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INDIVIDUAL, FAMILY, AND COMMUNITY CORRELATES
OF CHILD PROBLEMATIC BEHAVIOUR IN
DISADVANTAGED FAMILIES

by

Marilyn Van Dieten

A thesis submitted to the School of Psychology
in conformity with the requirements for
the degree of Doctor of Philosophy



Marilyn Van Dieten, Ottawa, Canada, 1991



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Abstract

Most investigators accept that the determination of risk status for child outcome is too complex to be explained by any single causal variable. Despite this recognition, few empirical attempts have been made to simultaneously examine the impact of multiple factors on child problematic behaviour. In the current study, a multivariate theoretical model was proposed to assess the relative and combined effects of various factors in contributing to child socialized aggression and conduct disturbance. Variables were drawn from four domains, including child problematic behaviour, family interaction, parent characteristics, and community factors. Analyses were also undertaken to identify protective factors which discriminated between problematic and nonproblematic children.

The proposed theoretical model was tested with a high-risk community sample. Seventy-two families residing in rent-subsidized, high-crime neighbourhoods were recruited to participate in the study on a voluntary basis. All of the families were headed by single-mothers and the majority depended on social

assistance as their primary source of income. In addition, children were equally represented on the basis of age, sex, and geographic location.

The parent-child dyads were interviewed in the home. Multiple measures and/or modes of assessment (i.e., self-report, collateral reports, and observational techniques) were used to evaluate predictors from each of the major domains.

Results of the multivariate analyses provided support for the proposed theoretical model. As expected, the most powerful predictor of socialized aggression and conduct disturbance emerged from the family interaction domain (i.e., ineffective discipline). Variables from the parent characteristics and community factors domain were also important in the prediction of socialized aggression. Combined, these measures accounted for a large percentage of the variance for each of the criterion measures.

Path analytic techniques were used to examine the direct and indirect effects of predictor variables on child behavioural outcome. The results of these analyses pointed to the importance of previously neglected variables in this area. For example, parental

antisocial attitudes were found to exert a direct impact on parenting behaviour (ineffective discipline, poor monitoring), which in turn increased the likelihood of child socialized aggression.

The results also revealed that several protective factors were important in differentiating between problematic and nonproblematic children. Positive temperament, good academic performance, the ability to get along well with others, and the presence of a confidante tended to characterize children scoring low on measures of socialized aggression and conduct disturbance. The implications of these and other findings for theory, research, and clinical practice are discussed.

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Chapter 1

Introduction

The identification of factors associated with problematic behaviour among children warrants a major research commitment for several reasons. First, conduct disorder (i.e., aggression and delinquent behaviour) is one of the most serious and pervasive disorders of childhood. Recent epidemiological data suggest that approximately eight percent of children in Ontario between the ages of 12 and 16 show some form of this disturbance (Offord, 1989). Research also suggests that more than half of the cases of serious antisocial behaviour in adulthood can be traced back to childhood and early adolescence (Loeber & Stouthamer-Loeber, 1987). Given the enormous personal, emotional, and economic loss that results from criminal behaviour, there is a strong need to identify children who are at highest risk for persistent maladjustment.

Second, resources available to address the clinical needs of these children are limited. Therefore, information derived from research has important implications for the development of effective

intervention strategies.

Finally, L. information serves a vital function in testing the adequacy of theories concerned with the etiology of child problematic behaviour.

Over the last 50 years, considerable progress has been made toward the identification of individual, family, and environmental factors associated with child behavioural outcome. The results of this body of research have been summarized in increasingly voluminous reviews which are both descriptive (e.g., Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1986; Patterson, 1982; Snyder & Patterson, 1987; Wilson & Hernstein, 1985) and empirical in nature (e.g., the meta-analyses performed by Farrington, 1985; Loeber & Stouthamer-Loeber, 1987).

Regardless of the method employed by reviewers to integrate findings across studies, a number of variables have consistently emerged as important in the prediction of child problematic behaviour. The most stable and powerful predictors can be categorized into four domains: (1) early child behaviours, such as conduct problems (i.e., aggression, stealing, truancy, lying, and drug use), and the seriousness of juvenile

offences; (2) family interaction variables such as inadequate child rearing practices (e.g., poor supervision and ineffective discipline) and conflictual parent-child relations; (3) parent characteristics, such as criminality and drug abuse; and (4) community factors, such as subsidized housing, delinquent peers, and low socioeconomic status.

Despite consensus among researchers as to the importance of these factors, the available research on the development of child problematic behaviour has several weaknesses. To begin with, few attempts have been made by researchers to simultaneously examine factors across a variety of domains in their respective studies. This is attributed in part, to a reluctance by many researchers to transcend disciplinary boundaries. Ultimately, researchers have emphasized the importance of preferred variables at the expense of others (Andrews & Wormith, 1989). For example, sociologists have emphasized the importance of class distinctions, while researchers advocating a biological theory of human behaviour focus on the genetic determinants of child maladjustment. This practice makes it difficult to determine the cumulative impact and relative

importance of specific variables in the prediction of outcome.

In contrast to the more "single-determinant" theoretical positions of most major theories of child problematic behaviour, several writers have argued for a theoretical synthesis of the various findings on child outcome (e.g., Hoge & Andrews 1986; Rutter, 1985; Susser, 1973; Wilson & Hernstein, 1985). These writers have stressed the importance of a perspective that regards child conduct disturbance and delinquency as a multidetermined phenomenon in which a number of antecedent conditions may be neither necessary nor sufficient, but rather contributory in nature. Accordingly, the presence of one risk factor increases the probability for the occurrence of child problematic behaviour, while an accumulation of risk factors would have an additive effect and greatly increase the likelihood and severity of maladjustment.

The second major weakness of the research to date is the scarcity of studies focussing on community-based, high-risk families. Given the pivotal role that such factors as poverty, criminal neighbourhoods, and parental absence play in contemporary sociological

theories of crime, it is surprising that few attempts have been made to control for these variables. In their summary of the literature, Loeber and Stouthamer-Loeber (1986) concluded that, "while it is easy to blame high-risk families for the crime in our society, a more advantageous approach is to examine how, for example, a proportion of single parents in a high crime neighbourhood are able to bring up children in a nondelinquent fashion" (p.321).

A related shortcoming is the emphasis that many researchers have placed on risk factors as opposed to protective factors. Until recently, few attempts have been made to assess child attributes that serve to buffer or ameliorate the impact of severe environmental stress on child behavioural outcome. An important question that has been given only rudimentary attention concerns the identification of characteristics that differentiate problematic and nonproblematic children who are exposed to similiar economic and social disadvantages.

The final weakness characterizing many of the research studies to date concerns the focus of assessment. That is, investigators have tended to

measure the absence or presence of structural factors that are not readily amenable to clinical intervention (e.g., marital status, family size, and socioeconomic status). With notable exceptions (e.g., Alexander, 1973; Patterson, 1982), few attempts have been made to utilize observational techniques or measures with demonstrated psychometric properties. In their extensive review, Farrington and Tarling (1985) concluded that, "advances in predictive efficiency will only follow the development and implementation of more valid, reliable, and sensitive measurement techniques" (p. 171). In conjunction with this recommendation, it is essential that researchers administer measures that are clinically relevant, dynamic in nature, and amenable to change.

The purpose of the present study is to address each of these major criticisms by evaluating the usefulness of a multivariate model in identifying risk factors for child problematic behaviour. This evaluation is done with a sample of children who are exposed to high-risk environmental circumstances. The model will assess four domains or sets of variables: (1) child problematic behaviour, (2) indices of family

interaction, (3) parent characteristics, and (4) community factors.

Preliminary analyses will also be undertaken to identify protective factors that discriminate between problematic and nonproblematic children. As a first step toward this goal, a detailed review of the literature with regard to each of the domains will be provided.

Child Problematic Behaviour

Before proceeding in further discussion, it is important to provide an operational definition of child problematic behaviour. Although numerous definitions can be applied to this label, the current study is concerned with overt behaviours such as persistent aggression, disobedience, and non-compliance, as well as such delinquent behaviours as, lying, stealing, and drug abuse.

Traditionally, the study of these behaviours has focussed on children labelled as delinquent by the legal system. That is, investigators have examined samples of youth who were institutionalized or adjudicated for the commission of an act(s) that

violated the law. These children are then often compared with nondelinquent groups. The assumption made by researchers who adopt this methodology is that all delinquents exhibit a common set of psychological characteristics. Quay (1987) argues that delinquent youth are not a heterogeneous group and, therefore, "the search for single psychological variables that can reliably separate delinquents from nondelinquents is not an effective research strategy" (p. 118).

In his review of the literature, Quay (1987) summarized the empirical research focussed on identifying subtypes of delinquents based on behavioural characteristics. Rather than a legal criterion (i.e., official delinquency), these investigators have assessed problematic behaviour using self-report instruments, behaviour checklists, and the analyses of life-histories. Four subtypes of childhood psychopathology emerged from Quay's review, including conduct disturbance (undersocialized aggression), socialized aggressive disorder, attention deficit, and anxiety-withdrawal-dysphoria. Items designed to assess each of these subtypes have been included in the revised rating scale of the Behaviour Problem Checklist

(Quay & Peterson, 1983). Other well-developed scales reflect these dimensions but use different names (e.g., Child Behaviour Checklist, Achenbach & Edelbrock, 1983).

Of the four dimensions identified by Quay (1987), the conduct disturbance and socialized aggressive subtypes have received the greatest attention in studies of delinquent behaviour. For example, Hanson, Henggeler, Haefele, and Rodick (1984) used the Behaviour Problem Checklist (Quay & Peterson, 1975) to identify correlates of serious and repeated criminal behaviour among a sample of adjudicated offenders and their siblings. They found the socialized aggression and conduct disturbance subscales to be significant in the prediction of adolescent criminal behaviour and recidivism. Given the strong relationship between these two subtypes and delinquency, they will be used in the current study to assess child problematic behaviour.

Conduct disordered children are described by their parents and teachers as assaultive, disobedient, and destructive. Quay (1987) suggests that these children exhibit continuous difficulties in a variety of areas (e.g., inhibiting behaviour, self-control, verbal

mediation, delayed moral reasoning, and aggression). In their extensive review of the literature, Loeber and Stouthamer-Loeber (1987) concluded that children who remain aggressive into early adolescence appear to be at high risk for future delinquency. In addition, offence-specific precursors were noted, with aggressive behaviour in childhood predicting violent behaviour in adulthood.

The socialized aggressive subtype includes such behaviours as cheating, stealing, truancy, and loyalty to delinquent peers. At the essence of this behavioural pattern are good peer relations in the context of deviant behaviour. In a 10-year retrospective study, Henn, Bardwell, and Jenkins (1980) concluded that children manifesting this disorder are more a product of environmental and peer factors than conduct disturbance, and thus are more amenable to change. Quay (1987) suggests that the socialized aggressive subgroup only differs from nondelinquents on measures of official delinquent behaviour. He suggests that, "this group has channelled their behaviour into delinquent activities while leaving their cognitive abilities, interpersonal relationships, and social skills

unimpaired" (p. 134).

To date, researchers have focussed on the identification of factors that correlate with official delinquency. More recently, investigators such as Quay (1987) have emphasized the need to specify correlates that are sensitive to subtypes of child problematic behaviour. This has particular relevance for social service agencies responsible for reducing and preventing delinquency. For example, the generalized difficulties characterized by conduct disturbance suggest a need for long-term intervention aimed at cognitive, interpersonal, and social-skills training. In contrast, for children who manifest socialized aggressive behaviours, an emphasis on peer relations and parental monitoring of activities engaged in outside the home might be an appropriate deterrent.

The research presented to date has important implications for the differential diagnosis and treatment of delinquent behaviour. The inclusion of these subtypes in the current study provided an opportunity to replicate and extend the findings of previous research.

Family Interaction

Parenting behaviour has long been recognized as an important factor in the development of child problematic behaviour. The cross-sectional and longitudinal studies conducted by the Gluecks (1950), McCord et al. (1959, 1979), West (1969), West and Farrington (1973, 1977) consistently revealed differences in the parenting practices of delinquent versus nondelinquent families. In general, it has been found that parents of antisocial children tend to be more inconsistent, lax, or overly strict (Glueck & Glueck, 1950, 1968; McCord et al. 1959; Patterson, 1980; Schaefer, 1965; West & Farrington, 1973, 1977), to use punitive physical punishment (Glueck & Glueck, 1950; McCord et al. 1959; Olweus, 1980; West & Farrington, 1973), and to be deficient in a number of interrelated family management skills (Alexander & Parsons, 1973; Patterson, 1982).

Patterson and Dishion (1985) have identified four sets of factors that place children at increased risk for both conduct disturbance and socialized aggressive behaviours. These factors include: (1) minimal parental supervision, (2) a low degree of communication,

involvement, and interaction between parents and children, (3) poorly defined and poorly communicated rules and expectations for children's behaviour, and (4) inconsistent and excessively severe discipline.

The strength of the parent-child relationship has also played a major role in the prediction of child problematic behaviour (Glueck & Glueck, 1950; Hirshci, 1969; Johnson, 1985). For example, the Gluecks found high family cohesiveness associated with low delinquency. Cohesiveness was defined as "strong emotional ties among family members, joint interests, pride in their home, and a 'we' feeling in general" (p. 115). Other evidence suggests that lack of parental affection and parental rejection of the child are significantly related to child antisocial behaviour (McCord et al., 1959; Nye, 1958; West & Farrington, 1973).

Attempts to measure parent-child attachment and cohesiveness vary considerably. Cerncovich and Giordano (1987) suggest that measurement strategies typically employed by researchers are inadequate to capture the dynamic quality of parent-child interaction and its effect on problematic behaviour. One notable exception

is Alexander's (1973) effort to determine factors that distinguish between the family interaction patterns of delinquent and nondelinquent adolescents. Alexander (1973) found that communication patterns differed significantly between these two groups. Communication skills associated more frequently with nonproblematic families included more supportive statements, less silence, more equality of speech and more simultaneous speech.

These results are supported by Hanson et al. (1984) in their comparison of adolescent offenders and nonoffenders. In addition to the communication measures utilized by Alexander (1973), Hanson and colleagues (1984) included observations of affect, conflict, and dominance. They found that the less supportive the communication, and the colder and more conflictual the parent-child relationship, the greater the likelihood of frequent and serious police arrests during adolescence.

The importance of family interaction factors in the prediction of conduct disturbance and delinquency has been underscored in treatment outcome studies. (For an extensive review of this literature, see Gordon and

Arbuthnot, 1987). At present, two major research groups have designed and implemented intervention programs in an attempt to alter family interactions critical to the development of problematic behaviour. These are the research groups led by Gerald Patterson of the Oregon Social Learning Center and James Alexander of the University of Utah's Psychological Clinic.

After extensive observations of treated and untreated families, a parent training program was designed by Patterson and colleagues to address deficits in the families of aggressive and delinquent children. The program taught parents to monitor their children's behaviour, to define explicit rewards and punishments for behaviour, and to administer consequences in a consistent manner contingent on the child's behaviour.

Initial studies conducted by this group (e.g., Patterson & Fleischman, 1979; Patterson & Reid, 1973; Patterson, Reid, Jones, & Conger, 1975) demonstrated the alteration of ineffective parenting practices and a reduction in child aggression at program termination. These results were maintained during a six-month follow-up (Arnold, Levine, & Patterson, 1973).

Finally, Patterson, Chamberlain, and Reid (1982) conducted intensive parent training with ten families of highly aggressive children. A greater reduction in child deviant behaviour was noted for this group than for nine families of aggressive children who had been randomly referred to community treatment.

More recently, Patterson and colleagues used a parent-training approach with children who were older (average age was 14 years) and who had committed a minimum of two juvenile offences (Marlowe, Reid, Patterson, & Weinrott, 1986). Fifty-five boys from lower-class families were randomly assigned to the social learning approach or community treatment. The experimental group committed significantly fewer offences during treatment. Although these differences were not maintained at a one-year follow-up, the experimental group did spend fewer days in an institution than the control group during the follow-up period.

Alexander and colleagues also made extensive observations of parent-child interaction. However, they differed from the Patterson research group in three important ways. First, the Alexander group focussed on

officially identified delinquents in a Mormon community. Second, they developed a family-oriented behavioural intervention (Functional Family Therapy or FFT) which focusses on the entire family as the object of change. Third, in addition to skills-deficit training (e.g., communication, problem solving, and contingency contracting), Alexander and colleagues placed a strong emphasis on the parent-child relationship. Finally, this approach has been replicated by researchers with delinquent youth in an economically depressed rural region (Gordon, Arbuthnot, Gustafson, & McGreen, 1986; Gordon, McGreen, & Arbuthnot, 1984).

A number of treatment evaluation studies have been reported by Alexander and colleagues demonstrating the effectiveness of FFT in reducing recidivism with status offenders (Alexander & Parsons, 1973; Alexander & Barton, 1976; Alexander et al., 1976). In an early study, Alexander and Parsons (1973) randomly assigned 116 families of delinquent adolescents to four groups: (1) FFT, (2) client-centered family therapy, (3) psychodynamic-eclectic family therapy, and (4) a probation-only control group. During a three-year

follow-up, participants in the FFT group continued to commit fewer offences than participants who had been randomly assigned to alternative treatment programs.

More recently, Barton, Alexander, Waldron, Turner, and Warburton (1985) reported on three studies in which FFT demonstrated a reduction in adolescent delinquent behaviours. Treatment was carried out in field settings and positive results were maintained at 13 months following treatment.

Both research groups have demonstrated the effectiveness of family-oriented approaches in the treatment of conduct disturbance and delinquency. Further, these efforts have contributed toward a more precise description of the skills deficits and interaction patterns that are correlated with behavioural outcome. Finally, treatment outcome studies provide additional evidence to support the importance of parenting skills and relationship factors in the development and maintenance of child problematic behaviour.

Unfortunately, these investigators have failed to provide a description of the child, parent or family who is most likely to benefit from intervention. For

the most part, characteristics of subjects have been poorly described in terms of the history, nature and situations in which the problem behaviours occur. Similarly, a systematic assessment of those factors which have a direct and indirect impact on parental skill acquisition and maintenance require further investigation. This is of particular importance in ensuring the generalizability of skill training from the clinic to the home. For example, preliminary investigations by Wahler and Dumas (1987) suggest that multidistressed mothers are less likely than mothers who report low levels of daily stress to show long-term benefits from skill training programs. The authors attribute this lack of maintenance in part to the mother's inability to identify and cope with aversive stimuli from other areas (e.g., spousal conflict), which in turn contributes to negative interactions with the child.

Parent Characteristics

The preceding discussion has focussed on family interaction factors that appear to have a direct and immediate impact on child problematic behaviour. An

emphasis has been placed on the microsocial analysis of family interaction patterns that distinguish between deviant and normal families. Attention is now directed toward parent characteristics affecting family interactions and, in turn, child problematic behaviour. Essentially, these parent attributes can be grouped under three headings: antisocial personality, antisocial attitudes and behaviour, and parental stress.

Empirical evidence documenting the influence of parental personality on child behaviour is readily available. For example, Goodstein and Rowley (1961) compared the Minnesota Multiphasic Personality Inventory (MMPI) profiles of 50 parents with children demonstrating four different types of problems - schizophrenia, antisocial behaviour, personality trait disturbance, and neurosis. Mothers of antisocial children tended to score significantly higher than mothers of children with personality, trait and/or neurotic problems on the depression, hysteria, and psychopathic deviate scales.

Wolking, Duntzman, and Bailey (1967) also compared the MMPI profiles of parents of children referred for

treatment. The mothers of antisocial children scored higher on the hysteria and psychopathic deviate scales than mothers of children from other diagnostic groups (e.g., organic brain syndrome, psychosis, conversion neurosis, anxiety, and mental deficiency).

Patterson (1980b) reported results consistent with these findings. When compared to controls, the mothers of 26 socially aggressive children and 35 delinquent children (i.e., stealers) showed elevations on almost all of the MMPI clinical scales. These results suggest that parental personality - antisocial personality in particular - warrant further attention.

A number of early studies have shown that children are more likely to become delinquent if parents have a criminal record (Ferguson, 1952; Glueck & Glueck, 1950; McCord et al. 1959). Ferguson (1952) found that boys with criminal fathers were two times more likely to become delinquent than boys whose fathers had no criminal history. Further, criminality in the family was found to be a significant predictor of delinquency independent of other factors, such as family size or academic performance. Glueck and Glueck (1950) found that two thirds of the fathers of delinquents, compared

with one third of the fathers of non-delinquents, had an official history of criminality.

More recent studies also point to the high incidence of intergenerational crime (McCord, 1979; Robins et al. 1975; West & Farrington, 1973). West and Farrington (1973) identified parental criminality as one of five independent factors significantly related to delinquency. McCord (1979), in her 30-year follow-up of more than 600 boys from the St. Louis area, found that father deviance and personality (e.g., alcoholism, psychopathy, conviction for drunkenness, and serious crimes) during childhood significantly predicted the boys' adult criminality. These results are further underscored by Robins (1966, 1978) who found that the father's psychopathy or alcoholism was associated with the child's severe antisocial disturbance in adulthood.

Some parents, although not actually engaging in deviant behaviours, may display attitudes that condone or encourage deviant acts by their children (e.g., encourage the child to engage in fights or store stolen property in the home). Alternatively, they may fail to label serious child misbehaviour as deviant (Loeber, 1987). Although the impact of parental deviant values

on child aggression and stealing have not been assessed, several investigators have examined the influence of parental attitudes and tolerance toward drugs on adolescents' drug use (e.g., Brook, Whiteman, Gordon, & Cohen, 1986; Huba & Bentler, 1980; Jessor & Jessor, 1977).

For example, Jessor and Jessor (1977) interviewed 184 mothers of high school students regarding their beliefs about society and morality. Self-report ratings were subsequently administered to the children for alcohol use, drug use, sex, and political activism. It was found that children of mothers with more traditional values reported less involvement in problem behaviours.

Brook and colleagues (1986) examined the impact of maternal personality attributes, mother-child relationship, and adolescent personality attributes on adolescents' stage of drug use (using a scale that assessed increased self-involvement with drugs). Subjects included 356 mothers and their children who ranged in age from 13 to 18. Results indicated that maternal personality attributes (e.g., tolerance of deviance, poor control of impulses, and poor

psychological adjustment) had an indirect impact on drug use via adolescent personality attributes and mother-child relationship variables. A psychologically stable and conventional mother was associated with a positive mother-child relationship and conventionality in the adolescent, which led to lower drug use.

In criminology, differential association theory addresses the role of deviant attitudes on behaviour. Sutherland and Cressey (1978) suggest that delinquent behaviour and its component attitudes, motives, and techniques are learned by individuals through social interaction. To change behaviour, Cressey (1955) suggests that delinquents be assimilated into groups that emphasize values conducive to law-abiding behaviour and alienated from groups that emphasize values conducive to criminality.

Several treatment studies have been conducted in adult correctional facilities to assess the adequacy of differential association theory (Andrews, Wormith, Kennedy, & Daigle-Zinn, 1977; Andrews, Young, Wormith, Searle, & Kouri, 1973; Wormith, 1984). Andrews and colleagues (1973) found that inmates exposed to structured weekly discussions with volunteers, as

compared to a delayed-treatment group, demonstrated a significant decrease in their identification with the criminal subculture. In a second study, Andrews and colleagues (1977) assessed changes in criminal attitudes by exposing inmates to one of two groups: a structured discussion group and a social-recreation program. Again, the discussion group produced prosocial attitude change while the social-recreation group did not.

Wormith (1984) randomly assigned inmates to one of four treatment groups to assess the impact of attitude change on behaviour. As in the studies by Andrews and colleagues (1973, 1977), Wormith (1984) found that attitude changes were produced in the discussion treatment groups. Furthermore, measures of institutional activity demonstrated prosocial change. During a three-year follow-up, results revealed that treatment effects on illegal behaviour after release were not significant. Wormith (1984) suggested that long-term attitudinal change might be enhanced by incorporating a self-control skill development component.

To summarize, children may learn problem

behaviours such as drug use from the attitudes and behaviours exhibited by their parents. Furthermore, treatment studies with adult offenders provide evidence to suggest that exposure to prosocial attitudes may reduce problematic behaviours, particularly if accompanied by skill training.

