify the predictor variables are
somewhat vague in that the actual dynamics operating
within each is not considered. Therefore, this research
should be viewed as a starting point in identifying
problem areas. Further research should target these
problem areas and investigate them in greater depth with
the goal of uncovering and understanding their dynamics.

The notion of individual differences must never be
neglected if the young offender is to be helped. Each
young offender must be perceived as a dynamic individual
with his or her own risks and needs (Andrews et al.,
1990). However, research such as this is needed in
narrowing the great expanse of factors involved in
Youthful offending. It is crucial that these factors be identified before effective treatments are developed.
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Footnotes

1 Because Ontario participated in the Youth Court Survey for the first time in 1990-91, these figures presented do not include Ontario.

2 The information contained in the present paper is based primarily on comprehensive reviews of the literature by Andrews et al. (in press), Loeber and Dishion (1983) and Loeber and Stouthamer-Loeber (1987).

3 Bonferroni t statistic (Pedhazur, 1982):
\[
\text{alpha / number of comparisons} = .05 / 23 = .002
\]
Appendix A

Criteria Used in the Determination of Serious Youthful Offending

Serious Offence Index Based on the Following

-Murder
-Manslaughter
-Attempted Murder
-Wounding/ Assault
-Assault Causing Bodily Harm/ Aggravated Assault
-Assault with Weapon
-Sexual Assault
-Robbery
-Armed Robbery
-Robbery with Violence
-Assault/ Intent to Rob
-Assault to Resist Arrest
-Assault on Police Officer
-Break & Enter with Intent
-Break, Enter, Theft
-Theft Over $1000.
-Auto Theft
-Arson
-Drug Trafficking
Appendix B

Representation of the Toronto Case Management System
Intake Form (TO-CMS Intake)

1. _SERIOUSNESS_OF_CURRENT_OFFENCE(S)_ *

**high [ ]:** major property damage/loss or major personal injury/impact or use of a weapon or violation of court order or 3 or more indictable offences

**moderate [ ]:** indictable offence or some property damage/loss or minor personal injury/impact or 5 or more summary offences

**low [ ]:** summary offence and no property damage/loss and no/minimal personal injury/impact

2. _PAST_OFFENCE(S)_ *

**high [ ]:** major property damage/loss or major personal injury/impact or use of a weapon or more than 2 failures to comply or 5 or more priors

**moderate [ ]:** indictable offence or some property damage/loss or minor personal injury/impact or 3 or more priors

**low [ ]:** summary offence and no property damage/loss and no/minimal personal impact/injury and less than 3 priors

**strength [ ]:** no past offences

3. _YOUTH'S RESPONSE TOWARDS CURRENT OFFENCE(S)_ *

**high [ ]:** does not admit any responsibility for offence(s) or shows no concern about impact on victim/blames victim or shows no understanding of harm offence has or could have caused

**moderate [ ]:** minimizes/makes excuses re: responsibility for offence or shows minor concern for victim or minimizes harm offence has or could have caused
strength [ ]: admits responsibility for offence and understands impact of offence on victim and understands/appreciates harm offence has or could have caused

4. FAMILY_CIRCUMSTANCES - CRIME *

high [ ]: chronic history of crime or current extensive involvement in criminal justice system

moderate [ ]: some family history of crime and minor current involvement in criminal justice system

low [ ]: some family history of crime and no current involvement in criminal justice system

strength [ ]: no known family history of crime and no current involvement

4. FAMILY_CIRCUMSTANCES - EMOTIONAL DISTRESS *

high [ ]: chronic history of psychiatric problems or current psychiatric problems

moderate [ ]: chronic history of emotional distress or current emotional distress

low [ ]: some family history of psychiatric problems or emotional distress and no current psychiatric emotional problems

strength [ ]: family history of emotional stability

4. FAMILY CIRCUMSTANCES - STABILITY OF LIVING ENVIRONMENT*

high [ ]: chronic changes in family constellation or frequent moves that result in a change of community

moderate [ ]: several changes in family constellation or several moves that result in a change in community

low [ ]: 1 or 2 changes in family constellation or 1 or 2 moves within same community
Strength [ ]: all family members have lived together consistently and have lived in same community for several years

5. FAMILY DYNAMICS - COMMUNICATION *

high [ ]: chronic communication breakdown or chronic negative communication or chronic absence of communication

moderate [ ]: current communication breakdown or current negative communication or current absence of communication

low [ ]: occasional communication difficulties

strength [ ]: general clear and direct communication

5. FAMILY DYNAMICS - ROLES *

high [ ]: roles are chronically unclear, reversed or inappropriate

moderate [ ]: roles are currently unclear, reversed or inappropriate

low [ ]: roles are sometimes unclear or inappropriate

strength [ ]: family members have clear appropriate roles

5. FAMILY DYNAMICS - DISCIPLINE *

high [ ]: discipline is chronically inconsistent, ineffective or inappropriate

moderate [ ]: discipline is currently inconsistent, ineffective or inappropriate

low [ ]: discipline is occasionally inconsistent, ineffective or inappropriate

strength [ ]: consistent, effective, appropriate discipline
5. FAMILY DYNAMICS - PROBLEM SOLVING *

high [ ]: chronically family has poor problem solving skills

moderate [ ]: family problem solving skills usually break down in crisis situations

low [ ]: occasionally family has poor problem solving skills

strength [ ]: family has good problem solving skills

6. FAMILY CRISIS *

high [ ]: death or divorce or health or financial

moderate [ ]: parental separation or blending families

low [ ]: youth leaves home or other

strength [ ]: family member leaves home or other

7. AGGRESSIVE BEHAVIOR (YOUTH'S) *

high [ ]: consistent/frequent physical aggression

moderate [ ]: consistent/frequent verbal aggression or situational/occasional physical aggression