In addition to parental personality and attitudes, the impact of parental stress on both child behaviour and parental functioning has received empirical attention. Stressors that have been consistently correlated with child problematic behaviour include financial distress, parental absence, and daily crises.

A number of early investigators reported a significant negative relationship between material stressors (e.g., socio-economic status, income, employment, education, and housing) and child problematic behaviour (summarized in Gibbons, 1976). More recent evidence suggests that the relationship between economic stressors and delinquency is usually associated with a constellation of unfavourable family and personality factors. In a cross-sectional study assessing the influence of individual characteristics and family factors on delinquency, the Gluecks (1950)

concluded that educational level, occupational status, and income were less important than the individual's ability to work, attitude toward work, and the frequency and length of dependency on social assistance.

Investigators have also been concerned with the impact of parental absence on child behaviour. In a review of the literature, Patterson (1982) concluded that there is an association between broken homes and child problematic behaviour for lower-class families but that this relationship is not a causal one. Gibbons (1976) suggests that when the quality of family life is controlled, the influence of parental absence on delinquent behaviour becomes less profound. For example, McCord and colleagues (1959) found that the incidence of delinquent behaviour was much higher in intact homes characterized by a high degree of conflict and neglect. Hirschi (1969) and Nye (1958) report similar findings. That is, the impact of parental absence appears to be mediated by the child's attachment to the remaining parent.

Finally, in more recent studies using multivariate techniques, marital status (single versus two-parent

home) was found to be a significant predictor of delinquency (Cerncovich & Giordano, 1987; Farnworth, 1984; Gove & Crutchfield, 1982; Rosen, 1985; Van Voorhis, Cullen, Mathers, & Garner, 1988). However, this factor is less important than the strength of the relationship between the parent and child and the single-parent's ability to adjust to increased care-taking and financial responsibilities.

The studies cited above do not permit an examination of the direct effect of stress on parental functioning and child problematic behaviour. In response to this, investigators have recently adopted alternative procedures to examine the impact of stress. For example, Patterson (1982) and Wahler and Dumas (1987) have focussed on identifying daily stressors or stimulus events that are perceived as problematic by the mother. Patterson and colleagues at the Oregon Social Learning Center have developed the Family Events Checklist which is completed by the mother on an intermittent basis to sample the impact of daily hassles (e.g., bills to pay, illness in the family, and arguments with family members) on parental mood and subsequent response to the child.

Recently, Forgatch, Patterson, and Skinner (1988) used the Family Events Checklist with 64 mothers who had separated from their spouses during the previous year and 200 mothers of intact families. As expected, reports of maternal stress were higher among mothers undergoing separation than mothers with a spouse present. The level of maternal stress was also found to have a direct effect on both child behaviour and parental disciplinary practices. As maternal stress increased, child problematic behaviour (aggression and noncompliance) and the parent's inept use of discipline increased.

To date, a number of individual stressors have been related to child behaviour and parental functioning. For the most part, these studies fail to assess the direct and immediate impact of maternal stress on outcome. The recent examination of daily stressors or crises provides a more precise account of the influence of stress over time.

Thus far, an emphasis has been placed on individual and family factors that appear to have a direct impact on child development and family interaction. Of further interest is the examination of

community factors thought to influence child behaviour beyond the immediate family.

Community Factors

Sociologists have traditionally emphasized the importance of environmental factors in the development of child problematic behaviour. Many sociological theories view delinquency as being a solution to a social problem, with no consideration of the role of personal resources. For example, the early subculture theories and subsequent theories of labelling, social control, and social deviance suggested that delinquency is a natural response to social class and structural inequalities.

Perhaps the greatest limitation of these approaches is the inability of theorists to adequately measure those concepts which are used to define the social environment. For the most part, researchers have focussed on differences between deviant and nondeviant samples in economic status, housing, education, and other structural factors. At a descriptive level, the identification of these factors has some utility. However, this approach does little to explain how

environmental factors contribute to the development of individual and family problems. As Wilson and Herrnstein (1985) state, such theories do not account for the "array of individual differences and the complex interactions which occur in the neighbourhood and community that may shape attitudes, ... and bring a person into - or keep him apart from - the larger society" (p. 500).

Behavioural and social learning theory has provided a more precise way to conceptualize and assess the impact of environmental factors on child problematic behaviour. Drawing from behaviour theory, Wilson and Herrnstein (1985) suggest that conditions in the community affect delinquency by providing sources of reinforcement and punishment. In their extensive review of the delinquency literature, Wilson and Herrnstein (1985) concluded that three aspects of the community might support antisocial behaviour: peers or gangs, social boundaries, and the incidence of crime in the neighbourhood. An individual who is predisposed to problematic behaviour because of personal traits and family socialization may be affected by the community whenever there are increases in the values attached to

the rewards of crime and in the opportunities to engage in crime.

A number of investigators have identified delinquent peers as a correlate of socialized aggressive behaviour (Elliot, Huizinga, & Ageton, 1985; Henggeler, 1989; Johnson, 1979; Short, 1957). In addition, findings from two longitudinal studies (Farrington, 1979; Elliot et al., 1985) suggest that deviant peer involvement is a significant predictor of future delinquent behaviour.

For the most part, research with delinquent peers has been criticized for the simplistic nature of the assessment instruments. Typically, "deviant peers" is measured by the number of delinquent friends and the frequency in which these friends engage in crime. Short (1957) developed the Differential Association Scale to assess the relationship between delinquency and the intensity, frequency, and duration of the child's association with delinquent peers and adults. Recently, Agnew (1991) extended Short's work by assessing the interactive effects of these dimensions on a large sample of youth between the ages of 11 and 17. Agnew concluded that the impact of delinquent peers

on child behavioural outcome is related to the level of involvement with peers, the time spent with peers, and the extent to which peers present delinquent patterns.

Less attention has been directed toward the assessment of parental social involvement and the impact of this factor on child misbehaviour and parental functioning. This is surprising, given that the quality of social support received from others has been found to exert a beneficial influence on parent-child relations (Hetherington, Cox, & Cox, 1977), the parents' sense of competence in the caregiving role (Abernathy, 1973), child competence (Roberts, 1989), and effective parenting behaviour (Colletta, 1979; Roberts, 1989). Conversely, social isolation has been identified as a risk condition and associated with dysfunctional parenting in the case of child abuse (Belsky, 1984).

Numerous setting factors, such as neighbourhood crime rates, have been found to correlate with child problematic behaviour (McCord, 1979; Wilson, 1980). From a social learning perspective, Hoge and Andrews (1986) propose an interactional model to illustrate how setting factors might contribute to delinquency

involvement. They suggest that situational factors (e.g., levels of unemployment, attitudes toward unemployment, availability of housing, and criminal activity) maintain contingencies within social systems (e.g., neighbourhoods, families, and schools), which in turn influence the attitudes and behaviours of individuals within the system (Andrews, 1980). Implicit within this model is the notion that individual behaviour and attitudes are influenced by the behaviour and attitudes of other community members.

To assess the relative impact of situational factors on individuals, Andrews and colleagues (1988) suggest that investigators must distinguish between the personal situational factors, situational factors occurring in the community, and the possible interaction of both. For example, the proportion of residents in the neighbourhood who are actively criminal should be determined independently of particular individuals. Other factors found to be predictive of criminality can also be examined to determine the criminogenic status of the area. Andrews and colleagues (1988) suggest that these might include "measures of social structures as the proportion of

those who are: young, on welfare/unemployed, unmarried, without a postsecondary education, members of gangs, etc." (p. 305).

Protective Factors

To further understand the mechanisms that promote child conduct disturbance and socialized aggressive behaviour, attention must also be directed toward the identification of factors that promote healthy, well-adjusted children. Rutter (1985) defined protective factors as "influences that modify, ameliorate, or alter a person's response to some environmental hazard that predisposes to maladaptive outcome" (p. 600).

In their extensive reviews of the literature, Rutter (1985) and Garmezy (1985) identified a number of child attributes that exert a protective influence. Rutter (1985) suggests that resilience to stressors is characterized by a person's cognitive appraisal of life circumstances. To offset chronic stress and adversity, it is necessary for the individual to believe in his or her ability to deal with, and adapt to, change. Other protective child factors include positive temperament (Rutter, 1985), above average intelligence (Rutter et

al., 1970), and social competence (Garmezy et al., 1984). Indices of social competence include academic achievement, participation and competence in activities, the ability to relate well to others (Garmezy, 1985), and high self-esteem and self-efficacy (Rutter, 1985).

One of the most important investigations to identify protective factors has been the classic longitudinal study by Werner, Bierman, and French (1971). Using a multidisciplinary approach, Werner and colleagues followed a cohort of 698 children from the island of Kauai from birth to age 25. Approximately half of the sample lived in chronic poverty and encountered four or more risk factors before the age of two, including economic deprivation, exposure to perinatal stress, mother's low education (grade eight or less), and family distress. Of this high-risk group of children, 21% experienced no serious academic or behavioural difficulties and appeared psychologically well-adjusted at age 18. The remainder of the group had committed delinquent acts by adolescence and were more likely to have experienced educational and mental health problems.

Factors that significantly differentiated between resilient and delinquency-prone children in the high-risk group included birth order, medical complications at birth or in early childhood, and child temperament. A higher proportion of resilient children were first born and recuperated more quickly from illnesses in early and middle childhood. In addition, the mothers of resilient children perceived them as being "easy to deal with" and "good natured" during infancy. Finally, psychological evaluations conducted in early and middle childhood, as well as in adolescence, revealed that the resilient children performed better on achievement-oriented tasks and on measures of socialization and self-esteem. The Kauai study clearly demonstrated the importance of child attributes in protecting high-risk children from future maladjustment.

Another landmark study to examine the influence of risk and protective factors on the presence of behavioural and emotional disorders in children is the Ontario Child Health Study (OCHS; Rae-Grant, Thomas, Offord, & Boyle, 1988). The OCHS was a province-wide survey of childhood disorders (i.e., conduct disorder, hyperactivity, somatization, and neurosis) among a

randomly selected sample of more than 3,000 children aged 4 to 16. The survey was carried out in 1983 as the first part of a longitudinal study (Boyle, Offord, Hofmann, Catlin, Byles, Cadman, Crawford, Links, & Rae-Grant, 1987); Offord, Boyle, Szatmari, Rae-Grant, Links, Cadman, Byles, Crawford, Blum, Byrne, Thomas, & Woodward, 1987).

Rae-Grant and colleagues (1989) used data from the OCHS to evaluate the relationship between protective factors and the presence of childhood disorder, while controlling for risk in the child's living circumstances (e.g., low socio-economic status, family problems, and parental problems). Being a good student and getting along well with others emerged as important protective factors across all age groups. In addition, the presence of a confidante had a significant positive effect on child outcome for the 12-to-16-year-olds.

To summarize, the research findings reviewed above clearly demonstrate that a number of factors are related to child problematic behaviour. For the present study, important predictors were classified under four major headings: (1) child problematic behaviour, (2)

family interaction factors, (3) parent characteristics, and (4) community factors. In addition, child attributes that exert a protective influence for children who face adverse environmental circumstances were identified. A theoretical model is now presented to integrate the findings reviewed thus far.

Theoretical Model

To facilitate an understanding of how the various risk factors might interact to contribute to child problematic behaviour, a theoretical model is presented in schematic form in Figure 1. As can be seen from the diagram, the model incorporates each of the major domains and risk variables identified previously. Essentially, the model assumes that factors from each of the domains are significantly correlated with child behavioural outcome.

The second assumption concerns the causal ordering of the major domains in relation to child behavioural outcome. It is anticipated that measures of family interaction will have the strongest impact on child problematic behaviour. Many investigators accept that the family plays the most immediate and influential

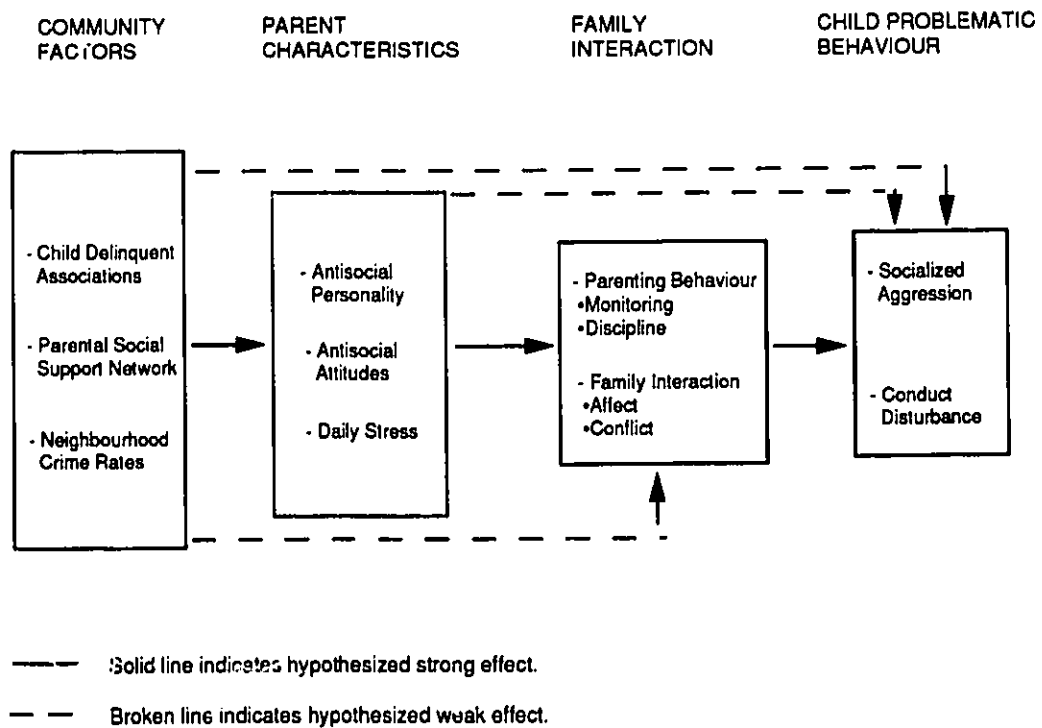


Figure 1 - A Conceptual Model of Child Problematic Behaviour

role in the child's development (Maccoby & Martin, 1983). Empirical data to support this position was provided by Laub and Sampson (1988) in their re-analysis of the Glueck data. During the 1940s, the Gluecks initiated a comprehensive longitudinal and cross-sectional study of the biological, psychological, and sociological variables presumed to contribute to juvenile delinquency. Five hundred male and female delinquents and nondelinquents were matched according to age, race, ethnicity, general intelligence, and low socio-economic residence. Despite the overall wealth of information collected by the Gluecks, the results were criticized in part for the lack of sophistication characterizing the data analysis.

Using multivariate techniques, Laub and Sampson (1988) have re-evaluated the original data collected by the Gluecks. The model they examined consisted of factors from three domains: (1) family process variables (e.g., parenting behaviour and parent-child attachment), (2) structural background variables (e.g., race, employment status, parental substance abuse, criminality, and residential mobility), and (3) child problematic behaviour. The regression analyses

performed by Laub and Sampson (1988) essentially confirmed the findings generated by the Gluecks. That is, aspects of family functioning were the most powerful predictors of serious and repeated delinquency.

The third assumption of the model is that parent characteristics will have a weaker impact on child problematic behaviour than the family functioning variables. In addition, the influence of parent characteristics variables will be mediated by measures of family interaction. This conceptualization is based on the findings of Laub and Sampson (1988) and the process model developed by Belsky (1984).

Drawing from the Glueck data, Laub and Sampson (1988) not only confirmed that family process variables are the most powerful predictors of child behavioural outcome, they also provided evidence to suggest that the effects of structural background variables are mediated by parent-child interactions. For example, parents who engaged in criminal behaviour and/or substance abuse also tended to be less effective (erratic or threatening) in disciplining their children and to provide insufficient monitoring. Furthermore

these parents and their children both reported more hostility and feelings of rejection toward one another.

Belsky (1984) has summarized existing research concerned with the etiology of child maltreatment and identified several determinants of parenting behaviour. These include such parental characteristics as personality and experiences of stressful events. Based on this review, Belsky (1984) hypothesized that parental personality has the strongest impact on family process (e.g., Belsky, 1978, 1980; Colleta, 1983; Rutter, 1966) due to insufficient coping resources necessary for adequate childcare.

Belsky (1984) also cited evidence to suggest that stress is likely to promote or undermine parental competence and the values parents attach to the caregiving role. That is, parents who are faced with multiple stressors and lack the social resources necessary to cope with crises are more likely to report feelings of chronic depression and anger. He suggested that stressful events covary with changes in mood, which in turn impact negatively on parental reactions to child behaviour (e.g., ignoring child deviant behaviour, or using physical punishment).

The final assumption of the model is that community factors will have the weakest influence on delinquent behaviour. More specifically, the impact of community factors on delinquency will be mediated, first by the parent characteristics and secondly by family interaction variables. Empirical data to support this assumption could not be found. However, the interactional model developed by Hoge and Andrews (1986), which was presented earlier, illustrates how setting factors might influence the attitudes and behaviours of individuals within a system.

The Present Study

This study seeks to gain a greater understanding of those factors which are correlated with child behavioural outcome. In addition, the study is exploratory in nature. Statistical techniques such as multiple regression and path analysis were used to identify predictors of child problematic behaviour and to provide a theoretical explanation for links among the various factors. It should be noted that the use of terms such as "predictor" and "causal" within the text was not meant to infer causal significance between factors. Rather, these terms were utilized in reference

to the statistical analyses mentioned above as this is the standard way of reporting them.

For the purpose of this study, children were assessed as problematic if they obtained high scores on the socialized aggressive and conduct disturbance subscales of the Revised Behaviour Problem Checklist (Quay & Peterson, 1983). To increase the likelihood of selecting families with problematic children and to examine the role of protective factors, the sample was drawn from a high-risk population: mother-led, single-parent families residing in low-income housing.

This study seeks to contribute to the literature on child problematic behaviour in a number of important ways. As indicated previously, few empirical attempts have been made to simultaneously examine the impact of multiple factors on child problematic behaviour. In addition, theoretical and research efforts have tended to focus on variables from a specific or favoured domain. The proposed theoretical model provides a consolidation of previous research findings and permits the examination of several major hypotheses. These hypotheses assess the relative importance of risk factors from multiple domains on child behavioural outcome.

The current study also contributes to the literature in a number of specific ways. First, researchers have tended to focus on male children who have been clinically referred for problems of aggression or who have been identified by the legal system as delinquent. Investigators such as Quay (1987) suggest the need to focus on behavioural traits characterizing different types of antisocial children. The inclusion of two such criterion measures in the present study permitted the examination of factors that are more sensitive in detecting socialized aggressive behaviour versus conduct disturbance. Given the findings to date, it was hypothesized that socialized aggressive behaviour would be more strongly correlated with ineffective parental monitoring and increased associations with delinquent peers. In contrast, it was expected that high conduct disturbance children would experience greater levels of overall family dysfunction.

Second, a number of studies have focussed on family factors contributing to child problematic behaviour. Observational techniques developed by the Patterson and Alexander research groups have permitted

the identification of process measures which discriminate between the families of problematic and nonproblematic children. These process measures have subsequently been incorporated in intervention strategies with demonstrated effectiveness in reducing child problematic behaviours. Despite the sophistication and usefulness of these techniques, researchers have tended to focus on either parenting behaviour or parent-child relations. The current study provided the opportunity not only to validate the use of these measures with a nonclinical sample, but to examine the relative importance and combined influence of specific factors on child outcome.

Third, few attempts have been made by researchers to identify and examine the determinants of parenting behaviour in a systematic manner. On the basis of the research findings reported by Belsky (1984) and Laub and Sampson (1988), a number of variables were examined in relation to the family interaction domain. Given the importance clinicians have placed on family intervention programs to reducing child problematic behaviour, this information is crucial to enhancing long-term effectiveness and skill generalizability.

Fourth, the sampling procedures used in the current study permitted the identification of protective factors. As the literature suggests, it was anticipated that nonproblematic children would evidence more favourable attributes. Once again, this information is of considerable importance to the development of intervention strategies, particularly in high-risk communities.

Finally, consistent with the recommendations of Chronbach and Meehl (1955) and Patterson (1986), multiple measures and modes of assessment were chosen to evaluate each of the important predictor variables. In addition, measures that best described the specific construct were selected. Thus, observational measures were used to more accurately reflect the dynamic nature of parent-child interactions. Conversely, global measures with acceptable psychometric properties were used to assess factors that could not be assessed at a micro-level (i.e., parent characteristics, and community factors). This method permitted a more reliable assessment of predictor variables and will hopefully assist investigators in the selection of measures for future research.

Chapter 2

Method

Setting

Families residing in rent-to-income housing facilities operated by the Ottawa-Carleton Regional Housing Authority (OCRHA) were the focus of this study. Approval to conduct the study was obtained from the OCRHA and the Ontario Ministry of Housing. The conditions of approval as specified by the General Manager of OCHRA and the Regional Manager of the Ministry of Housing are presented in Appendix A and B respectively.

In 1988-89, OCRHA provided 3,527 units to low-income families who found it difficult or impossible to obtain adequate housing on the open market. The units form 31 distinct communities which are dispersed throughout the Ottawa-Carleton region. Four of these sites provide residences for the elderly or developmentally handicapped; these were not included in the sample. The 27 remaining sites were listed according to four geographic regions (i.e., Ottawa north, south, east, and west). The two largest sites

from each region were then chosen to ensure that the study received maximum exposure during the recruitment phase.

At the termination of data collection, each region was represented by approximately 18 families. The physical design of the units varied and included town-houses (56 units), an emergency shelter (2 units), and two high-rise apartment buildings (14 units).

Subjects

Participants were recruited from each of the ten communities and included 72 single-mother families with at least one child between the ages of 10 and 15. Children were equally represented on the basis of age (10-11 years, 12-13 years, and 14-15 years) and sex to include 12 families in each group. Estimates from data provided by OCRHA (August, 1988) revealed that 46% of all families in the ten sites were led by single-mothers and that there were a total of 486 children between the ages of 10 and 15. Upon completion of the study, approximately one third of all eligible families had been assessed.

Families were recruited in two ways. First,

committee members from each of the respective tenant organizations were contacted by the investigator and provided with information about the study. Committee members then referred or introduced the investigator to families in the area. Second, each family who had been contacted was asked to identify other families in the neighbourhood who met the selection criteria. Both methods proved equally effective in producing consenting referrals.

Procedure

An initial contact was made with the families who had been referred, and each mother was provided with detailed information about the study. A copy of the script used to introduce the study is presented in Appendix C. An interview was scheduled in the homes of all families who agreed to participate. The target child was then identified on the basis of age (10-11 years, 12-13 years, and 14-15 years) and sex to include an equal number of children in each group. In those families where more than one child met the necessary age and sex requirements (e.g., a 10-year-old boy and a 15-year-old girl), the target child was chosen to fill

the child grouping that was least represented at the time of recruitment.

The interview was scheduled at a time when the parent and identified child could be present. Each of the home interviews was attended by two interviewers. At the outset, interviewers verbally reviewed the consent form with both mother and child and then obtained written consent. A copy of the Consent Form is presented in Appendix D. Families were informed that they would receive \$20.00 as compensation for their participation and that they would be free to withdraw from the assessment at any time or to abstain from answering any questions if they so desired.

After the consent form was signed, one interviewer met with the parent while the other met with the child. All self-report measures were administered verbally either during or immediately following the interviews. Copies of the parent and child interviews are presented in Appendix E and F respectively.

The Parent Interview is subdivided into four sections. In the first section, detailed social demographic information was gathered on the child, family, and parent. During the second and third parts

of the interview, measures were administered to assess child problematic behaviour, family management practices, and family relations. The last section of the interview consisted of questionnaires designed to assess parental attitudes, parental antisocial personality, and stressful life events. Immediately after the interview, the mother was asked to complete the Unrevealed Differences Questionnaire (URD; Henggeler & Travormina, 1980) and a social network questionnaire modified from Teitjen (1978).

The Child Interview is subdivided into four sections. In the first part of the interview, the child was asked to provide information about activities engaged in at home and after school. Questionnaires concerned with the child's impressions of parenting behaviour and family relations were also administered. In the second section of the interview, the child's attitude toward school was evaluated. Finally, the child's peer relations and level of involvement with delinquent others were examined. Immediately after the interview, the child was asked to complete the Unrevealed Differences Questionnaire.

Once the interviews and questionnaires were

completed, the parent and child were asked to participate in the interaction task. This required the joint completion of the Unrevealed Differences Questionnaire. A pencil and blank questionnaire were placed on the table. The mother and child were asked to discuss and jointly rank-order the choices for each item of the questionnaire. Participants were asked to announce their first name before beginning the task. The audio-recorder was started, and the interviewers left the room until the task was completed. With the exception of the Global Impressions Checklist, all observational data was coded from this audio-taped discussion.

After concluding the family assessment, the interviewers completed the Interviewer Impression Rating Scales for the Parent and Child Interviews (Appendix E & F; Patterson, Dishion, Reid, Capaldi, & Forgatch, 1984) and the Global Impression Rating Scale (Patterson & Bank, 1986).

Measures

The assessment process was characterized by multimethod and multidomain sampling. The methods of

assessment included structured interviews, self-report questionnaires, direct observation, and collateral reports. Measures were grouped into the four major domains: child problematic behaviour, family interaction, parent characteristics, and community factors. Instruments used to assess the protective factors are presented separately. Each of the measures used in the current study are described below and listed in Table 1. Details concerning the psychometric properties for each instrument are provided in the results section (see pages 94-136).

Domain I: Child Problematic Behaviour

Information about the child's misbehaviour was gathered during the structured interviews and through direct observational methods. A copy of the measures is presented in Appendix G.

Two subscales from the Revised Behaviour Problem Checklist (Quay & Peterson, 1983) were administered during the parent interview. The Socialized Aggression (SA) subscale consists of 17 items which describe covert delinquent behaviours such as substance abuse, lying, theft, and delinquent activities with peers.

Table 1

List of Measures and Source of Information

Source of Information	Measures
<u>Domain I: Child Problematic Behaviour</u>	
Parent Report	.Revised Behaviour Problem Checklist (RBPC- Quay and Peterson, 1983) -Socialized Aggression Subscale (SA) -Conduct Disturbance Subscale (CD) .Official Delinquency -Police contact -Convictions -Periods of Incarceration .Home Disobedience Scale (Loeber, Dishion, & Patterson, 1984)
Observational Ratings	.Total Aversive Behaviour Score (TAB) -Family Interaction Coding System (FICS - Reid, 1978)

Table 1 (Cont.)

Source of Information	Measures
<u>Domain II: Family Interaction</u>	
<u>1. Parenting Behaviour</u>	
Monitoring:	
Parent Report/ Child Report/ Interviewer Impressions	.Monitoring I Scale (Stouthamer-Loeber, Patterson, Dishion, & Loeber, 1983)
	.Monitoring II Scale (Patterson, Dishion, Reid, Capaldi, & Forgatch, 1984)
Parent Report	.Unsupervised Time Per Week
Discipline:	
Observational Ratings	.Global Impressions Checklist (Patterson & Bank, 1987)
Parent Report/ Child Report	.Discipline Scale (Patterson et al., 1984)

Table 1 (Cont.)

Source of Information	Measures
<u>Domain II: Family Interaction</u> (cont'd)	
<u>2. Intra-Familial Relations</u>	
Interaction Task:	.Unrevealed Differences Questionnaire (Henggeler & Travormina, 1980)
Affect:	
Observational Ratings	.Qualitative Rating (Hetherington & Frankie, 1971) .Supportive Communication (Alexander, 1973)
Conflict:	
Observational Ratings	.Qualitative Rating (Hetherington & Frankie, 1971) .Defensive Communication (Alexander, 1973) .Aggressive Communication (Becker & Iwakami, 1969)
General Functioning:	
Parent Report/ Child Report	.General Functioning Scale (Epstein, Baldwin & Bishop, 1983)

Table 1 (Cont.)

Source of Information	Measures
Domain III: Parent Characteristics	
Antisocial Personality:	
Parent Report	.Socialization Scale (Gough, 1969)
	.Psychopathy Scale (Peterson, Quay, & Cameron, 1959)
Antisocial Attitudes:	
Parent Report	.Tolerance for Law Violations (Andrews, Daigle-Zinn, & Wormith, 1974)
	.Identification with Criminal Others (Andrews et al., 1974)
Maternal Stress:	
Parent Report	.Family Events Checklist (Patterson, 1982)

Table 1 (Cont.)

Source of Information	Measures
<u>Domain IV: Community Factors</u>	
Parent Report	.Attitude Toward the Community Scale (Modified from Hirschi, 1969)
Police and Pinkerton Security Reports	.Index of Reported Crime
Parent Report	.Social Network Questionnaire (Tietjen, 1978)
Child Report	.Differential Association Scale (Short, 1957)
<u>PROTECTIVE FACTORS</u>	
Parent Report/ Child Report	.Getting along well with others .Good academic performance .Presence of good friendships .Participation in activities .Presence of a confidante (Rae-Grant, Thomas, Offord, & Boyle, 1989)
Parent Report	.Child Temperament Scale (Turecki, 1985)

This subscale has been found to successfully predict serious and repeated arrests among male adolescents and their siblings and to be highly correlated with parent-child relationship factors (Hanson et al., 1984). Scores range from 0 to 34, with higher scores indicating more severe behaviour problems.

The Conduct Disturbance (CD) subscale contains 22 items which describe generalized conduct problems such as difficulties with peers and noncompliance. This scale has also been found to be important in predicting official delinquency (Hanson et al., 1984) and in detecting pre-adolescents at risk for future delinquent behaviour (Quay & Peterson, 1987). Scores range from 0 to 44, with higher scores indicating more severe behaviour problems.

The Home Disobedience Scale (Loeber, Dishion, & Patterson, 1984) was used as an additional measure of child misbehaviour. This scale consists of six items from the Parent Interview and four items from the Child Interview. The scale was designed to assess child compliance with house rules. In combination with measures of family management practices the Home Disobedience Scale was found to be an efficient

screening device for the identification of males in grades 4, 7, and 10 who are at risk for delinquent behaviour (Loeber et al., 1984). Scores range from 2 to 46, with higher scores indicating more severe behaviour problems.

In addition to self-report measures, observational ratings of child misbehaviour were calculated using the Total Aversive Behaviour (TAB) measure of the Family Interaction Scoring System (FICS; Reid, 1978). A TAB rate was derived by summing the number of aversive behaviours exhibited by the child during the interaction task and dividing that sum by the total time taken to complete the task. Higher rates are indicative of greater levels of aversive behaviour.

Domain II: Family Interaction

The second domain included two major subcomponents of family interaction: family management practices and intrafamilial relations. To assess family management practices such parenting skills as monitoring and discipline were examined. Parent-child relations were assessed by two major constructs: affect and conflict. In addition, a self-report measure was administered to

the parent and child to provide a general index of family functioning. Information to evaluate this domain was gathered during the child and parent interviews, through questionnaire administration, and through direct observational methods. A copy of each of the questionnaires and observational measures is presented in Appendix H.

Parenting Practices.

(1) Monitoring

The parent's ability to monitor the child's activities, whereabouts, and deviant behaviour is considered an important parenting skill. To assess this skill, two scales, presented orally during the structured interviews, were administered.

The first monitoring scale was derived from a screening instrument developed by Stouthamer-Loeber, Patterson, and Loeber (1983). The instrument consists of five questions from the Child Interview, two questions from the Parent Interview, and one item from the Interviewer's Impression Scale. The interviewer's rating was based on the child's reaction to a number of questions about house rules and on the interviewer's

impression of the adequacy of parental monitoring of the child.

Items for the second monitoring scale were drawn from a structured interview developed by Patterson, Dishion, Reid, Capaldi, and Forgatch (1984). The scale is comprised of 12 items. Ten items were administered during the child and parent interviews, and two items were drawn from the Child and Parent Interviewers Impression Rating Scale. Scores range from 12 to 60, with high scores indicating less effective monitoring practices.

In addition to the monitoring scales, parents were asked to provide an estimate of the number of hours per week the child is not directly supervised by an adult. This item has been used by Snyder, Dishion, and Patterson (1986) as a separate indicator of monitoring behaviour.

(2) Discipline

The second family management skill examined in the study was discipline. To assess information had been gathered on parental consistency in following through with commands and on the use of disciplinary practices that have been found effective in controlling child

problematic behaviour.

Self-report and observational measures were used to assess this skill. First, the Global Impressions Checklist was administered. This instrument was revised by Patterson and Bank (1987) from an assessment device developed by Reid (1978). After each family assessment, the interviewers responded to seven items assessing effectiveness and consistency of disciplinary practices. Each of the items were rated as "yes," "no," or "did not occur." The sum of "yes" responses formed the total score, with higher scores indicating less effective disciplinary practices.

The Discipline Scale was the second measure. This scale consists of 15 items drawn from a structured interview that was developed by Patterson, Dishion, Reid, Capaldi and Forgatch (1984). Items were administered during both the parent and child interviews and were rated on a three- or five-point scale. High scores indicate less effective disciplinary practices.

Parent-Child Relations. Observational measures were used to assess the level of affect and conflict

displayed between mother and child during the Unrevealed Differences (URD) interaction task which was developed by Henggeler and Travormina (1980). The URD was administered both separately and jointly to the parent and the child. The questionnaire consists of nine items, each with three to five alternative choices. Discussions during the joint administration of this questionnaire were audio-recorded and used to provide the observational ratings. The URD was chosen as the interaction task because variations of this scale are some of the most frequently used methods of assessing intra-familial relations (Henggeler et al., 1987).

(1) Affect

Two observational measures were chosen to assess the affect construct. The first is a qualitative rating done by the observer on a 7-point scale. The scale assesses overall acceptance, approval, and affection in the dyadic relationship. Observer ratings were based on the procedures developed by Hetherington and Frankie (1971). A rating of one indicates that the relationship is extremely warm, while a rating of seven suggests the relationship is extremely cold.

Supportive Communication was the second measure used to assess the affect construct. The scale was developed by Alexander (1973) and consists of frequency ratings of statements that evidenced empathic understanding, acceptance, equality, and genuine information giving and seeking. High scores on this scale indicate high rates of supportive communication.

(2) Conflict

Three observational measures were chosen to assess the conflict in the parent-child relationship. The first measure is a qualitative rating done by observers on a 5-point scale. The scale assesses the overall level of hostility, anger, sarcasm, annoyance, and irritation displayed by the dyad. Observer ratings were based on the procedures developed by Hetherington and Frankie (1971). A score of five on this scale indicates high levels of conflict, while a score of one indicates low levels of conflict.

The second measure of conflict was Defensive Communication (Alexander, 1973). Frequency ratings of statements that evidenced judgmental-dogmatism, restrictive control, indifference, and disregard were recorded from the interaction task. High scores on this

scale indicate high levels of conflict.

The final measure of conflict was Aggressive Communication. A frequency rating of contradictions, sarcasm, or any clear reaction of disdain to another's statement was provided. High scores on this scale indicate high levels of hostility in the dyadic relation (Becker & Iwakami, 1969; Henggeler et al., 1987).

(3) Family Functioning

The General Functioning scale (GF) was administered to both parent and child to assess overall family functioning. The GF scale is a 12-item subscale of the Family Assessment Device (FAD; Epstein, Baldwin & Bishop, 1983). The FAD is a 60-item self-report measure of family functioning. It consists of seven subscales, six of which reflect dimensions believed essential to the functioning of all families: (a) problem-solving, (b) communication, (c) roles, (d) affective responsiveness, (e) affective involvement, and (f) behaviour control. The General Functioning scale is the seventh subscale and provides a measure of overall health/pathology of the family. Although each of the 12 items belong exclusively to this scale,

the items reflect each of the six dimensions described above.

The scale was derived from item analyses conducted in testing the psychometric properties of the FAD. Each item of the GF subscale was found to correlate highly with the other dimensions. Recently, the GF scale has been used as a brief version of the FAD in the Ontario Child Health Study (Byles et al., 1988). Results from this investigation indicate that the GF scale is a useful measure of family functioning.

The scale consists of 12 statements with response categories of "strongly agree," "agree," "disagree," and "strongly disagree." The categories are given values of one through four. Scores range from 12 to 48, with high scores indicating greater family pathology.

Domain III: Parent Characteristics

The third domain includes measures of parental antisocial personality, criminal attitudes, and stressful life events. Information was gathered during the parent interview. A copy of each of the measures is presented in Appendix I.

Antisocial Personality. Mothers were asked to

complete the Socialization and Psychopathy scales, which were designed to assess antisocial personality.

The Socialization scale was initially developed by Gough (1969) to assess delinquency. Subsequent research indicated that the scale addressed not just delinquency but the full range of socialization (Megargee, 1972). As such, the scale is sensitive to conventional rules and procedures which are useful in forecasting the likelihood that individuals will transgress the norms established by their particular cultures (Gough, 1969). The Socialization scale consists of 54 items, with high scores indicating less deviance.

The psychopathy scale (Peterson, Quay, & Cameron, 1959) is a 25-item questionnaire that assesses the personality dimension of psychopathy. The scale was developed from a factor analysis of two questionnaire scales with demonstrated effectiveness in differentiating delinquents from nondelinquents. Items reflect amoral, rebellious, and impulsive qualities as well as a conspicuous distrust of legal and other authority. Responses are scored as true or false. Scores range from 0 to 25, with high scores indicating psychopathy.

Antisocial Attitudes. Two questionnaires assessing parental antisocial attitudes were administered. The Tolerance for Law Violations Scale (TLV) and the Identification with Criminal Others Scale (ICO) were modified by Andrews, Daigle-Zinn, and Wormith (1974) from the work of Walter Reckless and colleagues. Item content reflects those personal attitudes, values, and beliefs which suggest positive identification with those who offend the ICO and directly justify illegal activity the TLV.

The scales contain ten and six items respectively, and each item is scored on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." High scores reflect more deviant antisocial attitudes.

Stress. The Family Events Checklist (Patterson, 1982) was administered to assess the amount of stress experienced by parents in the week prior to assessment. The measure contains 32 items, and samples unpleasant events typical for most families. Items are subdivided into ten categories: household, economic, health, employment, school, social interchange, legal, drugs, and recreation. Preliminary analyses suggest that

reports of crises covary with child behaviour and mother's mood and level of coerciveness in interacting with the child.

Domain IV: Community Factors

The final domain provided information about specific factors within the community that may impact on child behaviour and family functioning. Measures of parental attitudes toward the community, neighbourhood crime rates, parental social support, and child delinquent associations were administered. Data to assess this domain were gathered during the Parent Interview and from collateral reports. The measures are presented in Appendix J.

Attitude toward Community. A 25-item attitude scale adapted from Hirschi (1969) was developed to assess parent attitudes toward the community. Items evaluated level of satisfaction with the neighbourhood, involvement in the community, and concern with personal safety. Items are rated on a two- or three-point scale, with high scores indicating more favourable attitudes toward the community.

Neighbourhood Criminal Activity. To provide an index of the amount of crime reported in the neighbourhood, frequency ratings of vandalism, break and entry, assault, and domestic disputes were calculated from Police Reports and Pinkerton Security Reports over a 12-month period (January 1988 to January 1989).

Parental Social Support. The Social Network Questionnaire (SNQ) adapted from Tietjen (1978) was administered to assess the quality and quantity of parental relationships with family, friends, and professionals. The initial version of the SNQ provided information on three dimensions considered fundamental to examining social networks: structure, location in time and space, and activities. The revised version of the scale contains an overall helpfulness rating.

Parents were asked to list up to 20 people who were most important to them. Information about each person listed was then requested. Structural information included sex, length of time known, and relationship to respondent (relative or family). Measures of the network were located in time (frequency

of contact) and space (within walking distance, city limits or outside of the city).

An overall supportiveness rating was calculated by summing the total number of persons who provided instrumental support across a number of activities. Assessed activities included help with household tasks, help with babysitting, emotional support, child rearing information, financial assistance, and overall balance (e.g., "Do you give more than this person, the same, or less?"). High scores indicate a larger support network.

Finally, using a 7-point Likert scale, a rating was provided to assess the quality of overall helpfulness of each person in contact with the parent (when all activities are considered together). A rating of seven indicates that the individual "makes things a lot better," while one indicates that the individual "makes things a lot worse." Information in each of these areas was coded separately for relatives and friends.

Child Delinquent Associations. The Differential Association Scale (DAS; Short, 1957) was administered verbally to the child to measure: the frequency,

duration, priority, and intensity of interaction with delinquent peers; the degree of presumed exposure to crime and delinquency in the community; and knowledge of and association with, adult criminals. The DAS consists of nine items, each with a four- or five-point Likert scale response. Scores range from 9 to 38, with smaller sums indicating higher levels of association with delinquent adults and peers.

Protective Factors

Six protective factors were chosen to represent this domain. A copy of each of the measures is presented in Appendix K. These particular factors were selected because they appeared repeatedly in the literature as those child attributes which ameliorate the impact of environmental factors.

The first five factors were drawn directly from the Ontario Child Health Study (Rae-Grant et al., 1989). These include getting along with others (three items), good academic performance (three items), the presence of good friendships (two items), participation in activities (two items), and the presence of a confidante (one item). Items were administered during

the structured interviews. A dichotomous rating was provided to determine the absence or presence of each factor.

A measure of child temperament during the first two years of life was included as the final factor. The Child Temperament Scale was developed by Turecki (1985), based on the individual temperamental qualities identified by the New York Longitudinal Study. The scale consists of eight items concerned with high activity level, distractibility, poor adaptability, initial withdrawal, high intensity, irregularity, low sensory threshold, and negative mood. Each of the qualities were described to the parents, who were then asked to rate their child on a three-point scale ranging from "sometimes" to "almost always." Scores range from 0 to 16. Children receiving a score greater than six are considered "difficult." Turecki (1985) has found that the "difficult" child tends to have a higher incidence of behaviour problems and that parents of difficult children report less confidence in their ability as parents. A dichotomous rating was provided for this scale, with a score of 0 to 6 indicating the presence of good temperamental qualities.

Training of Interviewers

One male and three female graduate psychology students administered the family assessments. The students were recruited by the investigator and paid an hourly rate of \$8.00. All students had some prior clinical training in test administration and interviewing. The investigator was present during each family assessment and conducted all parent interviews. Child interviews were completed by the other students.

Training for the family assessments was provided by the investigator and begun one month before data collection. The trainees met for approximately three hours per week for four weeks to standardize interview techniques and coding of the Interviewer Impression and Global Impression rating scales.

In the first training session, trainees acquainted themselves with the assessment process by reading through the interviews and rating scales. During the second and third training sessions, two of the trainees were designated as interviewers while the remaining trainees played the role of either mother or child. The roles were then reversed to ensure that each trainee was given the opportunity to administer two

complete assessments. For the final training session, a family (one not included in the study) was recruited, and the trainees were given an opportunity to administer the complete assessment battery. Training was deemed satisfactory when each of the trainees demonstrated a high level of familiarity and comfort with the assessment material.

The Parent and Child Interviews and Interviewer Impression Rating scales are highly structured instruments and require specific responses from the participants. Therefore, interrater reliability for these instruments was not calculated.

For the Global Impressions Rating scale, interrater reliability was determined by calculating the percentage-agreement for ratings made on each of the seven individual items. Training was deemed satisfactory when an average percentage agreement level of 80% was achieved between two raters for each of the individual items.

To ensure that a high agreement level was maintained throughout the study, interrater reliability was calculated for the first ten families and then for every fifth family subsequently assessed.

Training of Raters

The investigator and two female undergraduate students were responsible for completing all observational ratings. In addition, an undergraduate student was recruited to assist the investigator in producing typewritten transcripts of the audiotapes made during the interaction task. The students were paid an hourly rate of \$6.00. Those students responsible for rating the observational measures had some previous experience in coding behavioural observation data.

Training of the raters took place over a four-month period and was conducted in two phases to accommodate the different coding systems (i.e., the Family Interaction Coding System developed by Reid, 1978 and the code categories adopted by Henggeler et al., 1987). The ratings of the transcripts were completed over a six-month period.

In the first phase of training, the Family Interaction Coding System (Reid, 1978) was introduced. Initially, attempts were made to replicate the "in vivo" home observation techniques and training procedures recommended by Reid (1978). This procedure

was eventually altered for three reasons. First, despite biweekly training sessions over a three-month period, interrater reliability across the code categories was unsatisfactory. Second, the time required to train the raters would have depleted financial resources for the project. Finally, of six families piloted, four indicated a reluctance to take part in the home observations and reported that they would be less likely to consent to participate in the study should "in vivo" observations be required.

For these reasons, the "in vivo" home observations were discarded, and only those code categories which could be rated from audiotapes and transcripts of the URD interaction task were maintained. The verbal categories were then subdivided and collapsed to provide a frequency rating of total aversive behaviour (TAB score) for both the parent and the child.

Training for the modified Family Interaction Coding System (FICS) consisted of eight two-hour sessions which were scheduled over a two-month period. Initially, trainees were encouraged to memorize the code definitions. Once they were familiar with the categories, the trainees were introduced to practice

tapes of family interaction, which consisted of 20-minute audio-taped segments of family television programs. After four sessions, trainees were able to reach satisfactory interrater reliability ($\underline{r}$ = .69 to .78).

During the second phase of training, trainees were introduced to the observational measures of affect and conflict. Once again, the trainees were encouraged to memorize the various code definitions. They were then introduced to the audio-taped segments of family interaction. After 12 hours of training, only poor to satisfactory interrater reliability ($\underline{r}$ = .44 to .73) across code categories was achieved. In addition, considerable time was required to complete all of the necessary ratings. To increase reliability and decrease the time required to complete the ratings, transcripts of the practice tapes were produced. After one additional training session, interrater reliability for both of the coding systems significantly improved ($\underline{r}$ = .82 to .98).

During the final phases of training, a family (one not included in the study) was recruited and a practice audiotape and transcript were made of the Unrevealed

Differences interaction task. Training was terminated when the trainees demonstrated high interrater reliability ($\underline{r}$ = .89 to .98) for code categories of the modified FICS and for observational measures of affect and conflict.

Chapter 3

Results

Social History and Demographic Information

Social history and demographic information is summarized separately for the child, family, parent, and community, in Tables 2, 3, 4 and 5.

The Child. The average age of the children was 12.4 years ($SD = 1.8$). Twenty-nine (40.3%) of the 72 mothers reported that their children had experienced medical difficulties in the first two years of life. Difficulties included accidents or serious illness requiring hospitalization, as opposed to colds or influenza. Mothers' retrospective accounts of early childhood behaviour revealed that 34.7% of the children were relatively easy to care for, 52.8% were moderately difficult, and 12.6% were extremely difficult.

More than half (63.9%) of the mothers reported that their child had received some form of professional assistance. Approximately half of these children (26.2% of the total sample) were receiving professional

Table 2

Child Social History and Demographic Data

Variable	Frequency	Percent
Early Medical Difficulties	29	40.3
Difficulty to Care for as a Young Child		
Easy	38	52.8
Difficult	17	23.6
Extremely Difficult	17	23.6
Current Medical Situation		
On Medication	14	19.4
Medical Problems	22	30.6
History of Professional Treatment		
None	26	36.1
Mental Health Professional	46	63.9
Primary Reasons for Professional Treatment		
Behaviour Problems	16	22.2
Emotional Problems	13	18.1
Sexually Abused	12	16.7
Academic/Learning Problems	5	6.9
School		
Behaviour Problems	35	48.6
Suspensions	21	29.2
Academic Problems	25	34.7
Official Delinquency		
Police Contacts	18	25.0
Convictions	8	11.1
Incarceration	3	4.2

attention at the time of the study. The most commonly cited reasons for this assistance were behaviour problems (22.2%), emotional problems (18.1%), and child sexual abuse (16.7%).

The average education achieved by the children was grade seven. One child had dropped out of school due to severe remedial and behavioural difficulties, one child had been diagnosed as borderline mentally retarded, and four of the children had been placed in special education programs. Half of the mothers indicated that according to discussions with teachers, their children were experiencing moderate to severe behavioural difficulties in school. When children were asked to comment on how far they would like to go in school, 63.9% indicated a desire to attend college and university. Mothers' responses to the same question were identical, with 63.9% hopeful that their child would attend a post-secondary institution.