low [ ]: some verbally aggressive behavior (eg. defiance) but is generally appropriate to age and developmental level

strength [ ]: deals with anger and frustration appropriately

8. HEALTH (YOUTH'S)

DESCRIBE: past and current health problems and rate as

high [ ]: moderate [ ]: low [ ]: or strength [ ]
4. PEER_RELATIONSHIPS *

high [ ]: history of having no friends or most friends have records/problems or recent isolation from peers

moderate [ ]: friends are much younger/older or has several friends with records/problems or has difficulty maintaining relationships

low [ ]: has difficulty making friends or some inappropriate friendships

strength [ ]: has age appropriate positive friendships

10. DRUG/ALCOHOL_ABUSE *

high [ ]: use interferes with everyday functioning and not prepared to address problem or use is directly related to offence

moderate [ ]: use interferes with everyday functioning but prepared to address problem or use of chemical substances

low [ ]: minor use but no interference with everyday functioning

strength [ ]: no use

11. SEXUALITY/SEXUAL_BEHAVIOR *

high [ ]: has serious interpersonal conflicts as a result of sexuality/sexual behavior: eg. offending behavior, victim of sexual abuse, pregnancy, sexually transmitted disease, causing disruption at home or school or has serious interpersonal conflicts as a result of sexuality/sexual behavior

low [ ]: client expresses concern regarding sexuality/sexual behavior or client lacks information commensurate with current level of sexual activity
strength [ ]: client appears personally satisfied with sexual development, sexuality, sexual behavior and has only minor if any interpersonal conflicts as a result of sexuality/sexual behavior/sexual development

12. EMOTIONAL DISTRESS - HISTORY *

high [ ]: severe depression - continuous social withdrawal, flat affect, indifference or suicide plans, threats or out of touch with reality - irrational thoughts/speech, hallucinations, delusions

moderate [ ]: moderate depression - frequent social withdrawal, flat affect, indifference or thoughts of suicide or non-specific anxiety

low [ ]: some depression, periodic social withdrawal, flat affect, indifference

strength [ ]: emotionally stable

12. EMOTIONAL DISTRESS - CURRENT *

high [ ]: severe depression - continuous social withdrawal, flat affect, indifference or suicide plans, threats or out of touch with reality - irrational thoughts/speech, hallucinations, delusions

moderate [ ]: moderate depression - frequent social withdrawal, flat affect, indifference or thoughts of suicide or non-specific anxiety

low [ ]: some depression, periodic social withdrawal, flat affect, indifference, but generally appropriate to developmental level

strength [ ]: emotionally stable

13. RESPONSE TO AUTHORITY (police, custody, probation, CAS) *

high [ ]: passive/aggressive - consistently seems to agree with expectations but behaviorally fails to comply or consistent verbal defiance and actual failure to comply with reasonable expectations
**moderate [ ]**: consistent verbal defiance but eventually complies with reasonable expectations

**low [ ]**: situational/occasional failure to comply with reasonable expectations

**strength [ ]**: identifies problems and is willing to work on them and complies with most reasonable expectations

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**14. EDUCATION - SCHOOL BEHAVIOR**

**high [ ]**: currently demitted/expelled or frequent suspensions or consistent discipline problems

**moderate [ ]**: past demissions/expulsions or occasional suspensions

**low [ ]**: some disruptive school behavior

**strength [ ]**: co-operative behavior in school

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**14. EDUCATION - SCHOOL ATTENDANCE**

**high [ ]**: chronic history of truancy

**moderate [ ]**: chronic current truancy

**low [ ]**: some truancy

**strength [ ]**: attends regularly

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**14. EDUCATION - ACADEMIC PERFORMANCE**

**high [ ]**: failing most subjects and below grade level

**moderate [ ]**: failing most subjects but at grade level

**low [ ]**: failing some subjects

**strength [ ]**: at or above grade level
15. _EMPLOYMENT_ (if applicable)

high [ ]: chronic pattern of quitting or chronic pattern of being fired or unable to gain employment because of emotional/intellectual problems

moderate [ ]: needs to work but unmotivated or able to find work but inappropriate or poor work habits

low [ ]: poor job search skills

strength [ ]: is motivated to work and can find work and can keep work

16. _USE_OF_NON-SCHOOL_/ _WORK_TIME_ *

high [ ]: has no positive/structured leisure activities and uses unstructured time negatively or neither attending school nor working

low [ ]: has some positive and structured leisure activities but most time unstructured or has unstructured leisure time, but does not use time negatively

strength [ ]: has positive and structured leisure activities and uses unstructured time appropriately

17. _PLACEMENT_HISTORY_

high [ ]: 3 or more placements through agencies/YOA orders or placement in a mental health facility or 3 or more placements not involving agencies

low [ ]: 1 or 2 short-term placements through agencies or YOA orders

strength [ ]: no placement history
RE_ASTICIPATED_TRANSITIONAL_EVENTS

High [ ]: changes in school or changes in workers
Reseate [ ]: changes in custody or other
Loss [ ] and strength [ ]: changes in placement (specify)

Note. * indicates items used in this study.
Appendix C

Correlation Matrix of Predictor Variables for Males and Females Combined

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2. Reoffending
3. Adjustment
4. Family history
5. Family emotional history
7. Family crisis
8. Communication
9. Roles
10. Discipline
11. Problem solv.
12. School behav.
15. Aggressive behav.
16. History of emotional distress
17. Current emotional distress
18. Response to current offences
19. Response to authority
20. Peer relations
21. Drug/alcohol abuse
22. Sexuality/sexual behav.
23. Use of leisure time
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