According to reports from mothers 18 (25%) of the children had been in contact with police for suspected involvement in a criminal offence. Eight of these children were convicted of a criminal offence, and three children were removed from the home on a short-

term basis and placed in a facility for young offenders. All of the offences were property-related, ranging from vandalism and shoplifting to break and enter.

The Family. The average family size for the sample was 3.3 ($SD = 0.8$), with 2.2 children ($SD = 0.8$). Nearly 30% of the mothers had never married or resided with a partner. Of those who did marry, 68% were separated or divorced at the time of the study. From this group, mothers reported an average of 2.4 partners ($SD = 0.9$) who resided in the home and took on caregiving responsibilities at some point in the child's life. The biological fathers were absent from the family home for an average of 8.8 years ($SD = 6.5$). Thirty-one percent of the children had never lived with their natural fathers, and 75% of the children had either infrequent or no contact with them. Eleven of the children had been separated from their families for more than three weeks because of the mother's absence or intervention by the Children's Aid Society or the juvenile courts.

The Parent. The mean age for the mothers was 34.8 years ($SD = 4.3$), with a range from 26 to 48 years. All

Table 3

Family Social History and Demographic Data

Variable	Frequency	Percent
Marital Status		
Single/Never Married	21	29.1
Divorced	35	48.6
Separated	14	19.4
Widowed	2	2.8
Contact with Biological Father		
No Contact	38	52.8
Infrequent/Irregular Contact	16	22.2
Regular Contact	18	25.0
Temporary Caregivers		
Lived with Family or Friends	7	10.0
Lived in Care of Children's Aid Society	4	5.0

Table 4

Parent Social History and Demographic Data

Variable	Frequency	Percent
Religion		
Roman Catholic	33	45.8
Protestant	29	40.3
Other	3	4.2
None	7	9.7
Employment		
Unemployed	43	59.7
Employed Full Time	11	15.3
Employed Part Time	18	25.0
Attending School		
Full time	7	9.7
Part time/Correspondence	6	8.3
Occupation		
Manager	1	1.4
Clerical	6	8.3
Service	4	5.6
Labour	7	9.7
Home Business	2	2.8
Homemaker	45	62.5
Student	7	9.8
Total Yearly Income		
Under \$10,000	19	26.4
\$10 - \$14,999	39	54.2
\$15 - \$19,999	12	16.7
\$25 - \$29,999	2	2.8
Professional Assistance (Recent)		
None	42	58.3
Mental Health Professional	28	39.0
Medical Doctor	2	2.8

Table 4 (Cont.)

Variable	Frequency	Percent
Substance Abuse: Mother		
No Problem	56	77.8
Moderate Problem	14	19.4
Extreme Problem	2	2.8
Criminal History: Mother		
No Convictions	58	80.6
More than one Conviction	14	19.4

but two of the mothers were caucasian, and all spoke English fluently. The average education achieved by mothers in the sample was grade ten ($SD = 2.04$). At the time of the study, 85% of the sample were unemployed or employed less than 15 hours per week. Approximately 80% of the families were rated as lower class according to the criteria used by Hollingshead and Redlich (1958). All of the families received social assistance and had depended on such assistance for an average of 9.9 years ($SD = 6.1$). Thirty-nine percent of the mothers indicated that when they were growing up their parents had relied on social assistance as the primary source of income.

Professional assistance was sought by approximately 41% of the mothers at some point during the last ten years. The primary reasons reported for seeking assistance were depression and family management problems. Sixteen of the mothers indicated having a moderate to severe problem with drugs or alcohol at some point during the last ten years.

Nineteen percent of the mothers reported having been convicted of one or more criminal offences. Offence types ranged from shoplifting and fraud to

possession and trafficking of narcotics. Three of the mothers had been incarcerated for a period exceeding six months, while the remainder had served probation. With the exception of two mothers, all reported that their children were unaware of their criminal history.

The Community. Demographic data for the ten communities in which the families resided were combined and are presented in Table 5. The most frequent family structure across all communities was the single-mother-led family (46%). This was followed by married or common-law couples (27%), and individuals living alone (18%). Approximately 50% of the population in these communities was made up of children less than 18 years of age. Finally, the vast majority of families (79%) were unemployed and relied on social assistance, pensions, or disability insurance as their primary source of income.

Table 5

Demographic Data for the Ten Communities Sampled in the Study

Variable	Frequency	Percent (<u>M</u>)	Range %
Total Occupants	5,893		
Total Dwellings	1,983		
Total Families:			
Mother-led	938	47	25-75
Father-led	55	3	00-06
Married/Common-law	541	27	11-47
Joint Tenants	99	5	00-10
Singles	350	18	00-48
Total Children:			
Older than 18 years	499	8	03-17
Younger than 18 years	2755	47	28-63
Total Families Receiving:			
Social Assistance	1339	68	59-73
UIC (Unemployment Insurance Commission)	31	2	01-03
Disability/Pension	197	9	02-30
Total Families:			
Employed	416	21	10-34

The Selection of Measures and their Psychometric Properties

As indicated previously, multiple measures were administered to assess each of the major domains. To reduce the number of variables for future analyses, the psychometric properties of each measure were evaluated against findings from previous research and from the current study. Those measures with the most acceptable psychometric properties were then selected to represent the domain.

Domain I: Child Problematic Behaviour

Information about the child's misbehaviour was gathered using three paper-and-pencil measures, one observational measure, and official reports of delinquent behaviour.

The first paper-and-pencil questionnaire was the Socialized Aggression (SA) subscale of the Revised Behaviour Problem Checklist. The alpha reliability of this subscale has been reported for six different samples (Quay & Peterson, 1983) and ranged from .85 to .93. Acceptable interrater reliability has also been

established (Quay & Peterson, 1983). The average interrater reliability was .75 among ten teachers and .93 for ratings from both mothers and fathers for a sample of 70 children.

The Conduct Disturbance (CD) subscale of the Revised Behaviour Problem Checklist was the second paper-and-pencil measure. The CD subscale showed excellent internal consistency with alpha values ranging from .92 to .95 across six studies (Quay & Peterson, 1983). The average interrater reliability among ten teachers was .85 for 172 developmentally delayed children. In a study of parental ratings, interrater reliability obtained for 70 children in a normative sample was .70 (Quay & Peterson, 1983).

Indices of the validity of the SA and CD subscales have been summarized by Quay and Peterson (1983). The scales have been found to successfully differentiate between deviant and normal children. In addition, both scales have been validated against other rating scales. For example, the SA and CD subscales correlated .80 and .88 with the Delinquent and Aggressive scales of the Child Behaviour Profile (Achenbach & Edelbrock, 1983). The SA and CD subscales have also been significantly

correlated with peer-rated aggression at .44 and .72 respectively (Quay & Peterson, 1983).

The Home Disobedience Scale (HDS) was administered as the final questionnaire. Test-retest correlations calculated by Loeber and colleagues (1984) indicated that the scale is reasonably stable ($\underline{r} = .67$). Indications of internal consistency were not reported by Loeber and colleagues, but an alpha of .82 was found for the HDS in the current study.

The Total Aversive Behaviour (TAB) observational measure was modified for use in the present study to include only the verbal categories of child aversive behaviour (see Method, p. 79). As such, the psychometric properties reported by Reid (1978) cannot be applied to the current findings. In the present study, interrater reliability for the revised TAB measure was extremely high ($\underline{r} = .98$, $\underline{p} < .001$, $\underline{N} = 26$).

The mean scores and standard deviations for measures of child problematic behaviour are summarized in Table 6. Normative data for the SA and CD subscales in the current study were much higher than those reported by Quay and Peterson (1983) for a random sample of normal children (SA: $\underline{M} = 1.39$, $\underline{SD} = 2.34$;

Table 6

Means and Standard Deviations for Measures of Child
Problematic Behaviour

Measure	Mean	<u>SD</u>
Revised Behaviour Problem Checklist		
.Socialized Aggression (SA)	5.1	7.2
.Conduct Disturbance (CD)	16.6	11.4
Home Disobedience Scale (HDS)	22.6	10.8
Total Aversive Behaviour (TAB)	18.4	25.8

CD: $\underline{M}$ = 6.24, $\underline{SD}$ = 6.15).

To provide some evidence of convergent validity, correlations between the various measures of child problematic behaviour are presented in Table 7. All measures were significantly interrelated ($p < .001$), with the exception of the CD subscale and the TAB score.

A principal component factor analysis, generating orthogonal factors, was conducted with the child behaviour measures (see Table 8). Using the varimax rotation method only one factor was extracted which accounted for 67% of the total variance. With the exception of the TAB score, all of the measures achieved a loading of .83 or greater.

Officially detected delinquency occurred relatively infrequently among children in the sample. There were 19 children who had contact with the police. Of these, eight had been convicted of a criminal offence and three had been incarcerated prior to the study. Due to the relatively low frequency of occurrence, officially detected delinquency was not selected for further detailed analyses. However, it was used to validate measures of child problematic

Table 7

Correlation Matrix for Measures of Child Problematic Behaviour

Measure	SA	CD	HDS	TAB
SA	----			
CD	.64***	----		
HDS	.82***	.70***	----	
TAB	.39***	.18	.44***	----

SA Socialized Aggression Subscale
 CD Conduct Disturbance Subscale
 HDS Home Disobedience Scale
 TAB Total Aversive Behaviour Score

***p < .001.

Table 8

A Principal Component Factor Analysis for Measures of
Child Problematic Behaviour

Factor Matrix:

	FACTOR 1
HDS	.94
SA	.92
CD	.83
TAB	.52

HDS	Home Disobedience Scale
SA	Socialized Aggression Subscale
CD	Conduct Disturbance Subscale
TAB	Total Aversive Behaviour Score

behaviour. Children were divided into two groups: those who had been in contact with the police or courts and those who had not. On all measures, there were substantial differences in the means of the two groups ($p < .001$). That is, children who had police contacts scored significantly higher on the SA subscale ($t(70) = -9.35$), the CD subscale ($t(70) = -4.45$), the HDS ($t(70) = -7.30$), and the TAB measure ($t(70) = -3.43$). Results suggest that these measures have good discriminant validity.

Selection of the Principal Criterion Measures. In general, the three paper-and-pencil questionnaires (SA, CD, and HDS) appeared to have good psychometric properties, while the TAB observational measure was more unstable. To reduce the number of criterion measures, only two measures were selected for use in future analyses. The SA and CD subscales were retained for two reasons: First, unlike the HDS, the CD and SA subscales have been used extensively by researchers, and the reliability and validity of these measures are well established. Second, an inspection of the items within the SA and CD subscales suggests that the use of both measures is important in detecting differences in

the expression of child problematic behaviour. More specifically, items on the SA subscale are indicative of delinquent behaviour, while the CD subscale appears to describe more general conduct problems. In this study, the SA and CD subscales were significantly correlated with police contacts ($r = .75$ and $r = .47$ respectively). The very high correlation found for the SA subscale provides evidence of the sensitivity of this measure in picking up officially detected delinquent behaviour.

Domain II: Family Interaction

Self-report and observational measures were used to assess two dimensions of family interaction: parenting behaviour and parent-child relations.

1. Parenting Behaviour

(a) Monitoring

Two self-report scales were administered to assess the monitoring construct. The first scale, labelled Monitoring I, was developed by Stouthamer-Loeber, Patterson and Loeber (1983). The test-retest coefficient, calculated for 21 subjects, was .77, suggesting that the scale is reasonably stable.

Chronbach's alpha was calculated for this scale in the current study. An alpha of .83 ($N = 72$) indicated that the Monitoring I scale had satisfactory internal reliability.

Items for the second scale, Monitoring II, were drawn from a structured interview developed by Patterson and colleagues (1982). The psychometric properties of this scale have not been reported in the literature. However, an alpha of .89 in the current study suggests that this scale also has satisfactory internal reliability.

In addition to completing the monitoring scales, parents were asked to provide an estimate of the average number of hours per week that the child was unsupervised by an adult.

The mean scores and standard deviations for the monitoring measures are summarized in Table 9. To provide some indication of convergent validity, a Pearson correlation coefficient was calculated between the monitoring scales. Results revealed that these measures were significantly interrelated ($r = .68$, $p < .001$).

Table 9

Means and Standard Deviations for Measures of Parenting Practices

Parenting Practices	Mean	<u>SD</u>
.Monitoring		
Monitoring Scale I	14.8	5.1
Monitoring Scale II	25.0	9.5
Unsupervised Hours/Week	14.4	8.6
.Discipline		
Discipline Scale	37.3	10.2
General Impressions Checklist	2.9*	--

* Indicates average number of true responses across items.

(b) Discipline

An observational and self-report measure were used to assess the discipline construct. The Global Impressions Checklist (GIC) served as the observational measure. In a study conducted by Patterson and Bank (1987), an alpha coefficient of .78 was reported for the GIC. Interrater agreement for 99 family sessions was $\underline{r} = .77$. In the current study, an alpha of .73 was found, suggesting that the scale has satisfactory internal reliability. Observer agreement for 23 family assessments drawn from this study was $\underline{r} = .78$.

Items for the self-report Discipline Scale were drawn from a structured interview developed by Patterson and colleagues (1982). The psychometric properties of this scale have not been reported in the literature. However an alpha of .83 in the current study indicates that the scale has strong internal reliability.

The mean scores and standard deviations for the Global Impressions Checklist and Discipline Scale are also presented in Table 9. The two scales were highly intercorrelated ($\underline{r} = .74$), providing some evidence of convergent validity.

Selection of the Principal Measures. The Monitoring I Scale and the Global Impressions Checklist were chosen as the principal measures of monitoring and discipline for two reasons. First, both instruments have been used in previous investigations. Second, internal consistency and interrater reliability were found to be satisfactory in the current study.

2. Parent-Child Relations

Several observational measures of affect and conflict were used to evaluate parent-child relations. In addition, a paper-and-pencil measure was administered to the parent and to the child to provide an index of general family functioning.

(a) Affect

Interrater reliabilities for the affect measures were extremely high for the qualitative rating ($r = .95$) and for the Supportive Communication variable ($r = .99$). Henggeler and colleagues (1987), used the same measures and reported reliability coefficients of .81 and .84.

Measures of affect have been used to discriminate between disturbed and healthy families (Hetherington &

Frankie, 1971; Alexander, 1973; Hanson et al., 1984). These measures have also been found to be strong predictors of delinquent behaviour. For example, low scores on the Supportive Communication measure predicted offender status in a sample of delinquent youth (Hanson et al., 1984). Similarly, high ratings on the qualitative measure predicted arrest history (Hanson et al., 1984).

The mean scores and standard deviations for these measures are presented in Table 10. The affect measures were significantly intercorrelated (see Table 11).

(b) Conflict

Interrater reliability for the conflict measures was extremely high for the qualitative rating ($\underline{r} = .96$), Aggressive Speech ($\underline{r} = .99$), and Defensive Communication ($\underline{r} = .99$). Henggeler and colleagues (1987) used the same measures and reported interrater reliability coefficients of .78, .82, and .88.

In general, families of delinquents tend to exhibit more conflict than families of nondelinquents (Alexander, 1973; Henggeler et al., 1987; Hetherington et al., 1971). For example, the Defensive Communication and Aggressive Speech measures were found to be

Table 10

Means and Standard Deviations for Measures of Family Relations

Observational Measures	Mean	<u>SD</u>
(a) Affect		
Child Supportive Communication	3.8	3.8
Parent Supportive Communication	9.8	8.9
Affect (Qualitative Rating)	3.4	1.3
(b) Conflict		
Child Aggressive Speech	6.2	7.6
Mother Aggressive Speech	6.1	6.1
Child Defensive Communication	6.9	7.9
Mother Defensive Communication	6.6	7.0
Conflict (Qualitative Rating)	2.7	1.1
(c) Family Functioning		
General Functioning Scale (Child Report)	25.6	5.7

Table 11

Correlation Matrix for Measures of Family Relations

	Affect		Conflict		General Functioning	
	SC	AFF	AGG	DC	CON	GF
SC	--	-.49***	-.14	-.14	-.16	-.31**
AFF		--	.60***	.62***	.45***	.35***
AGG			--	.79***	.67***	.31**
DC				--	.62***	.23*
CON					--	.35***
GF						--

SC Supportive Communication

AFF Qualitative Rating of Affect

AGG Aggressive Speech

DC Defensive Communication

CON Qualitative Rating of Conflict

GF General Functioning Scale

* $p < .05$, ** $p < .01$, *** $p < .001$.

positively related to familial arrest history (Hanson et al., 1984).

The mean scores and standard deviations for these measures are also presented in Table 10. As seen in Table 11, the conflict measures were highly intercorrelated, with r ranges from .62 to .79.

A principal component factor analysis was completed for the observational measures of affect and conflict (see Table 12). Using the varimax rotation method, two factors were extracted which accounted for 81.2% of the total variance. The first factor included the measures of conflict. Loadings for these variables were all positive and ranged from .82 to .92. The second factor included the affect measures. Loadings ranged from .64 to -.96. The negative direction of the loading for Supportive Communication was due to the inverse scoring of this measure.

(c) General Family Functioning

Psychometric data regarding the General Functioning (GF) scale has been reported by Byles, Byrne, Boyle, and Offord (1988). Test-retest reliability for a one-week interval was .71. The internal consistency for the GF scale was found to be

Table 12

A Principal Component Factor Analysis of the
Observational Measures of Family Relations

Rotated Factor Matrix:

	Conflict	Affect
<u>Measure</u>	FACTOR 1	FACTOR 2
AGG	.92	.11
DC	.90	.14
CON	.82	.08
SC	-.01	-.96
AFF	.61	.64

AGG	Aggressive Speech
DC	Defensive Communication
CON	Qualitative Rating of Conflict
SC	Supportive Communication
AFF	Qualitative Rating of Affect

.86 (alpha) and the split-half coefficient (Gutman) was .83. These results are consistent with those found in the current study (alpha = .88) and suggest that the scale demonstrates satisfactory reliability.

Construct validity was previously assessed for the GF scale by analyzing relationships between GF scores and variables assumed to contribute to family dysfunction (Byles et al., 1988). Findings suggested that the GF scale was significantly associated with income, parental alcohol abuse, marital disharmony, spouse abuse, general health, and parental emotional disorder.

In the current study, the GF scale correlated significantly, and in the appropriate direction, with the observational measures of affect (r ranges from .31 to .35) and conflict (r ranges from .31 to .35). The mean score and standard deviation for child responses on this scale were presented in Table 10. These results are much higher than those achieved by Byles and colleagues (1988) for 1,869 families in the Ontario Child Health Study ($M = 20$, $SD = 5.28$).

Selection of the Principal Measures. The Aggressive Speech and Supportive Communication measures

were chosen to represent the conflict and affect constructs. Both measures achieved the highest loadings in the factor analysis and have been used extensively by researchers concerned with the prediction of delinquent behaviour. The General Functioning Scale was also retained for future analyses as it appeared to be a satisfactory measure of overall family dysfunction (based on correlations with measures of affect and conflict in this study and the results of the Ontario Child Health Study).

Pearson correlation coefficients were also calculated to assess the relationship between measures of parenting behaviour and parent-child relations. The Monitoring I scale correlated significantly with the observational measure of conflict ($r = .32, p < .01$) and the General Functioning Scale ($r = .51, p < .001$), but it was not related to the Supportive Communication measure. The Global Impressions Checklist was significantly correlated with each of the relationship measures: General Family Functioning ($r = .72, p < .001$), Supportive Communication ($r = -.32, p < .01$), and Aggressive Speech ($r = .30, p < .01$).

Domain III: Parent Characteristics

Self-report measures were used to assess parental antisocial personality, antisocial attitudes, and stress. The psychometric properties of each measure are presented below.

(a) Parental Antisocial Attitudes

The Identification with Criminal Others (ICO) and Tolerance for Law Violations (TLV) scales were administered to assess parental antisocial attitudes. Estimates of internal consistency have been summarized by Andrews and Wormith (1990). Split-half reliabilities for 59 probationers were .88 and .93 for the ICO and TLV scales. Chronbach alphas were .72 and .67 respectively in a study conducted by Andrews and Kiessling (1980) with 30 adult probationers. Test-retest scores for 58 undergraduates were .59 and .84 for the ICO and TLV scales (Andrews & Wormith, 1990).

The concurrent, criterion, and predictive validity of the ICO and TLV scales have been well established and were summarized by Andrews and Wormith (1990). The scales appear to be significantly correlated with personality measures of deviance and measures of association with criminal others. In addition, both

scales have been found important in predicting future criminal behaviour (Andrews & Wormith, 1990). Finally, these measures have demonstrated sensitivity to intervention efforts (Andrews, 1980).

The mean scores and standard deviations in the current study for the ICO and TLV scales are presented in Table 13. Mean scores of parents in this sample were similar to that of a group of nonoffenders ($N = 435$; ICO: $M = 14.8$, $SD = 3.0$; TLV: $M = 23.6$, $SD = 4.8$) as reported by Andrews and Wormith (1990). In this study, the ICO and TLV scales were highly intercorrelated ($r = .56$, $p < .001$) and were found to be significantly related to the Psychopathy and Stress measures (see Table 14).

(b) Parental Antisocial Personality

The Socialization and Psychopathy scales were used to assess parental antisocial personality. The reliability of the Socialization scale has been well established, and a summary of findings were presented by Gough (1969) and Megargee (1972). For example, test-retest reliability among high school students ($N = 226$) and male prisoners ($N = 200$) was .69 and .80 respectively (Gough, 1969). Chronbach's alpha has been

Table 13

Means and Standard Deviations for Measures of Parent Characteristics

Parent Characteristics	Mean	<u>SD</u>
1. Antisocial Attitudes		
.Tolerance of Law Violations (TLV)	23.2	7.0
.Identification with Criminal Others (ICO)	13.2	3.6
2. Antisocial Personality		
.Socialization (SOCCPI)	34.0	7.8
.Psychopathy (PSYCHO)	5.3	3.6
3. Stress (FEL)	8.3	4.8

Table 14

Correlation Matrix for Measures of Parent
Characteristics

Parent Characteristics	TLV	ICO	SOC CPI	PSYCHO	FEL
TLV	---				
ICO	.56***	---			
SOC CPI	-.17	-.18	---		
PSYCHO	.47***	.31**	-.67***	---	
FEL	.21*	.24*	-.38***	.36***	---

TLV Tolerance for Law Violations
 ICO Identification with Criminal Others
 SOC CPI Socialization Subscale
 PSYCHO Psychopathy Subscale
 FEL Family Events List (Stress)

* $p < .05$, ** $p < .01$, *** $p < .001$.

reported in several studies and has ranged from .79 to .86. The Psychopathy scale has also been demonstrated to be a reliable and important instrument (Peterson, Quay, & Cameron, 1959). For example, Andrews and Wormith (1990) reported a Chronbach's alpha of .62 for 30 adult probationers and a test-retest correlation of .65 with 122 probationers.

The Socialization and Psychopathy scales have been used extensively by researchers to compare delinquent and nondelinquent groups (Megargee, 1972). Such studies have consistently found significantly lower scores among both male and female delinquents. For example, Gough (1969) reported point-biserial correlations between Socialization and the dichotomous criterion of delinquent-versus-nondelinquent for 11,795 males and 10,724 females. The correlations were .39 for the males and .46 for the females.

The predictive validity of the Socialization and Psychopathy scales has also been assessed by Andrews, Wormith and Keissling (1985) in their three-year follow-up assessment of probationers. Correlations with recidivism were .43 for the Socialization scale and .51 for the Psychopathy scale. Andrews and Wormith (1990)

have summarized the usefulness of these measures in predicting risk for future criminal behaviour.

The means and standard deviations for the Socialization and Psychopathy measures for the current study are presented in Table 13. Mothers in this sample tended to have slightly higher mean scores on the Socialization scale than a group of unmarried mothers ($N = 213$; $M = 32.9$, $SD = 6.24$) reported by Megargee (1972).

Normative data for the Psychopathy scale is presented by Andrews and Wormith (1990). Scores in the current study were considerably higher than those reported for 145 citizen volunteers ($M = 2.65$, $SD = 2.20$) and slightly lower than those received by 376 adult probationers ($M = 6.74$, $SD = 3.85$).

Intercorrelations between the personality scales and other measures of parent characteristics are presented in Table 14. The Socialization and Psychopathy scales were found to be inversely intercorrelated ($r = -.67$). The Psychopathy scale correlated significantly with all measures of parent characteristics, while correlations between measures of antisocial attitudes and the Socialization scale did

not reach significance.

Parental criminal behaviour was not considered as a risk predictor in the current study due to the low frequency of occurrence for mothers convicted of a criminal offence ($N = 14$). However, this variable was used to further validate parental measures of antisocial attitudes and personality. Dichotomous ratings were provided to establish an offender and a nonoffender group of mothers.

The means for the offender group on the ICO and personality measures differed significantly from those of the nonoffender group. That is, mothers with criminal convictions scored significantly higher on the ICO scale ($t(70) = -2.87, p < .01$), the psychopathy scale ($t(70) = -2.89, p < .01$) and lower on the socialization scale ($t(70) = 3.76, p < .001$). The TLV scale did not discriminate between offenders and nonoffenders.

(c) Stress

The Family Events List (FEL) was used to provide an indication of the number of recent stressful events faced by mothers. Psychometric data for the checklist has been presented by Patterson (1982) and Forgatch,

Patterson and Skinner (1988). In a study conducted by Forgatch and colleagues (1988), recently separated mothers ($N = 64$) reported having 16.5 "hassles" during a three-week period. This compares with 12 for mothers ($N = 200$) in two-parent families.

The mean score and standard deviation for the FEL measure in the current study are presented in Table 13. Scores for this sample were lower than those reported by Forgatch and colleagues (1988). The FEL was significantly correlated with all measures of parent characteristics, sharing the strongest relationship with the personality measures (see Table 14).

Selection of the Principal Measures. With the exception of the Family Events List, each of the measures considered for this domain have been used extensively by researchers and have demonstrated satisfactory to excellent reliability and validity. To date, most investigations concerning these measures have focussed on the prediction of criminal behaviour. To assess the impact of parent characteristics on child behaviour and parenting practices, all were retained for future analyses.

Domain IV: Community Factors

Four measures were used to assess this domain. The first measure dealt with reported criminal activity in each of the communities. The second set of measures included a questionnaire designed to assess parental satisfaction with neighbourhood safety and available resources. The third measure provided an indication of the child's associations with delinquent peers and adults. Finally, the Social Network Questionnaire was administered to assess the quantity and quality of support received by the parent from family and others.

(a) Neighbourhood Reports of Criminal Activity

Crime reports made during 1988-1989 by the police department and Pinkerton Security for each of the areas are presented in Table 15. Reports included incidences of trespassing, domestic disputes, family violence, break and entry, disorderly conduct, and suspicious activity. When the total number of occupants was taken into consideration, the frequency of reports did not vary considerably across areas. As expected, police reports and Pinkerton Security reports were highly intercorrelated ($r = .87$).

Table 15

Crime Reports for 1988-1989

AREA	Total Occupants	Police* Reports	Calls**	Pinkerton* Security Reports	Calls**
A	2,489	204	.08	203	.08
B	1,396	172	.12	168	.12
C	602	77	.13	82	.14
D	1,296	115	.09	108	.08

*Reports were calculated over a 12-month period.

** Average number of calls made per total occupants.

(b) Satisfaction with the Neighbourhood

The Neighbourhood Satisfaction Questionnaire was developed from a number of interview schedules. Therefore, psychometric data for this scale are unavailable. Chronbach's alpha was calculated in the present study. An alpha of .83 indicated that the scale has strong internal consistency. The mean score received on this scale was 4.4 (SD = 2.3).

(c) Child Delinquent Associations

Comprehensive psychometric data concerning the Differential Association Scale (DAS) have not been published. In the current study, an alpha of .86 suggests that the scale has good internal consistency. The DAS has been demonstrated to correlate significantly with delinquent behaviour $r = .67$ for boys and .51 for girls (N = 176; Short, 1957). The mean score received on the DAS for children in the current study was 27.5 (SD = 7.0).

(d) Parental Social Support

The Social Networks Questionnaire assesses the quantity and quality of social support for the mother. The Social Networks Questionnaire has been found to correlate significantly with child competence and

parenting behaviour (Roberts, 1989). The most important variable in predicting child misbehaviour was the availability of the mother's family to provide child care ($r = .40$, $p < .05$).

Descriptive statistics for the current study are presented in Table 16. As can be seen, mothers reported moderately sized social networks (an average of six persons, five of whom were seen once a week). In comparison with the data reported by Roberts (1989) for 35 two-parent families, the current sample had a much smaller social network (six versus 12) but tended to have similar levels of contact with people per week. The level of involvement in activities and overall helpfulness provided by family and friends did not differ significantly.

Selection of the Principal Measures. Despite the limited psychometric data available on the majority of measures from this domain, most were retained for future analyses. Since police reports tend to be a more comprehensive measure of criminal activity and are used more frequently in the literature, the Pinkerton Security reports were not retained for future analyses. Also, to limit the amount of information made available

Table 16

Social Networks Questionnaire: Descriptive Results

Variable	Mean	SD	Range
Structure			
Total no. of family members	2.8	2.3	0-10
Total no. of friends	3.0	2.4	0-14
% same-sex friends	66.3%	34.3	0-100
Frequency of Contact (Seen at least once a week)			
Family (total)	1.7	1.1	0-5
Friends (total)	3.0	1.9	0-8
Location			
Living in Ottawa			
Family (total)	2.1	1.7	0-10
Friends (total)	3.8	3.6	0-14
Living outside of Ottawa			
Family (total)	.7	.5	0-5
Friends (total)	2.3	2.5	0-10
Activities and Services (Provided at least once a month)			
Child rearing information:			
Family (total)	1.5	1.6	0-10
Friends (total)	1.7	1.5	0-7
Financial support:			
Family (total)	.9	1.5	0-10
Friends (total)	1.0	1.1	0-5
Household help:			
Family (total)	1.3	1.2	0-5
Friends (total)	.4	.7	0-3

Table 16 (Cont'd)

Variable	Mean	SD	Range
Activities and Services (Provided at least once a month)			
Babysitting:			
Family (total)	1.3	1.6	0-10
Friends (total)	.8	1.2	0-7
Emotional support:			
Family (total)	3.0	2.2	0-12
Friends (total)	2.8	2.1	0-13
Balanced relationship:			
Family (total)	4.2	2.3	0-10
Friends (total)	2.7	2.4	0-13
Overall Helpfulness Rating			
Family (total)	4.8	1.1	0-7
Friends (total)	5.3	1.4	0-7

from the Social Networks Questionnaire, only the overall helpfulness and support ratings were used in future analyses.

A summary of measures selected to represent each of the domains is presented in Table 17.

Table 17

Summary of Measures Selected to Represent Each of the Major Domains

Measures	Direction of Scale
----------	--------------------

DOMAIN I: Child Problematic Behaviour

Revised Behaviour Problem Checklist

-Socialized Aggression	High scores indicate
-Conduct Disturbance	problematic behaviour

DOMAIN II: Family Interaction

1. Parenting Behaviour

-Monitoring I Scale	High scores indicate
	poor monitoring

-Global Impressions Checklist	High scores indicate
	ineffective
	discipline

2. Family Relations

-Supportive Communication	Low scores indicate
	lower levels of
	affect

-Aggressive Speech	High scores indicate
	higher levels of
	conflict

-General Functioning Scale	High scores indicate
	higher levels of
	family dysfunction

Table 17 (Cont.)

Measures	Direction of Scale
----------	--------------------

DOMAIN III: Parent Characteristics

1. Antisocial Personality

-Socialization Scale	Low scores indicate higher levels of dysfunction
-Psychopathy Scale	High scores indicate higher levels of dysfunction

2. Antisocial Attitudes

-Identification with Criminal Others	High scores indicate antisocial attitudes
-Tolerance for Law Violations	

3. Maternal Stress

-Family Events List	High scores indicate greater levels of stress
---------------------	---

Table 17 (Cont.)

Measures	Direction of Scale
DOMAIN IV: Community Factors	
1. Crime Reports	
-Police Reports of Criminal Activity	High rates indicate greater levels of crime
2. Satisfaction with Neighbourhood	
-Neighbourhood Satisfaction Questionnaire	High scores indicate greater levels of dissatisfaction
3. Child Delinquent Associations	
-Differential Association Scale	Low scores indicate greater association with criminal others
4. Maternal Social Support	
-Social Networks Questionnaire	Low scores indicate less helpfulness and support
.Helpfulness Rating	
.Support Rating	

Protective Factors

Six measures were administered to assess the importance of child attributes in ameliorating or buffering the impact of adverse environmental circumstances. The child temperament scale developed by Turecki (1985) was included as the first measure of protective factors. Reliability data for the scale was not reported. However, an alpha of .80 in the current study suggests that the scale has satisfactory internal consistency. Turecki (1985) found that the scale was significantly correlated with child behaviour problems at home, ineffective disciplinary practices, and poor parental coping.

The remaining factors were drawn from the Ontario Child Health Study (Rae-Grant et al., 1989). Reliability data for these measures were not reported, although Rae-Grant and colleagues (1989) found that several protective factors were inversely related to childhood disorder. These included getting along with others, good academic performance, participation in two or more activities, and the presence of a confidante.

Frequency data for the current study are presented in Table 18. Intercorrelations among each of the

Table 18

Frequency Data for the Protective Factors

Factor	<u>N</u>	<u>%</u>
1. Good Temperament	25	34.7
2. Good Academic Performance	18	25.0
3. Presence of Good Friendships	36	50.0
4. Good Participation	14	19.4
5. Confidante	46	63.9
6. Getting Along Well with Others	19	26.4

factors are displayed in Table 19. Few of the measures were significantly related. The highest correlations were found between the factors of getting along well with others, positive temperament, presence of a confidante, and good academic performance.

A principal component factor analysis was calculated with each of the protective measures (see Table 20). Using the varimax rotation method, two factors were extracted which accounted for 52.6% of the total variance. The first factor included four measures that have been used previously by investigators to describe social competence (Achenbach & Edelbrock, 1983). Loadings for these variables were all positive and ranged from .60 to .78. The second factor included good participation and the presence of good friendships. The loadings for these measures were also positive and ranged from .73 to .75.

To provide an estimate of internal reliability, Chronbach's alpha was calculated by including all of the measures into a Protective Factor Scale (PFS). An alpha of .47 suggests that this scale has inadequate internal consistency. Using the results of the factor analysis, Chronbach's alpha was recalculated with the

Table 19

Correlation Matrix for the Protective Factors

Factor	TEMP	ALONG	CONFID	ACAD	PARTIC	FRIEND
TEMP						
ALONG	.38***					
CONFID	ns	.34**				
ACAD	.22*	.38***	ns			
PARTIC	ns	ns	ns	.20*		
FRIEND	ns	ns	ns	ns	.21*	

TEMP Positive temperament
 ALONG Getting along well with others
 CONFID Presence of a confidante
 ACAD Good academic performance
 PARTIC Good participation
 FRIEND Presence of good friendships

*p < .05, **p < .01, ***p < .001

ns not significant

Table 20

A Principal Component Factor Analysis for Child
Protective Measures

Factor Matrix:

	FACTOR 1	FACTOR 2
ALONG	.78	.16
ACAD	.68	.22
TEMP	.64	.18
CONFID	.60	.29
PARTIC	.14	.75
FRIEND	.11	.73

ALONG	Getting along well with others
ACAD	Good academic performance
TEMP	Positive temperament
CONFID	Presence of a confidante
PARTIC	Good participation
FRIEND	Presence of good friendships

four variables that loaded on the first factor. An alpha of .71 suggests that this scale is reasonably stable.

The Protective Factor Scale (PFS) was developed by summing the dichotomous ratings for the following variables: positive temperament, getting along well with others, good academic performance, and presence of a confidante. The mean score for children on the PFS was 1.7 (SD = 1.3).

Selection of the Principal Measures. Few studies have been conducted to determine those child attributes which serve as protective factors for child behavioural outcome. Given the need to establish measures in this area, it was decided that each of the identified factors would be retained for further analyses in this study.

Developmental and Gender-Related Issues

Before proceeding with the major analyses, an examination of the impact of age and gender on the criterion and independent measures was undertaken. Table 21 shows the changes in mean for all measures level by age group (10-11, 12-13, 14-15 years). As can be seen, the three groups differed significantly on the Socialized Aggression subscale, the monitoring measure, the amount of unsupervised time, maternal stress, and child delinquent associations. Measures of official delinquency were not presented due to the low frequency of occurrence; however, a significant difference ($F(3,68) = 4.6, p < .01$) was found in the expected direction, between groups for the frequency of police contacts. Results suggest that as child delinquent associations and deviant behaviours increase, parents are monitoring their children less and reporting greater levels of stress. Given these findings, age will be considered as a covariate for some of the subsequent analyses.

The mean scores for criterion and independent measures were also calculated separately for males ($N = 36$) and females ($N = 36$). As summarized in Table 22,

Table 21

Developmental Changes in Mean Levels by Age Group

Age	Group 1 (10-11)	Group 2 (12-13)	Group 3 (14-15)	F Value
Child Problematic Behaviour				
-CD	14.8	16.2	18.8	.8
-SA	2.3	5.5	7.3	3.1*
Family Interaction				
(1) Parenting Practices				
-Discipline	4.4	5.0	5.2	.6
-Monitoring	10.4	15.4	17.3	6.1***
-Unsupervised time (hours) per week	14.8	16.2	18.8	3.3*
(2) Parent-Child Relations				
-Affect	2.9	3.1	3.3	.3
-Conflict	2.6	3.3	3.9	1.6
-General Functioning	23.9	26.0	27.0	1.7
Parent Characteristics				
(1) Antisocial Attitudes				
-ICO	12.9	13.0	13.6	.3
-TLV	22.0	23.3	24.4	.7
(2) Antisocial Personality				
-Socialization	32.8	33.0	36.2	1.4
-Psychopathy	5.0	5.2	5.7	.2
(3) Stress	7.2	7.5	10.6	3.9*

Table 21 (Cont'd)

Age	Group 1 (10-11)	Group 2 (12-13)	Group 3 (14-15)	<u>F</u> Value
Community Factors				
(1) Police Reports				
	135.7	161.5	187.6	1.3
(2) Child Delinquent Associations				
	31.8	26.0	24.9	8.0***
(3) Parent Social Network				
-Overall Helpfulness	4.7	4.8	5.1	.9
-Overall Support	16.1	16.1	12.1	1.9
(4) Satisfaction with the Neighbourhood				
	3.8	4.6	4.9	1.3

*p < .05, **p < .01, ***p < .001

CD Conduct Disturbance Subscale
 SA Socialized Aggression Subscale
 ICO Identification with Criminal Others
 TLV Tolerance for Law Violations

Table 22

Summary Table Comparing Gender with Measures from each of the Major Domains

	Male Mean	Female Mean	<u>t</u>
Child Problematic Behaviour			
-Conduct Disturbance	18.1	15.0	-1.2
-Socialized Aggression	5.5	4.6	0.5
Family Interaction			
(1) Parenting Practices			
-Discipline	4.9	4.8	0.2
-Monitoring	15.0	14.5	0.4
-Unsupervised time/week	15.6	13.2	1.0
(2) Family Relations			
-Affect	2.7	3.6	-2.0*
-Conflict	3.5	3.0	1.1
-General Functioning	25.5	25.8	-0.2
Parent Characteristics			
(1) Antisocial Attitudes			
-Identification	13.3	13.0	0.3
-Tolerance	22.5	23.9	-0.8
(2) Antisocial Personality			
-Socialization	33.8	34.1	-0.2
-Psychopathy	4.9	5.6	-0.9
(3) Stress	8.6	8.3	0.2
Community Factors			
(1) Police Reports	149.1	174.0	-0.9
(2) Child Delinquent Associations	27.7	27.4	0.2
(3) Parent Social Network			
-Overall Helpfulness	4.9	4.8	0.2
-Overall Support	14.1	15.5	-0.7
(4) Satisfaction with the Neighbourhood	4.8	4.1	1.4

*p < .05

females experienced higher rates of affect in the dyadic relationship. No other measures varied in relation to the child's sex. Given these findings, male and female data were combined in all future analyses.

Risk Factors

A number of analyses were conducted to assess the relationship of selected measures with child problematic behaviour (i.e., t-tests, Pearson correlations, and multiple regression analyses). Results are reported separately for the criterion measures.

Socialized Aggression (SA). To examine differences between groups, high ($N = 30$) and low ($N = 42$) SA groups were established from the median score ($Mdn = 2$) received on the SA measure. Independent t-tests were then computed with measures from each of the major domains. As presented in Table 23, statistically significant differences were found between groups, and in the expected direction, on the majority of family interaction measures. The discipline and monitoring measures showed the largest differences. All measures from the parent characteristics domain significantly differentiated the two groups. From the community factors domain, only the measure of child delinquent associations showed significant differences.

Pearson correlation coefficients were calculated

Table 23

Mean Score Differences on Measures from the Major
Domains for Socialized Aggression (SA)

	Low SA	High SA	t
Family Interaction			
(1) Parenting Practices			
-Discipline	3.4	6.9	-8.87***
-Monitoring	12.4	18.1	-5.21***
(2) Family Relations			
-Affect	7.2	4.8	2.79**
-Conflict	5.8	7.4	-1.46
-General Functioning	23.2	29.1	-4.93***
Parent Characteristics			
(1) Antisocial Attitudes			
-Identification with Criminal Others	12.0	14.7	-3.30**
-Tolerance for Law Violations	21.8	25.2	-2.11*
(2) Antisocial Personality			
-Socialization	35.8	31.5	2.38*
-Psychopathy	4.3	6.8	-2.83**
(3) Stress	6.9	10.6	-3.41***
Community Factors			
(1) Police Reports	159.0	165.2	-.23
(2) Child Delinquent Associations	30.5	23.4	4.89***
(3) Parent Social Network			
-Overall Helpfulness	4.9	4.7	.84
-Overall Support	15.9	13.2	1.33
(4) Satisfaction with the Neighbourhood	4.4	4.4	-.01

*p < .05, **p < .01, ***p < .001

to provide further information on the magnitude of the relationships between SA and measures from each of the major domains (see Table 24). All measures from the family interaction domain correlated significantly and in the expected direction with SA. Discipline ($r = .68$) and monitoring ($r = .67$) showed the highest correlations overall. Consistent with the results on between-group differences, all measures from the parent characteristics domain were significantly correlated with SA (r ranged from .29 to .52). As to the community factors domain, child delinquent associations ($r = -.62$) and maternal support ($r = -.23$) were negatively related to the Socialized Aggression subscale.

A series of multiple regression analyses were then conducted to assess the relative importance of the measures in predicting SA. As a first step, stepwise regression analyses were conducted separately for measures within each domain. The predictors that were extracted from each of the domains were then assessed in a composite regression analysis.

The results of the first four regression analyses for each of the domains are shown in Table 25. Firstly,

Table 24

Pearson Correlations for Socialized Aggression with
Measures from the Major Domains

Variable	<u>r</u>
Family Interaction	
(1) Parenting Behaviour	
-Monitoring	.67***
-Discipline	.68***
(2) Family Relations	
-Affect	-.35**
-Conflict	.36**
-General Functioning	.54***
Parent Characteristics	
(1) Antisocial Attitudes	
-Tolerance for Law Violations	.29**
-Identification with Criminal Others	.39***
(2) Antisocial Personality	
-Socialization Scale	-.35***
-Psychopathy Scale	.34**
(3) Stress	.52***
Community Factors	
(1) Police Reports	ns
(2) Parental Social Network	
-Overall Helpfulness	ns
-Overall Support	-.23*
(3) Child Delinquent Associations	-.62***
(4) Satisfaction with Community	ns

*p < .05, **p < .01, ***p < .001, ns = not significant.

Table 25

Summary Table of Regression Analyses for Socialized Aggression

Predictors	R	R ²
Family Interaction		
-Discipline	.68	.46
-Monitoring	.73	.53
Parent Characteristics		
-Maternal Stress	.52	.28
-Identification with Criminal Others	.59	.35
Community Factors		
-Child Delinquent Associations	.62	.38
Composite Regression Analysis		
Family Interaction		
-Discipline	.68	.46
Community Factors		
-Child Delinquent Associations	.74	.54
Parent Characteristics		
-Maternal Stress	.76	.58

from the family interaction domain, discipline ($F(1,70) = 59.3, p < .001$) and monitoring ($F(2,69) = 38.3, p < .001$) provided independent contributions to the prediction of SA. Secondly, two measures from the parent characteristics domain, maternal stress ($F(1,70) = 26.6, p < .001$) and Identification with Criminal Others (ICO) ($F(2,69) = 18.4, p < .001$) were predictive of socialized aggression. Finally, from the community factors domain, the measure of child delinquent associations ($F(1,70) = 42.8, p < .001$) was positively related to SA.

As indicated previously, age showed a significant relationship with the SA measure ($r = .35, p < .002$). To account for the possible influence of this variable, age was included in the composite regression analysis. When the five factors were allowed to compete freely, results revealed that three measures, representative of each domain, accounted for 58% of the total variance. Discipline ($F(1,70) = 59.3, p < .001$) was the first variable entered into the equation, accounting for 46% of the variance. The child's delinquent associations ($F(2,69) = 40.9, p < .001$) added 8% to the accounted variance, and maternal stress ($F(3,68) = 31.4, p <$

.001) contributed an additional 4%. Age did not enter into the equation.

Conduct Disturbance (CD). Using the median score on the CD subscale (Mdn = 14), high (N = 34) and low (N = 38) CD groups were constructed. As can be seen in Table 26, statistically significant differences were found between groups on the majority of family interaction measures. The most important variables in discriminating between high and low CD groups were the discipline and general functioning measures. As with analyses conducted for SA, the conflict measure did not reach significance.

All measures from the parent characteristics domain significantly discriminated between the two groups, with psychopathy and stress showing the greatest differences. Child delinquent associations and helpfulness of the maternal social network also revealed significant differences between groups. Other measures from the community factors domain failed to distinguish between the groups.

Pearson correlation coefficients for CD with measures from each of the major domains are presented

Table 26

Mean Score Differences on Measures from the Major
Domains for Conduct Disturbance (CD)

	Low CD	High CD	t
Family Interaction			
(1) Parenting Practices			
-Discipline	3.5	6.4	-7.36***
-Monitoring	12.7	16.9	-3.81***
(2) Family Relations			
-Affect	7.1	5.2	2.15*
-Conflict	5.6	7.4	-1.54
-General Functioning	22.2	29.3	-6.56***
Parent Characteristics			
(1) Antisocial Attitudes			
-Identification with Criminal Others	12.3	14.1	-2.20*
-Tolerance for Law Violations	21.8	24.8	-1.85*
(2) Antisocial Personality			
-Socialization	35.8	32.0	2.15*
-Psychopathy	4.4	6.3	-2.19**
(3) Stress	7.1	9.8	-2.48***
Community Factors			
(1) -Police Reports	155.0	168.4	-.50
(2) Child Delinquent Associations	30.0	24.9	3.22***
(3) Parent Social Network			
-Overall Helpfulness	5.0	4.6	1.71*
-Overall Support	15.6	13.8	.93
(4) Satisfaction with the Neighbourhood	4.4	4.5	-.30

*p < .05, **p < .01, ***p < .001

in Table 27. All measures from the family interaction domain were significantly correlated with CD. Discipline ($r = .70$) and General Functioning ($r = .65$) showed the highest correlations overall. Each of the measures from the parent characteristics domain were significantly correlated with CD (r ranged from .24 to .36). Finally, from the community factors domain, child delinquent associations ($r = -.41$) and the helpfulness of the maternal social network ($r = -.31$) were significantly related to CD.

To further assess the relative importance of the measures in predicting CD, a series of multiple regression analyses, similar to those conducted with SA were conducted. Five variables were significant predictors of conduct disturbance (see Table 28). Within the family interaction domain, both discipline ($F(1,70) = 68.1, p < .001$) and General Functioning ($F(1,70) = 39.5, p < .001$) were positively related to the CD measure. From the parent characteristics domain, maternal stress ($F(1,70) = 10.1, p < .002$) was the only predictor of CD. Finally, from the community factors domain, two measures - the child's delinquent associations ($F(1,70) = 14.2, p < .003$) and overall

Table 27

Pearson Correlations for Conduct Disturbance with
Measures from the Major Domains

	Conduct Disturbance
Family Interaction	
(1) Parenting Behaviour	
-Monitoring	.45***
-Discipline	.70***
(2) Family Relations	
-Affect	-.33**
-Conflict	.21*
-General Functioning	.65***
Parent Characteristics	
(1) Antisocial Attitudes	
-Tolerance of Law Violations	.24*
-Identification with Criminal Others	.29**
(2) Antisocial Personality	
-Socialization Scale	-.24*
-Psychopathy Scale	.32**
(3) Stress	.36***
Community Factors	
(1) Police Reports	ns
(2) Parental Social Network	
-Overall Helpfulness	-.31**
-Overall Support	ns
(3) Child Delinquent Associations	-.41***
(4) Satisfaction with the Neighbourhood	ns

*p < .05, **p < .01, ***p < .001, ns = not significant.

Table 28

Summary Table of Regression Analyses for Conduct Disturbance

Predictors	R	R ²
Family Interaction		
-Discipline	.70	.49
-General Functioning	.73	.53
Parent Characteristics		
-Maternal Stress	.36	.13
Community Factors		
-Child Delinquent Associations	.41	.17
-Overall Helpfulness of Maternal Support Network	.51	.26
Composite Regression Analysis		
Family Interaction		
-Discipline	.70	.49
Community Factors		
-Overall Helpfulness of Maternal Support Network	.76	.58

helpfulness of the mother's social network ($F(1,70) = 12.07, p < .001$) - were related to CD.

The composite regression analysis resulted in two significant predictors which accounted for 58% of the total variance (see Table 28). Discipline ($F(1,70) = 68.1, p < .001$) accounted for 49% of the total variance, and the overall helpfulness of the mother's social network ($F(2,69) = 46.9, p < .001$) contributed an additional 9%.

Determinants of Family Interaction

A number of analyses were conducted to assess the impact of factors from the parent characteristics and community domains on three measures of family interaction. Results are reported separately for the monitoring, discipline, and general functioning measures.

Monitoring. An effective monitoring group (intensive supervision, $N = 38$) and an ineffective monitoring group (poor supervision, $N = 34$) were established from the median score ($Mdn = 13$) received on the monitoring measure. Independent t-tests were then computed with measures from each of the major domains (see Table 29).

Statistically significant differences were found between the groups on two measures from the parent characteristics domain. Higher levels of maternal stress and more deviant antisocial attitudes (ICO) were important in discriminating between groups. From the community factors domain, only the measure of child delinquent associations was significant.

A more comprehensive examination of the relationship between parental monitoring and the

Table 29

Mean Score Differences on Measures from the Parent Characteristics and Community Factors Domains for Monitoring

	Monitoring		
	Low	High	<u>t</u>
Parent Characteristics			
(1) Antisocial Attitudes			
-Identification with Criminal Others	11.8	14.7	-3.70***
-Tolerance of Law Violations	22.9	23.6	-0.42
(2) Antisocial Personality			
-Socialization	35.5	32.3	1.73
-Psychopathy	4.5	6.2	-1.89
(3) Stress	6.7	10.4	-3.50***
Community Factors			
(1) Police Reports	168.8	153.5	0.57
(2) Child Delinquent Associations	30.6	24.1	4.42***
(3) Parent Social Network			
-Overall Helpfulness	5.1	5.6	-1.63
-Overall Support	15.1	14.4	0.37
(4) Satisfaction with the Neighbourhood	4.4	4.5	-0.14
Control Variable			
(1) Child's Age	11.9	13.1	-2.94**

*p < .05, **p < .01, ***p < .001

various measures is presented in Table 30. All measures from the parent characteristics domain were significantly correlated with monitoring. Parental antisocial attitudes (ICO) ($r = .49$) showed the highest overall correlation with monitoring. From the community factors domain, child delinquent associations ($r = -.64$) and overall support from the maternal social network ($r = -.22$) were related to the monitoring measure. The negative correlation found for support suggests that inadequate monitoring is related to lower levels of support.

To further assess the relative importance of these measures in predicting monitoring behaviour, a series of multiple regression analyses were calculated. First, measures from the parent characteristics and community factors domains were entered into a stepwise regression analysis with monitoring as the criterion measure. A composite regression analysis was then calculated using the significant predictor variables.

Table 30

Pearson Correlations for Monitoring with Measures from
the Parent Characteristics and Community Factors
Domains

Variable	<u>r</u>
Parent Characteristics	
(1) Antisocial Attitudes	
-Tolerance of Law Violations	.21*
-Identification with Criminal Others	.49***
(2) Antisocial Personality	
-Socialization Scale	-.38***
-Psychopathy Scale	.34**
(3) Stress	.46***
Community Factors	
(1) Police Reports	ns
(2) Parental Social Network	
-Overall Helpfulness	-.16
-Overall Support	-.22*
(3) Child Delinquent Associations	-.64***
(4) Satisfaction with the Neighbourhood	ns
Control Variable	
(1) Child's Age	.44***

*p < .05, **p < .01, ***p < .001, ns = not significant.

Two regression analyses revealed significant predictors of the monitoring measure (see Table 31). From the parent characteristics domain, ICO ($F(1,70) = 21.8, p < .001$), maternal stress ($F(2,69) = 19.4, p < .001$), and socialization ($F(3,68) = 15.4, p < .001$) were positively related to monitoring. From the community factors domain, child delinquent associations ($F(1,70) = 48.8, p < .001$) emerged as a predictor of monitoring.

As indicated previously, age was significantly correlated with monitoring ($r = .44, p < .001$). To control for this variable, age was forced into a regression analysis, while the significant predictors (ICO, maternal stress, child delinquency associations, and socialization) identified above were allowed to compete freely. Results revealed that four measures accounted for 59% of the total variance (see Table 31). The child's age ($F(1,70) = 9.5, p < .003$) accounted for 12% of the variance. Child delinquent associations ($F(2,69) = 38.3, p < .001$) added 41%, the Socialization Scale ($F(3,68) = 29.5, p < .001$) contributed 4%, and ICO ($F(4,67) = 24.4, p < .001$) increased the accounted variance by 3%.

Table 31

Summary Table of Regression Analyses for Monitoring

Predictors	R	R ²
Parent Characteristics		
-Identification with Criminal Others	.49	.24
-Stress	.60	.36
-Socialization	.64	.40
Community Factors		
-Child Delinquent Associations	.64	.41
Composite Regression Analysis		
Child's Age	.35	.12
Community Factors		
-Child Delinquent Associations	.73	.53
Parent Characteristics		
-Socialization Scale	.75	.57
-Identification with Criminal Others	.77	.59

Discipline. Effective ($N = 39$) and ineffective discipline ($N = 33$) groups were established from the median score ($Mdn = 4.3$) received on the discipline measure. Independent t-tests were then computed with measures from the parent characteristics and community factors domains (see Table 32).

First, statistically significant differences were found between the groups on all measures from the parent characteristics domain. The most powerful measures from this domain were parental antisocial attitudes (ICO) and stress. From the community factors domain, only the measure of child delinquent associations was significant.

Correlational analyses for discipline essentially mirrored the results found for monitoring (see Table 33). Once again, all measures from the parent characteristics domain were significantly related to discipline (r ranges from .29 to .43). The most powerful relationship with discipline was found for ICO and maternal stress. From the community factors domain, child delinquent associations was highly correlated with discipline ($r = .55$) while other measures from this domain were not significant at the .05-level.

Table 32

Mean Score Differences on Measures from the Parent
Characteristics and Community Factors Domains for
Discipline

	Discipline		
	Effective	Ineffective	t
Parent Characteristics			
(1) Antisocial Attitudes			
-Identification with Criminal Others	12.0	14.5	-2.70**
-Tolerance of Law Violations	21.6	25.1	-2.21*
(2) Antisocial Personality			
-Socialization	35.7	32.0	2.12*
-Psychopathy	4.5	6.3	-2.11*
(3) Stress	7.1	10.0	-2.70**
Community Factors			
(1) Police Reports	159.7	163.7	-0.15
(2) Child Delinquent Associations	30.7	23.8	4.70***
(3) Parent Social Network			
-Overall Helpfulness	5.2	5.5	-0.74
-Overall Support	16.1	13.2	1.47
(4) Satisfaction with the Neighbourhood	4.2	4.7	-0.79

*p < .05, **p < .01, ***p < .001

Table 33

Pearson Correlations for Discipline with Measures from
the Parent Characteristics and Community Factors
Domains

Variable	<u>r</u>
Parent Characteristics	
(1) Antisocial Attitudes	
-Tolerance of Law Violations	.29**
-Identification with Criminal Others	.43***
(2) Antisocial Personality	
-Socialization Scale	-.32**
-Psychopathy Scale	.35***
(3) Stress	.40***
Community Factors	
(1) Police Reports	ns
(2) Parental Social Network	
-Overall Helpfulness	.16
-Overall Support	-.18
(3) Child Delinquent Associations	-.55***
(4) Satisfaction with the Neighbourhood	ns

*p < .05, **p < .01, ***p < .001, ns = not significant.

Regression analyses were calculated using the same procedures as implemented for the monitoring construct (see Table 34). Two stepwise regression analyses revealed four significant predictors of discipline. From the parent characteristics domain, antisocial attitudes (ICO) ($F(1,70) = 15.6, p < .002$) and stress ($F(2,69) = 13.2, p < .001$) were influential in predicting ineffective discipline. Finally, from the community factors domain, child delinquent associations ($F(1,70) = 30.8, p < .001$) and the overall helpfulness of the maternal social network ($F(2,69) = 18.3, p < .001$) were important predictors.

When the four predictors were allowed to compete freely, a composite regression analysis revealed that two measures accounted for 36% of the total variance (see Table 34). Child delinquent associations ($F(1,70) = 30.8, p < .001$) was the first variable entered into the equation, accounting for 31% of the variance. Parental antisocial attitudes (ICO) ($F(2,69) = 19.1, p < .001$) contributed an additional 5%.

Table 34

Summary Table of Regression Analyses for Discipline

Predictor	R	R ²
Parent Characteristics		
-Identification with Criminal Others	.43	.18
-Stress	.53	.28
Community Factors		
-Child Delinquent Associations	.55	.31
-Overall Helpfulness of Maternal Social Network	.59	.35
Composite Regression Analysis		
Community Factors		
-Child Delinquent Associations	.55	.31
Parent Characteristics		
-Identification with Criminal Others	.60	.36

General Functioning (GF). Two groups were established from the median score (Mdn = 24) obtained on the general functioning scale. Group one ($N = 38$) was designated as nonproblematic (low scores received on the GF scale). Conversely, group two ($N = 34$) was designated as problematic. Independent t-tests were computed with measures from the parent characteristics and community factors domains (see Table 35).

Statistically significant differences were found between groups on the majority of measures from the parent characteristics domain. The most significant difference was found for parental antisocial attitudes, where ICO exceeded a significance level of .001. Child delinquent associations and the overall support received from the maternal social network were significant from the community factors domain.

Correlations for general functioning with measures from the parent characteristics and community factors domains are presented in Table 36. As with the monitoring and discipline constructs, general functioning correlated significantly with all measures of parent characteristics. The highest correlation from this domain was found for the ICO scale ($r = .40$). From

Table 35

Mean Score Differences on Measures from the Parent
Characteristics and Community Factors Domains for
General Functioning

	General Functioning		
	Low	High	<u>t</u>
Parent Characteristics			
(1) Antisocial Attitudes			
-Identification with Criminal Others	11.8	14.6	-3.54***
-Tolerance of Law Violations	21.6	25.1	-2.21*
(2) Antisocial Personality			
-Socialization	35.2	32.6	1.38
-Psychopathy	4.3	6.4	-2.42*
(3) Stress	7.6	9.4	-1.65**
Community Factors			
(1) Police Reports	170.1	152.1	.67
(2) Child Delinquent Associations	29.2	25.7	2.14*
(3) Parent Social Network			
-Overall Helpfulness	5.1	5.6	-1.61
-Overall Support	16.7	12.6	2.09*
(4) Satisfaction with the Neighbourhood	4.3	4.6	-.54

*p < .05, **p < .01, ***p < .001

Table 36

Pearson Correlations for General Functioning with
Measures from the Parent Characteristics and Community
Factors Domains

Variable	r
Parent Characteristics	
(1) Antisocial Attitudes	
-Tolerance of Law Violations	.27*
-Identification with Criminal Others	.40***
(2) Antisocial Personality	
-Socialization Scale	-.30**
-Psychopathy Scale	.38***
(3) Stress	.36***
Community Factors	
(1) Police Reports	ns
(2) Parental Social Network	
-Overall Helpfulness	-.16
-Overall Support	-.28*
(3) Child Delinquent Associations	-.34***
(4) Satisfaction with the Neighbourhood	ns

*p < .05, **p < .01, ***p < .001, ns = not significant.

the community factors domain, child delinquent associations ($r = -.34$) and limited support from the maternal social network ($r = -.24$) were also significant.

Regression analyses were conducted using the same procedures as implemented for the monitoring and discipline constructs. The separate regression analyses revealed four significant predictors of general functioning (see Table 37). From the parent characteristics domain, antisocial attitudes (ICO) ($F(1,70) = 13.7, p < .004$) and stress ($F(2,69) = 10.8, p < .001$) were predictors of general functioning. From the community factors domain, child delinquent associations ($F(1,70) = 8.3, p < .005$) and overall support ($F(2,69) = 6.4, p < .003$) were important predictors.

A composite regression analysis revealed that three of the four predictors accounted for 28% of the total variance (see Table 37). Parental antisocial attitudes ($F(1,70) = 13.7, p < .001$) was the first variable entered into the equation, accounting for 16% of the variance. Maternal stress ($F(2,69) = 10.8, p < .001$) contributed 8%, and overall support from the

Table 37

Summary Table of Regression Analyses for General Functioning

Predictors	R	R ²
Parent Characteristics		
-Identification with Criminal Others	.40	.16
-Maternal Stress	.49	.24
Community Factors		
-Child Delinquent Associations	.33	.11
-Overall Support of Maternal Social Network	.40	.16
Composite Regression Analysis		
Parent Characteristics		
-Identification with Criminal Others	.40	.16
-Maternal Stress	.49	.24
-Overall Support of Maternal Social Network	.53	.28

maternal social network ($F(1,68) = 8.6, p < .001$) added
4%.

Analysis of the Path Models

Path analytic techniques were used to estimate the relative contribution of each predictor to variations in the criterion measures. According to Pedhazur (1982), "path analysis is a method for studying the direct and indirect effects of variables hypothesized as causes of variables treated as effects. Path analysis is not a method for discovering causes, but a method applied to a causal model formulated by the researcher on the basis of knowledge and theoretical considerations" (p. 580).

Path analysis requires more than one regression analysis on each dependent variable. This method makes it possible to test whether the pattern of intercorrelations among variables is consistent with a specified causal model.

The current sample size was not large enough to permit the entry of all independent variables identified in the theoretical model. Therefore, predictor variables identified in the multiple regression analyses were selected to indicate the main pathways of causal influence to be tested.

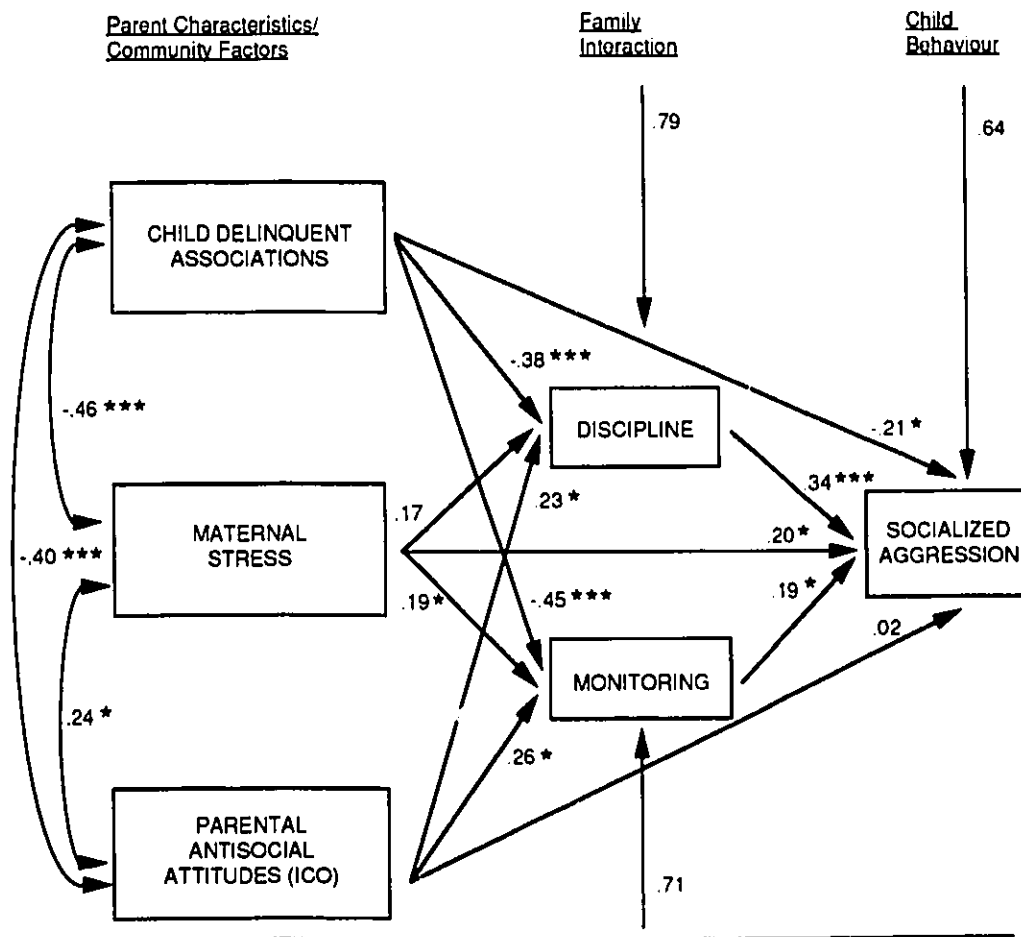
The proposed models for SA and CD are fully

recursive (i.e., one in which all the variables are interconnected). This implies that all relevant variables are included in the models that are being tested. In other words, variables not included and subsumed under residuals are assumed to be uncorrelated with the relevant variables. A further assumption underlying the application of path analysis is that variables in the model are linear, additive, and causal. Reciprocal causation between variables cannot be examined. It is for these reasons, and the limitations posed by the sample size, that the results must be treated with caution. As noted by Pedhazzer (1982), the credibility of a path model must be based on both statistical criteria and the theoretical understanding of social behaviour. The theoretical rationale for the proposed models was outlined in the introduction, and this was used to guide the development of the models specified below.

Socialized Aggression. Five variables were included in the causal model representing some of the hypothesized causes of socialized aggressive behaviour. The results of the LISREL VI (Joreskog & Sorbom, 1986) test of that model are shown in Figure 2. Child

Figure 2

Path Diagram Indicating the Direct Effect of Predictor Variables on Socialized Aggression



* $p < .05$, ** $p < .01$, *** $p < .001$.

delinquent associations, maternal stress, and parental antisocial attitudes were posited as predetermined (exogenous) variables and were therefore placed to the left of the diagram. The curved double-headed arrows indicate the correlations between the exogenous variables.

The values associated with the unidirectional arrows are path coefficients, which represent the direct effects of variables on the dependent measures that are not mediated by other variables. Path coefficients are estimated by presuming that a dependent variable is linearly related to one or more independent variables. To obtain an estimate of the coefficients, the dependent variables are regressed on the independent variables. Beta weights are used to indicate the effects between endogenous (dependent) variables, while gamma weights are reported to illustrate the effects between endogenous and exogenous (independent) variables. The path coefficients represent the expected change in endogenous variables for a one-unit increase in the exogenous variables. For example, the path coefficient of .34 for SA and discipline indicates that a one-unit increase in

discipline will lead to approximately a one-third increase in SA.

The indirect effect is the part of the effect of the exogenous (independent) variable that is mediated, or transmitted, by another variable or variables. Indirect effects are computed by multiplying the path values of compound paths connecting two variables via an intervening variable. For example, the indirect effect of maternal stress on socialized aggression via discipline is calculated by multiplying the path coefficient from maternal stress to discipline (.17) by the path coefficient from discipline to socialized aggression (.34). The total effect of an independent variable on a dependent variable consists of the sum of its direct and indirect effect(s).

The three dependent variables in the diagram have arrows from uncorrelated residual factors (represented by the vertical lines) to indicate that there are causes of monitoring, discipline, and socialized aggressive behaviour not included in the model. The path coefficient from the residual variable to the dependent variable is the square root of the coefficient of nondetermination. By squaring the path

coefficients and subtracting from one, the amount of variance in the dependent variable that is explained by the hypothesized residual path can be calculated.

In the current model, child delinquent associations, stress, and parental antisocial attitudes were posited to have a direct effect on SA. It was also hypothesized that these variables would impact indirectly on SA via monitoring and discipline.

As can be seen in Figure 2, the predictors identified in the path model accounted for a relatively large proportion of the total variance for each criterion measure. The path coefficients to the residual variables were .79, .71, and .64, respectively, for discipline, monitoring, and socialized aggression. Therefore, the percentage of the total variance explained by the exogenous variables specified within the path model was 38% for discipline, 50% for monitoring, and 60% for socialized aggression.

The total effects (direct plus indirect) on SA for each of the variables are presented in Table 38. With the exception of parental antisocial attitudes, all of the variables contributed important information to the understanding of child misbehaviour. Child delinquent

Table 38

Total Effect of Predictor Variables on Socialized
Aggression Based on Path Analysis

Variables	Socialized Aggression	Monitoring	Discipline
Child Delinquent Associations	-.42	-.45	-.38
Maternal Stress	.29	.19	.17
Identification with Criminal Others	.15	.26	.23
Discipline	.34		
Monitoring	.19		

Note: Total effects that are ≥ 0.19 are significant at $p < .05$

associations and discipline had the largest overall impact on SA.

The total effects of the exogenous variables (i.e., maternal stress, child delinquent associations, and parental antisocial attitudes) on parenting behaviour revealed that child delinquent associations and parental antisocial attitudes are closely related to monitoring and discipline. Maternal stress had a weak effect on these measures.

Results of the path analysis also suggested that child delinquent associations and maternal stress had a direct causal impact on SA. Parental antisocial attitudes (ICO) did not have a direct influence on socialized aggressive behaviour. However, ICO and child delinquent associations did impact directly on measures of parenting behaviour, while maternal stress had only a moderate effect.

The direct effect of each predictor was considerably larger than the indirect effect, suggesting that relatively little of the total effect of each predictor on SA was mediated or transmitted via monitoring or discipline. The indirect effect of child delinquent associations, maternal stress, and parental

antisocial attitudes on SA via monitoring were $-.13$, $.06$, and $.08$. The effects of these same variables on SA via discipline were $-.09$, $.04$, and $.05$.

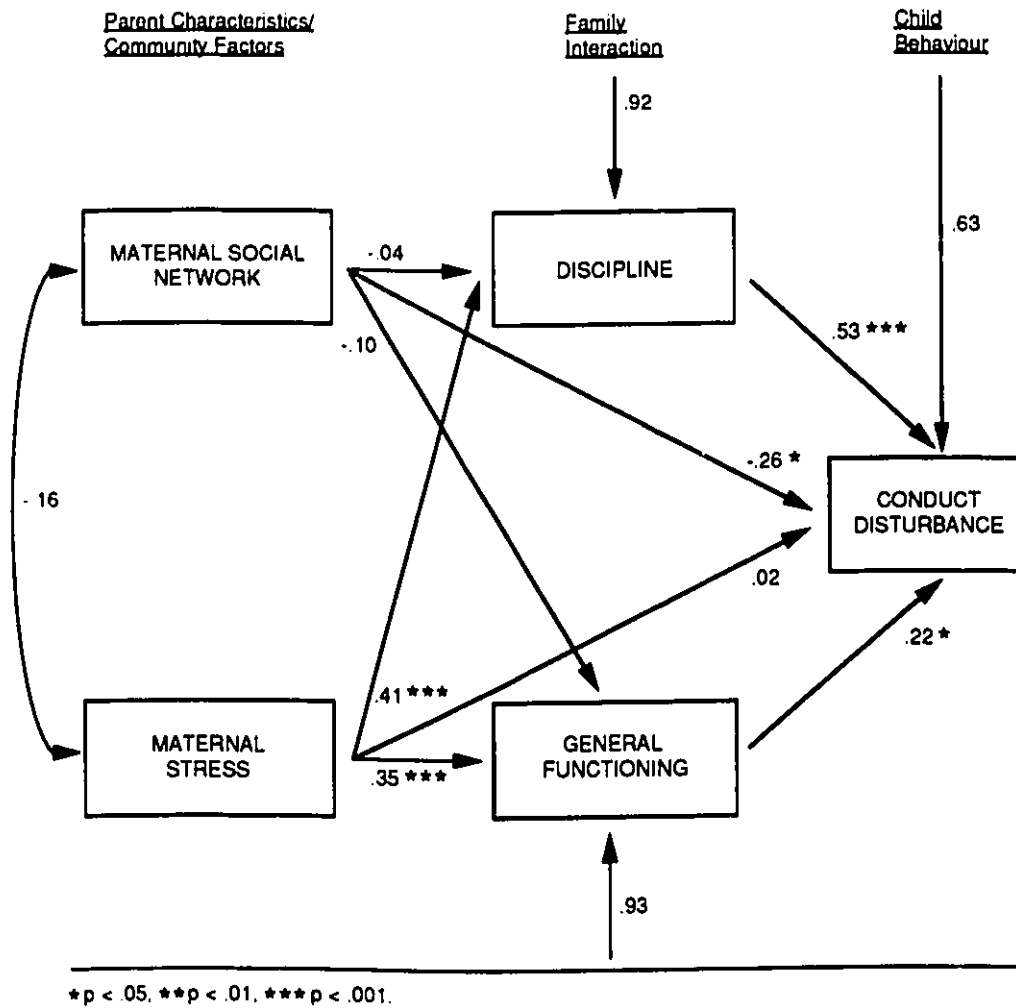
Conduct Disturbance. Five variables were included in the causal model representing some of the hypothesized causes of conduct disturbance. The results of the LISREL VI (Joreskog & Sorbom, 1986) test of that model are shown in Figure 3. The helpfulness of the maternal social network and maternal stress were posited as predetermined (exogenous) variables and were therefore placed to the left of the diagram. The curved double-headed arrow indicates that the causal relationship between these two variables was not examined in the model. A Pearson correlation of $-.16$ suggests that the two variables were not significantly correlated.

In the current model, helpfulness of the social network and maternal stress were thought to have a direct effect on CD. It was also hypothesized that these variables would impact indirectly on CD via discipline and general family functioning.

As can be seen in Figure 3, predictors within the

Figure 3

Path Diagram Indicating the Direct Effect of Predictor Variables on Conduct Disturbance



current model accounted for a relatively large proportion of the variance in conduct disturbance. The model was less adequate in identifying factors that influence parent-child interaction. The path coefficients to the residual variables were .92, .93, and .63, respectively, for discipline, general functioning, and conduct disturbance. The percentage of the total variance explained by the exogenous variables specified within the path model was 16% for discipline, 14% for general functioning, and 60% for conduct disturbance.

The total effects on CD of each of the variables are presented in Table 39. Discipline and maternal stress had the largest overall impact on conduct disturbance, while maternal stress also emerged as an important determinant of discipline and general functioning.

The direct effects of each of the predictors are presented in Figure 3. Helpfulness of the maternal social network had a direct impact on CD. Maternal stress did not show a direct influence on conduct disturbance, although it did impact directly on measures of family interaction.

Table 39

Total Effect of Predictor Variables on Conduct
Disturbance Based on Path Analysis

Variable	Conduct Disturbance	Discipline	General Functioning
Helpfulness of the Maternal Social Network	-.26	-.04	-.10
Maternal Stress	.31	.41	.35
Discipline	.53		
General Functioning	.22		

Note: Total effects that are ≥ 0.19 are significant at $p < .05$.

The indirect effects of the maternal social network and stress on child conduct disturbance via discipline were $-.02$ and $.22$ respectively. The effects of these same variables on CD via general functioning were $-.02$ and $.08$. The significant indirect effect of maternal stress on CD via discipline suggests that the effects of stress are mediated by how the parent behaves toward the child.

Protective Factors

A number of analyses were conducted to examine the importance of protective factors in predicting child behaviour outcome (i.e., t-tests, Pearson correlation coefficients, and multiple regressions). Regression analyses were also performed to evaluate the relationship between protective factors and the presence of child problematic behaviour, while controlling for level of risk. Finally, these analyses were repeated with the Protective Factor Scale (PFS) to assess the additive effects of protective measures in ameliorating risk for child problematic behaviour.

Socialized Aggression (SA). To explore between - group differences, high SA ($N = 30$) and low SA ($N = 42$) groups were established from the median score received on the SA measure. Differences between the two groups were then determined for each of the protective factors (see Table 40). As indicated previously, dichotomous ratings have been provided for each of the protective factors, with 0 indicating the absence of the factor and 1 indicating the presence of the factor (see Appendix K).

Table 40

Mean Score Differences on Protective Factors for Low
and High Socialized Aggressive Children

Protective Factor	Low SA	High SA	<u>t</u>
Positive temperament	.71	.23	4.12***
Getting along well with others	.45	.07	4.26***
Good participation	.26	.10	1.72
Presence of a confidante	.81	.40	3.88***
Good friendships	.60	.43	1.43
Good academic performance	.38	.07	3.54***

*p < .05, **p < .01, ***p < .001

Statistically significant differences were found, in the expected direction, for the majority of the protective factors. The most important factors in distinguishing between the two groups were: 1) getting along well with others, 2) the presence of a confidante, 3) positive temperament, and 4) good academic performance. The presence of good friendships and participation in activities failed to discriminate between the high and low SA groups.

Pearson correlation coefficients were calculated to explore the magnitude of the relationships between SA and the protective measures (see Table 41). Once again, the majority of measures significantly correlated with SA in the expected direction. Only two factors, the presence of good friendships and participation in activities, were unrelated to the SA measure.

A stepwise regression analysis assessed the relative importance of the protective factors in predicting SA (see Table 42). When each of the factors was allowed to compete freely, two measures accounted for 28% of the total variance. The presence of a

Table 41

Pearson Correlations for Socialized Aggression with the
Protective Factors

Protective Factor	<u>r</u>
Positive temperament	-.39***
Getting along well with others	-.35**
Good participation	-.15
Presence of a confidante	-.42***
Good friendships	-.18
Good academic performance	-.31**

*p < .05, **p < .01, ***p < .001

Table 42

Summary Table of Regression Analyses for Socialized Aggression

<u>Predictors</u>	<u>Socialized Aggression</u>	
Protective Factor	R	R ²
Presence of a confidante	.42	.17
Positive temperament	.53	.28
Protective and Risk Factors	R	R ²
Discipline	.68	.46
Child delinquent associations	.74	.54
Maternal stress	.76	.58

confidante ($F(1,70) = 14.1, p < .001$) was the first factor entered into the equation, accounting for 17% of the variance. Positive temperament ($F(2,69) = 12.9, p < .001$) contributed an additional 11%.

A hierarchical regression analysis with a forced method of entry at each block was performed (Cohen & Cohen, 1983) using the significant protective and risk factors (discipline, child delinquent associations, and maternal stress) identified previously in the composite regression analysis. The hierarchy reflected the proximity of risk factors to the theoretical model as well as the status of the independent variables (risk factor or protective factor). Risk variables (discipline, maternal stress, and child delinquent associations) were entered first, followed by the protective factors (presence of a confidante and positive temperament).

As indicated in Table 42, only the risk factors emerged as important. Unexpectedly, the protective factors did not contribute new information to the prediction of SA. These results were replicated when all factors were allowed to compete freely in a stepwise regression analysis.

Conduct Disturbance (CD). High CD ($N = 34$) and low CD groups ($N = 38$) were established from the median score ($Mdn = 14$) on the CD measure. Independent t -tests were computed between groups for each of the protective factors. As can be seen in Table 43, statistically significant differences were found between groups for three of the protective factors: positive temperament, getting along well with others, and good academic performance.

Pearson correlation coefficients for CD with the protective measures are presented in Table 44. Four of the six measures correlated significantly with CD in the expected direction.

A stepwise regression analysis was then performed to assess the relative importance of the protective factors in predicting CD (see Table 45). When each of the factors were allowed to compete freely, two measures accounted for 46% of the total variance. Positive temperament ($F(1,70) = 16.6, p < .001$) was the first factor entered into the equation, accounting for 37% of the variance. Good academic performance ($F(2,69) = 28.2, p < .001$) contributed an additional 9%.

A hierarchal regression analysis with a forced

Table 43

Mean Score Differences on Protective Factors for Low
and High Conduct Disturbance Children

Protective Factor	Low CD	High CD	<u>t</u>
Positive temperament	.81	.23	6.00***
Getting along well with others	.49	.09	4.11***
Good participation	.21	.17	0.47
Presence of a confidante	.73	.54	1.66
Good friendships	.51	.49	0.23
Good academic performance	.41	.09	3.32***

*p<.05, **p<.01, ***p<.001

Table 44

Pearson Correlations for Conduct Disturbance with the
Protective Factors

Protective Factor	<u>r</u>
Good temperament	-.61***
Getting along well with others	-.44***
Good participation	-.16
Presence of a confidante	-.24*
Good friendships	-.02
Good academic performance	-.40***

*p < .05, **p < .01, ***p < .001

Table 45

Summary Table of Regression Analyses for Conduct Disturbance

<u>Predictors</u>	<u>Socialized Aggression</u>	
Protective Factors	R	R ²
Positive temperament	.61	.37
Good academic performance	.68	.46
Protective and Risk Factors	R	R ²
Discipline	.70	.49
Positive temperament	.77	.59
Helpfulness of social network	.80	.65

method of entry at each block was performed (Cohen & Cohen, 1983) using the significant protective and risk factors (discipline and overall helpfulness of the maternal social network) previously identified in the composite regression analysis. The hierarchy reflected the proximity of risk factors to the theoretical model as well as the status of the independent variables (risk factor or protective factor). Risk variables (discipline and helpfulness of the maternal social network) were entered first and followed by the protective factors (positive temperament and good academic performance). Results revealed that both risk factors, along with positive temperament, emerged as important, accounting for 65% of the total variance.

A final analysis was done to allow each of the risk and protective factors to compete freely in a stepwise regression analysis. As can be seen in Table 45, discipline ($F(1,70) = 68.1, p < .001$) was the first variable entered into the equation, accounting for 49% of the variance. Positive temperament ($F(2,69) = 50.0, p < .001$) was the second variable entered and contributed 10%, while helpfulness of the maternal social network ($F(3,68) = 41.2, p < .001$) added 6%.

Protective Factor Scale (PFS). Analyses were repeated, using the PFS to assess the additive effects of child attributes in predicting child outcome. The scale includes four measures: child temperament, getting along well with others, presence of a confidante, and good academic performance.

Once again, children were subdivided into high and low groups based on the median scores received on the SA and CD measures. The difference between the means on the PFS was substantial ($p < .001$) for both outcome measures. That is, high SA children tended to score lower on the protective factors scale ($M = .80$, $SD = .66$ versus $M = 2.36$, $SD = 1.20$; $t(70) = 7.09$, $p < .001$), as did high CD children ($M = .94$, $SD = .84$ versus $M = 2.43$, $SD = 1.17$; $t(1,70) = 6.24$, $p < .001$).

Pearson correlation coefficients were calculated to explore the magnitude of the relationship between the PFS and criterion measures. As expected, the scale was significantly correlated with both SA ($r = -.55$, $p < .001$) and CD ($r = -.63$, $p < .001$).

Two multiple regression analyses were then computed with the PFS and predictors of risk for child problematic behaviour. In the first analysis,

predictors of SA (discipline child delinquent associations, and maternal stress) were allowed to compete freely in a stepwise regression analysis with the Protective Factor Scale. Once again, only the risk factors emerged as predictors of SA, accounting for 58% of the total variance. The PFS did not contribute any additional information to the understanding of socialized aggression.

In the second analysis, risk factors identified for CD (discipline and helpfulness of the maternal social network) were allowed to compete freely with the PFS. All measures emerged as predictors of CD, accounting for 60% of the total variance (see Table 46). Discipline ($F(1,70) = 63.7, p < .001$) was the first variable entered into the equation accounting for 48% of the total variance. Helpfulness of the maternal social network ($F(2,69) = 44.2, p < .001$) was the second variable entered, contributing an additional 9%. Finally, the Protective Factor Scale ($F(3,68) = 32.5, p < .001$) added 3% to the total variance.

Table 46

Summary Table of Regression Analyses for the Protective
Factor Scale and Predictors of Risk for Child Conduct
Disturbance

Predictors	R	R ²
Discipline	.70	.48
Helpfulness of Maternal Social Network	.75	.57
Protective Factor Scale	.77	.60

Interaction of Risk and Protective Factors

Exploratory analyses were conducted to assess the possible interaction of risk and protective factors in the assessment of child behavioural outcome. First, a Risk Factor Scale (RFS) was constructed with each of the measures found to be correlated with SA and CD (i.e., discipline, monitoring, general functioning, maternal stress, parental antisocial attitudes, helpfulness of the maternal social network, and child delinquent associations). A dichotomous rating of 0 (nonproblematic) and 1 (problematic) was provided, using the median scores received on each of these measures as the cut-off point. On the resulting 7-item RFS scale, the scores ranged from 0 to 7, with a mean of 3.8 ($SD = 2.0$). The Pearson correlation for the scale with SA was .64 ($p < .001$) and for CD, the correlation was .61 ($p < .001$).

As a second step, groups were constructed based on the median scores received on both the PFS ($Mdn = 1.5$) and the RFS ($Mdn = 4$). The Pearson correlation for the PFS with the RFS was .69 ($p < .001$). A median split of SA produced 30 children scoring above the median. Table 47 shows the percentage distribution of high SA

Table 47

Percentage Distribution of High Socialized Aggression
Children as Classified by the Risk and Protective
Factor Scales (N = 72)

		Risk Factor Scale		
		LOW	HIGH	
Protective Factor Scale		-----+	-----+	
	LOW	44.4 (9)	81.5 (27)	36
	HIGH	6.3 (32)	50.0 (4)	36
		+-----+	+-----+	72
		41	31	

children as a function of the risk and protective factors scales. Of particular interest is the finding that 81.5% of the children scoring high on the RFS and low on the PFS received high scores on the SA subscale whereas, only 6.3% of children scoring low on the RFS and high on the PFS were high on the SA subscale ($x^2 = 15.58$, df = 1, $p < .001$).

A closer examination of the table revealed that the PFS and RFS yielded similar findings for groups scoring consistently high or low on the two scales (i.e., 44.4% versus 50.0%). To test if there was an interaction effect between the two scales an analysis of variance was undertaken. No interaction effects were found.

A predictive accuracy statistic, Relative Improvement Over Chance (RIOC) was calculated. RIOC takes into account selection ratios and base rates (Loeber & Dishion, 1983). For SA, the RIOC was 37.5% with 91.7% of high SA children being identified.

Similar results were noted for high conduct disturbance children. As shown in Table 48, 88.9% of children scoring high on the RFS and low on the PFS received high scores on the CD subscale ($x^2 = 12.87$, df

Table 48

Percentage Distribution of High Conduct Disturbance
Children as Classified by the Risk and Protective
Factor Scales (N = 72)

		Risk Factor Scale		
		LOW	HIGH	
Protective Factor Scale		+-----+-----+-----+		
	LOW	44.4 (9)	88.9 (27)	36
HIGH		+-----+-----+-----+		
		15.6 (32)	50.0 (4)	36
		+-----+-----+-----+		
		41	31	72

= 1, $p < .001$). An analysis of variance failed to reveal any interactive effect between the Risk and Protective Factor Scales. The RIOC was 61.54% with 92.3% of high CD children identified.

In the final set of analyses, a predictor scale was constructed that combined both the risk and the protective factors. This scale was intended to measure generalized risk for child disorder. The protective factors were scored in the inverse direction to maintain consistency with risk. On the resulting 11-item scale, the scores ranged from 0 to 10 with a mean of 5.6 ($SD = 2.7$). The Pearson correlation for the General Risk Scale with SA was .67 ($p < .001$), and for CD the correlation was .65 ($p < .001$). Using the median score for the General Risk Scale ($Mdn = 6$), a prediction table for high and low SA and CD children was constructed. These prediction tables are presented in Tables 49 and 50.

As can be seen, 88% of the children who received low scores on the General Risk Scale were in the low SA group, while 81% of the children who received high scores on this scale were high SA children ($X^2 = 34.02$, $df = 1$, $p < .001$). Similiar results were found

Table 49

Prediction of Socialized Aggression Using the General Risk Scale

SOCIALIZED AGGRESSION

GENERAL RISK SCALE	Groups	Low		High		41
		-----+		-----+		
	Low		88%		12%	
			(36)		(5)	
	High	+-----+		+-----+		31
			19%		81%	
			(6)		(25)	
		+-----+		+-----+		
			42		30	72

Table 50

Prediction of Conduct Disturbance Using the General Risk Scale

CONDUCT DISTURBANCE

GENERAL RISK SCALE	Groups	Low	High	
	-----+	-----+	-----+	
	Low	81% (33)	20% (8)	41
	High	13% (4)	87% (27)	31
	+-----+	+-----+	+-----+	
		37	35	72

for the CD subscale. Approximately 81% of low CD children received low scores on the General Risk Scale, while 87% of the sample rated as high CD also received high scores on the risk scale ($X^2 = 32.28$, df = 1, p < .001).

Chapter IV

Discussion

Most investigators accept that the determination of risk status for child outcome is too complex to be explained by any single variable. Despite this recognition, the use of multivariate models in the prediction of child problematic behaviour has been received only recent attention. In the current study, an extensive review of the literature was undertaken to identify risk factors that have been found to correlate with child behavioural outcome. These factors were then grouped into four major domains and a multivariate model was proposed to examine the relative and combined effects of important predictors.

It was assumed that all factors specified within the model would be significantly related to child behavioural outcome. Those factors most immediate to the child (e.g., parenting behaviour and parent-child relations) were posited to have the strongest influence on child problematic behaviour, with more distant variables (e.g., parent characteristics and

community factors) having a weaker effect.

A second multivariate model was proposed to identify determinants of parenting behaviour and family functioning. Once again, factors were identified from the research literature that have been found to influence family interaction. These factors were then grouped into two domains: parent characteristics and community factors. It was anticipated that parenting behaviour and family functioning are determined by multiple factors and that variables from each domain would influence how the parent and child interact.

Protective factors that have been found to ameliorate or buffer the impact of adverse environmental circumstances were also identified. It was expected that knowledge of both risk factors and protective factors would increase our ability to predict child problematic behaviour.

The assumptions were tested with a high-risk community sample. More specifically, the 72 families included in the study resided in rent-subsidized, high-crime neighbourhoods. All of the families were led by single mothers, and the majority depended on social assistance as their primary source of income. Focussing

on this particular sample permitted the investigators to identify those factors that differentiate between high-and-low problem groups, while controlling for adverse environmental conditions.

An additional goal of the current study, was to develop a comprehensive assessment battery. This battery could be used by future investigators to more readily identify measures that are both expedient and sensitive in predicting outcome. Following the procedures proposed by Chronbach and Meehl (1955) and Patterson (1986), each of the constructs were assessed using multiple measures and/or modes of assessment (i.e., self-report, collateral reports, and observational techniques).

As a first step, a number of measures were listed to evaluate each construct. Those measures that best described the specific construct were then chosen. For example, it was felt that the constructs of discipline, affect, and conflict would be most accurately represented by estimates of the incidence of specific action-reaction patterns between the parent and child. Observational measures were used to assess these constructs.

In contrast, self-report questionnaires were administered to assess those factors that could not be evaluated at a micro level (e.g., monitoring and protective factors). For these constructs, a similar set of questions was administered to both the parent and child and combined with interviewer impression ratings. In those cases where only one agent was used to provide information about a construct (e.g., parent personality and antisocial attitudes), an attempt was made to administer several questionnaires.

It should be noted that the inclusion of multiple measures and modes of assessment (self-report, collateral reports and observational techniques) added to the financial and human resources necessary to conduct the study. This in turn necessitated a restricted sample size. However, for a number of reasons this limitation does not, vitiate the testing of the proposed assumptions. More specifically, large variances were obtained for the majority of variables, indicating that the sample was well distributed across the range of measures. Second, and most important, expected associations between variables and child problematic behaviour were found.

The inclusion of many variables in the study and the fairly large number of statistical analyses may also limit the generalizability of the findings as the risk of making Type I errors was elevated. In recognition of this limitation, a number of stringent criteria guided the selection of variables and the analyses: (a) the independent variables were carefully chosen from the literature, (b) only significant results at the .05 level are reported even though, in many instances, the results were in the predicted direction, and (c) whenever comparisons were possible, the results of the present study were cross-validated with empirical data provided from previous research.

To facilitate the discussion of the major findings, this chapter has been subdivided into four sections: (1) risk factors of child problematic behaviour (2) determinants of parent-child interaction, (3) protective factors, and (4) summary and conclusions.

Risk Factors

The results of the current study supported the assumption that risk factors identified within each of the domains are important in increasing our ability to

predict child behavioural outcome. For socialized aggression (SA), three variables (discipline, maternal stress, and child delinquent associations) accounted for 58% of the total variance in the composite regression analyses. Fifty-eight percent of the variance for conduct disturbance (CD) was explained by the discipline and social network measure. Findings will be discussed separately for each of the domains.

Child Problematic Behaviour. As indicated previously, subscales of the Revised Behaviour Problem Checklist were selected as the criterion measures. The Checklist was chosen over other well-established questionnaires (e.g., Child Behaviour Checklist, Achenbock & Edelbrock, 1979) because of the strong relationships found by investigators between the SA and CD subscales and measures of official delinquency and aggressive behaviour (Quay & Peterson, 1987; Hanson et al., 1984). Though these subscales have been well-validated, the exclusive reliance on one source for outcome information has frequently been challenged. For example, several authors report little convergence between parent ratings and reports from the child,

teachers, and systematic observation (c.f. Patterson, 1982). In the current study, both the SA and CD subscales were significantly intercorrelated with the Home Disobedience Scale and official reports of child delinquency. Moreover, the SA subscale was related to observational measures of child aversive behaviour. These findings provide evidence that the subscales are sensitive to child problematic behaviour and increase our confidence in their use as the sole outcome criteria.

The use of two criterion measures of child problematic behaviour made it possible to identify factors that were more sensitive to socialized aggression as opposed to conduct disturbance. As indicated previously, socialized-aggressive disorder is characterized by the child's loyalty to delinquent peers and participation in criminal activities. In contrast, conduct disorder describes more overt behaviour problems such as aggression, attention-seeking, and defiance. Results revealed that, in addition to the common predictors (discipline, maternal stress, and child delinquent associations), SA and CD were both influenced by different risk factors. The

variables that emerged from the regression analyses as important for SA were monitoring and parental antisocial attitudes. For CD, general family functioning and the helpfulness of the maternal social network were influential. These results are important in increasing our understanding of the processes and mechanisms involved in the expression and development of child problematic behaviour. They will be addressed in more detail throughout the discussion.

Family Interaction. Most investigators accept that the family plays the most immediate and influential role in the child's social development (Maccoby & Martin, 1983). Consistent with this view, it was anticipated that measures of family interaction would have the largest impact on child behaviour. As expected, discipline emerged as the most powerful predictor of socialized aggression and conduct disturbance. This result was replicated across the various analyses. First, ineffective discipline served to discriminate between problematic and nonproblematic children. This measure also emerged as the strongest predictor in the composite regression analyses,

accounting for between 46% and 49% of the variance for SA and CD, respectively. Finally, results of the path analysis revealed that discipline had the strongest direct impact on child problematic behaviour.

Support for these findings is well documented in the literature. For example, Snyder and Patterson (1987) conducted an extensive review of both cross-sectional and longitudinal studies on the impact of discipline on child antisocial behaviour. They found that discipline consistently emerged as an important predictor of child behavioural outcome, accounting for up to 40% of the variance. There is also evidence from the treatment literature that intervention strategies emphasizing behavioural skill training in such areas as discipline are effective in decreasing official delinquency and antisocial behaviours in the home (Gordon & Arbuthnot, 1987).

In addition to discipline, measures of monitoring and general family functioning were significantly correlated with both SA and CD. These results suggest that inept monitoring and poor family functioning contribute to socialized aggression and conduct disturbance. Results of the regression and path

analyses revealed that monitoring was more sensitive in predicting socialized aggression, while general family functioning was more closely related to conduct disturbance.

The influence of age on both monitoring and SA provides an explanation for these findings. More specifically, Synder and Patterson (1987) found monitoring to be a more powerful predictor in studies that used delinquent behaviour, as opposed to such conduct problems as aggression, as the criterion measure. They attribute this link to the child's age and developmental stage within the family. That is, children are typically given more freedom from the parental home as they enter and proceed through adolescence (Synder, Dishion, & Patterson, 1986). In turn, parents must become increasingly vigilant in their efforts to monitor the child's activities and subsequently minimize the child's contact with circumstances that might promote delinquent behaviour (Patterson & Stouthamer-Loeber, 1984; Snyder, Dishion, & Patterson, 1986).

These assumptions were supported in the current results: a notable increase in the mean level of

unsupervised time was apparent across the age groupings. Rates of socialized aggression, delinquent associations, and ineffective monitoring were also showed higher among older children. As the number of unsupervised hours and antisocial activities increased across the different age groups, parent's monitoring of their children's behaviour was less adequate. This finding may be of particular importance for children residing in high-risk environments. For example, Wilson (1980) and McCord (1979) provide evidence to suggest that children raised in disadvantaged neighbourhoods require more intensive supervision to discourage involvement in delinquent activities.

The stronger correlation between general family functioning and conduct disturbance is consistent with the features characterizing this disorder. That is, CD children tend to display coercive behaviours such as aggression, noncompliance, and irritability. The current results indicate that these same children spend more time in the home and are thus exposed to higher rates of negative interactions with siblings and parents. This would impact on family functioning in several ways. First, negative interchanges tend to

impact on how members within the family perceive each other (Alexander, 1973). Second, Patterson (1986) provides some evidence to suggest that when dysfunctional patterns emerge, they tend to escalate in severity and frequency. This impacts on how family members interact and function with regard to resolving crises, making decisions, and communicating effectively.

It should be noted that, despite high interrater reliability across code categories, the observational measures of affect and conflict did not emerge as important in the regression analyses. This finding was particularly disappointing given the expense involved in implementing these measures. Other investigators such as Hanson and colleagues (1984) have found these measures to be powerful in predicting delinquency among adolescents.

However, these investigators did not include a general measure of family dysfunction or attempt to assess parenting behaviour. The current results suggest that parenting behaviour, particularly discipline, is the most powerful predictor of child behavioural outcome. Discipline correlated significantly with

of the family interaction measures. It may be that discipline shares such substantial variance with the relationship factors that the latter contribute little new information.

Parent Characteristics. All measures from the parent characteristics domain were significantly correlated with SA and CD. The most powerful predictor from this domain to emerge in the regression analyses was maternal stress. Mothers who reported higher levels of stress also reported more severe child problematic behaviours. Results of the path analyses revealed that maternal stress had a direct impact on socialized aggression. In contrast, the effect of stress on conduct disturbance was mediated by how the parent disciplines the child. Mothers who were inept at disciplining their children became even less effective when faced with stressful situations.

The importance of stress as a predictor of child problematic behaviour has been presented for mothers experiencing divorce (Forgatch et al., 1988) and "at-risk families" (Garmezy et al., 1984). Forgatch and colleagues (1988) combined several measures of stress,

including the Family Events Checklist, and found that this construct accounted for 27% of the variance in child antisocial behaviour.

In a review of the research, Kohn (1973) concluded that lower-class individuals have a greater propensity than middle or upper-class individuals to manifest breakdown symptoms when faced with similar crises or stressful events. Kohn attributed this to a lack of community, financial, and inner-coping resources. The strong correlation in the current study between stress and the General Functioning and Socialization scales suggests that mothers who experience child problematic behaviour also lack the problem-solving skills and coping resources necessary to respond effectively to stress. This subsequently impacts on the way these mothers interact with their children.

Alternatively, child misbehaviour has been found to contribute directly to mothers' reports of stress (Patterson, 1982). Forgatch and colleagues (1988) attempted to control for the child's contribution to maternal stress by omitting items on the Family Events Checklist that dealt with the child. They found, that maternal stress still contributed directly to child

behavioural outcome. Belsky (1984) provided some evidence that these two factors have a reciprocal and interactive effect. Unfortunately, the current analyses did not permit an examination of reciprocal influences. More research in this area is required to determine the causal influence of maternal stress and child problematic behaviour.

Measures of parental antisocial attitudes were also significantly correlated with SA and CD, with the Identification with Criminal Others (ICO) scale displaying the strongest relationship. Mothers receiving high scores on the ICO scale tended to be more accepting and tolerant of the deviant behaviours of their children's friends and associates. These same parents also reported more serious difficulties with their children. The ICO scale emerged as particularly important for socialized aggression. This measure did not have a direct effect on SA in the path analysis, although it did have a significant influence on how the parent behaves. These findings suggest that parents who condone delinquent behaviour in others are less likely to recognize and attend to the child's delinquent activities and behaviours.

In our review, no studies were found that directly assessed the relationship between parental antisocial attitudes and generalized behaviour problems. The current results indicate that this variable is particularly sensitive in detecting child socialized aggression, suggesting an area for further study.

Measures of parental personality were also related to child problematic behaviour. Mothers who received high scores on the Socialization scale (i.e., those who were more sensitive to conventional rules and procedures) reported fewer child behaviour problems. Similarly, mothers who received high scores on the Psychopathy Scale (i.e., those displaying more impulsive, amoral, and aggressive behaviour) reported a greater frequency of child problematic behaviours.

The relationship found in this study between parental deviant personality attributes and child antisocial behaviour has also been noted in the literature. Goodstein and Rowley (1961) compared MMPI profiles of parents of children with four different types of problems. The mothers of antisocial children tended to score significantly higher than mothers of children with personality trait, and/or neurotic

problems on the depression, hysteria, and psychopathic deviate scales. Wolking and colleagues (1967) also compared the MMPI profiles of parents of children referred for treatment. Again, mothers of antisocial children scored higher than mothers in the other groups on the hysteria and psychopathic deviate scales.

Patterson (1980b) reported results consistent with these findings. When compared to normal controls, mothers in a clinical sample showed elevations on almost all of the MMPI clinical scales. The current results, as well as previous findings, suggest that parental personality, in particular antisocial personality, warrant further attention.

Community Factors. From the community factors domain, the most important and consistent predictor of child outcome was the measure of child delinquent associations (DAS). The DAS emerged as a powerful predictor in the composite regression analyses for socialized aggression. In addition, this measure had a direct effect on SA in the path analysis.

The strength of this measure in predicting socialized aggressive behaviour was not surprising

given the pivotal role deviant peer influences played in the conceptualization and formalization of the SA subscale (Quay & Peterson, 1983). Items on the SA subscale that tap delinquent associations include: "belongs to a gang," "loyal to delinquent friends," "has bad companions," and "steals in the company of others."

Despite the conceptual overlap between the DAS and the SA subscale, the DAS was still included in the community factor domain. This was done for three reasons. First, the two measures are dependent upon information from different sources (mother and child). Second, unlike the SA subscale, the DAS focusses on the child's exposure to peer and adult criminal behaviour rather than on the child's actual performance of deviant behaviour. Third, peer relations have played a prominent role in several theoretical models of delinquency (e.g., differential association theory, Sutherland & Cressey, 1978; subcultural theories, Elliot et al., 1985). These theories highlight the importance of intimate close associations with criminal others, exposure to criminal models, and access to criminal resources. Finally, empirical research has

supported the importance of this construct in contributing to and maintaining delinquent behaviour (e.g., Snyder et al., 1986).

The Social Network Questionnaire yielded inconsistent findings in relation to the criterion measures. Results suggested that mothers who received instrumental support from a large number of family members and friends also reported fewer problematic behaviours for their children on the SA subscale. Unexpectedly, the qualitative rating of helpfulness was unrelated to socialized aggressive behaviour.

For CD, mothers who gave high ratings to the quality and helpfulness of support also described fewer conduct disturbance problems. The quantity of instrumental support was unrelated to the CD criterion measure. The results of the path analysis revealed that lack of support had a direct effect on CD. This suggests that the quality of support received by the mother impacts directly on the child.

The influence of relatives, neighbours, and friends on the child's development has been given only rudimentary attention in past research/studies. Researchers have tended to focus instead on the impact

of the social network on parental functioning as opposed to child functioning. For example, McFarlane and colleagues (1984) found a significant relationship between social support and parental mental health. Other researchers have addressed the role of social support as a buffer to maternal stress (e.g., Sandler, 1980) and found this construct to be positively related to effective parenting behaviour (e.g., Colletta, 1979; Roberts, 1989).

Cochran and Brassard (1979) conducted an extensive review of the literature on the relationship between parents' personal social networks and children's development. They concluded that the maternal social network directly impacts on children by providing cognitive and social stimulation, direct support, observational models, and opportunities for active participation.

Using the Social Network Questionnaire, Roberts (1989) examined the relationship between social networks, parenting, and child behaviour. His results provided some support for the view that parental social networks have a direct influence on child competence. These findings might account for the relationship found

in this study between low levels of helpfulness in the maternal social network and child problematic behaviour. That is, high CD children may lack adult modelling supportive of nondeviant social relationships and activities.

Unexpectedly, the neighbourhood satisfaction questionnaire and police reports of delinquent activity failed to correlate with either the SA or CD subscales. Upon closer inspection, results revealed that there was little variability among scores for both measures. That is, most parents reported moderate to high levels of dissatisfaction with their neighbourhoods, and the frequency of police reports was similar across communities.

Determinants of Family Interaction

A number of analyses were done to assess the influence of parent characteristics and community factors on parenting behaviour and general functioning within the family. It should be noted that the path analysis did not permit an exploration of reciprocal causation between independent and dependent variables. Most investigators accept that the way a child behaves

has a direct impact on how the parent responds to him/her (Patterson, 1982). As such, the path analytic findings presented in the current study should be treated as preliminary and tentative. This caution notwithstanding, the consistency in the results of other data analyses permits the identification of variables that may prove useful to investigators who wish to explore causal relationships in future research.

Three factors emerged consistently in the univariate and multivariate analyses as predictors of monitoring, discipline, and family functioning. These were child delinquent associations, parental antisocial attitudes, and maternal stress. It is noteworthy that, combined, these factors accounted for a relatively large proportion of the variance in each criterion measure, from 28% for general functioning to 59% for monitoring behaviour.

The most powerful predictor overall was the measure of child delinquent associations. This factor accounted for between 31% and 41% of the variance in two of the three composite regression analyses. Parental antisocial attitudes was the second most

powerful predictor, emerging in all three composite analyses. This factor accounted for 16% of the total variance for the general functioning measure and contributed new information to our understanding of discipline and monitoring. Maternal stress was a less powerful predictor, but it nevertheless emerged as important, particularly in predicting level of family functioning. Other variables were also significant in predicting measures of family interaction. These included the Socialization scale and the quality and quantity of social support received by the mother.

As indicated previously, the Differential Association Scale assesses the child's exposure to criminal peers and adults. In the current study, this measure was an important predictor of both SA and CD in children. Though research has not specifically addressed the relationship between child exposure to criminal peers and adults and parenting behaviour, it is likely that the relationship is interactive in nature.

Patterson (1982) describes parenting behaviours, such as discipline and monitoring, as complex skills requiring parents to accurately label problematic

behaviour and provide consistent and contingent strategies to inhibit this behaviour. Snyder and Patterson (1987) suggest that inept parenting in the home results in child antisocial behaviours, which subsequently reduce the child's opportunities to develop problem-solving and interpersonal skills. The child who engages in high rates of noncompliance, fighting, lying, and stealing will also be at high risk for rejection by prosocial peers and will experience academic problems. At the same time, this child is likely to gravitate toward peers who demonstrate similar behaviours.

In the current study, ineffective monitoring and discipline were strongly associated with child behavioural outcome and delinquent associations. This suggests that problematic children are not provided with effective consequences for misbehaviour, including participation in a delinquent peer group. Parents may not be concerned about the child's choice of peers. Alternatively, parental attempts to control the child's selection of peers may be ineffective because the parent lacks the skills necessary to control misbehaviour.

It is clear that the peer group is important to child psychosocial development as it provides adolescents with a sense of belonging and with behavioural norms (Panella, Cooper, & Henggeler, 1982). Peers become more influential as the child ages. Parents who had difficulty controlling their child's behaviour when he/she was younger are likely to have even greater difficulty as peer influences increase in importance. In fact, confrontations about delinquent peer involvement may serve to escalate coercive interactions and to undermine parenting techniques that were effective when the child was younger (Patterson, 1982). Despite the impact of peers on child development, the effect of this factor on parenting behaviour has received little empirical attention. Given the strength of the current results, additional research in this area is warranted.

The next factor to have a profound impact on measures of family interaction was parental antisocial attitudes. As indicated in the path models presented earlier, parental antisocial attitudes had a direct effect on measures of parenting behaviour and general functioning, but it failed to impact directly on child

problematic behaviour. An explanation for this finding has been provided by Patterson (1982) in his clinical work with parents of children who steal. Patterson suggests that many of these parents are unable to recognize child deviant behaviour and simply fail to acknowledge that the child is behaving inappropriately. From a social learning perspective, it may be anticipated that parents of SA children directly transmit deviant attitudes to their children by modelling deviant behaviour or, more likely, by failing to intervene and restrict the child's activities.

In the current study, parental antisocial attitudes were significantly correlated with parental criminal behaviour. This suggests that mothers who view certain criminal behaviours as tolerable are more likely to engage in delinquent activities. It may be that these same mothers condone or tolerate this behaviour in their children.

The importance of antisocial attitudes in predicting future criminal behaviour has been illustrated with adult male offenders and young offenders (Bonta, 1990; Shields & Ball, 1990). In addition, self-reported criminal behaviour among

university students has been correlated with antisocial attitudes (Grant, 1990). Furthermore, alteration of deviant attitudes through treatment has been found to have a positive impact on recidivism among male offenders (Andrews, 1980).

In the last decade, researchers have begun to evaluate the impact of parental attitudes on child behaviour. For example, several investigators have examined the influence of parental attitudes and tolerance toward drugs on adolescent drug use (e.g., Huba & Bentler, 1980; Jessor & Jessor, 1977). Brook and colleagues (1986) obtained data directly from mothers to determine tolerance for drug use. These investigators found that maternal unconventionality (e.g., tolerance of deviance) was related to higher rates of drug use in adolescent children.

The current results emphasize the importance of addressing parental antisocial attitudes in treatment for antisocial children. Parents who condone delinquent behaviour in others are less likely to recognize and attend to their children's delinquent activities and behaviours. The strength of the current association between parental deviant attitudes and SA

warrants a more detailed examination in future research.

Maternal stress was the final factor identified in the regression analyses as an important predictor of family interaction. Of the factors discussed thus far, maternal stress has received the most attention in research on parenting behaviour. Several investigators have reported data illustrating that stressors increase maternal coerciveness (Patterson, 1983; Whaler & Dumas, 1988). Patterson (1983) suggests that an increase in maternal irritability and coerciveness may lead to disruptions in discipline or to the use of less effective discipline strategies.

Forgatch and colleagues (1988) proposed a mediational model to assess the impact of stress on parenting behaviour and child outcome for a sample of recently divorced mothers. As predicted, reports of maternal stress were higher for mothers undergoing separation than for mothers in intact families. Maternal stress had a significant effect on both child antisocial behaviour and inept discipline. As maternal stress increased, child aggressive behaviour and inept parental discipline practices increased. Furthermore,

the effect of stress on child behaviour was mediated by its effect on discipline. This suggests that discipline practices served to buffer the impact of stress on the child.

To a large extent, these findings were confirmed in the current study. Results of the path model revealed that stress had a direct effect on both child behavioural outcome and parenting behaviour. In addition, discipline served to mediate the effects of stress for children with conduct disturbance. Parents who tended to be ineffective in disciplining their children became even less effective when faced with stressful daily events.

Protective Factors

Before examining the results dealing with protective factors, it should be emphasized that each of the children in this study faced a number of adverse environmental circumstances. All had experienced the loss or separation of a parent, all were exposed to economic disadvantages, and all resided in communities characterized by high rates of unemployment and crime.

Despite these potentially hazardous conditions, a

number of protective factors emerged as important in discriminating between problematic and nonproblematic children. Results suggested that children who were rated as nonproblematic (either low SA or low CD) were more likely to have such attributes as a positive temperament, a confidante, getting along well with others, and good academic performance.

The most important predictor to emerge in both the univariate and multivariate analyses was child temperament. This factor contributed new information to the understanding of both criterion measures (SA and CD) and was a significant predictor of conduct disturbance when risk was controlled. Given the retrospective nature of the child temperament measure, caution must be exercised when attributing importance to this predictor. It may be that mothers who reported current difficulties with their children also tended to perceive their past interactions as less favourable.

Despite these cautionary remarks the importance of child temperament has been well documented in the literature. For example, Werner and Smith (1982) found that high-risk children whose mothers described them as affectionate, cuddly, and easy to deal with during

infancy were less likely than other at-risk children to engage in delinquent behaviours at age 18.

Research conducted by Dunn and Kendrick (1980) provides evidence that child temperament can be used to predict changes not only in the child's behaviour but also in parent-child interaction after the birth of a sibling. Children rated (through interviews and observations) as temperamentally difficult responded to the birth of a sibling more adversely and elicited both criticism and antagonism from their parents. Similarly, Rutter and Quinton (1984) found that temperamentally easy children were less likely to be the target of their parents irritability. Finally, Belsky (1984) summarized a number of studies examining the influence of temperament on parental functioning. He concluded that children's characteristics impact directly on how they are cared for by their parents. Children described as less difficult appear to enhance the quantity and quality of care received from adults.

In addition to positive temperament, social and academic competence was found in this study to exert a protective effect on children. Similarly, Rutter (1979) found that children in discordant homes who had a good

relationship with at least one parent were less likely to evidence conduct disturbance than children lacking such a relationship. In another study, Brown and colleagues (1986) examined the long-term effects on women of losing a parent before the age of 17. They found that lack of surrogate care (i.e., indifference and nonsupportiveness) was highly related to depression in adulthood.

The protective influence of a close intimate relationship extends beyond the family environment to close personal ties with peers and external support from extended family members, teachers, and other adults. For example, Werner and Smith (1982) concluded that the availability of close friends, grandparents, and teachers exerted a protective influence on children from disadvantaged circumstances. Similar results were found in the Ontario Child Health Study. Rae-Grant and colleagues (1989) found that getting along well with others was significantly related to child outcome for 4- to 11-year-olds, while the presence of a confidante emerged as an important protective factor for adolescents (12- to 16-year-olds).

For both age groups in the Ontario Child Health

Study, social and academic competence served as a powerful predictor of child outcome. High intelligence and scholastic attainment has also been found to have a protective effect for psychiatric disorder and generalized conduct problems (Rutter, 1985). Finally, Rutter (1983) examined competence in children exposed to two school settings located in disadvantaged areas. The school with lower delinquency rates showed more effective classroom management techniques (i.e., high structure, emphasis on personal responsibility for actions and activities, and the maintenance of a prosocial atmosphere). Further, teachers and administrators in this school tended to use contingency contracting to nurture the acquisition of academic and social competencies in children.

In his extensive review of the child development literature, Garmezy (1985) concluded that by inculcating positive values, three factors serve to protect children who face adverse circumstances. These are the personality disposition of a child, the existence of a supportive milieu, and the presence an external support system that encourages and reinforces a child's academic and social competence. Rutter

(1985) suggests that resilience to stressors is characterized by a person's cognitive appraisal of life circumstances. To offset chronic stress and adversity, it is necessary for individuals to believe in their ability to deal with, and adapt to change. The protective factors that Rutter believes are necessary to foster these cognitions are similar to those identified by Garmezy (1985) and to those found in the current results (i.e., positive temperament, secure relationships, and experiences of success and achievement).

Two protective factors did not emerge as significant in the current study. These were the presence of good friendships and participation in activities. Although these findings appear to contradict some of the research just reported, several explanations may be posited to account for the discrepancies.

First, there are notable differences in the methods of conceptualization and measurement of outcome criteria employed by investigators across studies. For example, Rae-Grant and colleagues (1989) used the Survey Diagnostic Instrument (SDI), which assesses both

internalizing (neurosis and somatization) and externalizing (conduct disturbance and hyperactivity) disorders. In the present study, the outcome criteria focussed exclusively on externalizing disorders. Though the findings are preliminary, there is some evidence to suggest that measures such as participation in activities and the presence of good friendships may be more sensitive to internalizing disorders. For example, depressed adolescents have been shown to engage in fewer pleasant activities (Lewinsohn, Hoberman, & Rosenbaum, 1988) and to have difficulties with interpersonal interactions (Reinherz, Stewart-Berhauer, Pakiz, Frost, Moeykens, & Holmes, 1988).

Second, measures used to assess these specific protective factors may require modification when the focus is exclusively on child problematic behaviour. Items used to assess the presence of good friendships failed to discriminate between prosocial and antisocial friendships. That is, children were asked only if they had good friends with whom they spend time on a regular basis. Given the strong relationship between delinquent associations and behavioural outcome, it appears that children in this sample who were problematic have as

many friends as nonproblematic children, but these friends tend to be delinquent rather than prosocial.

The measure of participation in activities also failed to discriminate between high and low behaviour-problem children. It should be noted that six of the ten communities in which families were assessed were located within one mile of a recreational facility. Many of the children sampled indicated that they were members of the facility. More intensive questioning about the nature of attendance may have revealed that the children used the facility as a meeting place rather than for participation in structured activity with adult supervision.

It was anticipated that by combining risk factors and protective factors in a multiple regression analysis, we would be able to increase our ability to predict both socialized aggression and conduct disturbance. Inconsistent with expectations, only the risk factors emerged in the regression analyses as important for SA. This finding may have several possible explanations. First, it may be that discipline, which tended to be the most influential contributor to socialized aggression, overshadowed the

influence of all other factors. Second, it is possible that the protective measures used in the current study were not sensitive to SA or that other child attributes played a more prominent role in protecting against this disorder. Farrington and colleagues (1988) presented some tentative conclusions in this regard in their longitudinal study of 63 boys from criminogenic backgrounds. They found evidence that shyness acted as a protective factor for non-aggressive boys. In addition, boys without convicted parents or behaviour-problem siblings at age 10 tended to be leading successful lives at age 32.

Unlike the results for SA, when protective factors were combined with risk factors in the prediction of conduct disturbance, significant predictors were found from both sources which contributed additional information to our understanding of this outcome. Discipline, helpfulness of the maternal social network, and child temperament accounted for 65% of the total variance in conduct disorder. This finding suggests that mothers who rated their children as high on conduct disturbance also provided less effective discipline, felt they received less assistance from

their family and friends, and described their children as temperamentally difficult during the first two years of life.

The construction of a Risk and Protective Factor Scale permitted us to investigate the utility of these factors in identifying children with more severe problematic behaviours. Combining the two scales correctly identified over 80% of high SA and CD children with RIOCs of 37.5% for SA and 61.5% for CD. The simplicity and validity of these two scales has some obvious practical relevance. Relatively few children were falsely identified as nonproblematic. For the case of SA it was only 19% while for CD it was 13 %. Thus, these scales show promise with respect to clinical utility.

Of further interest was the finding that risk and protective factor scales did not show any interaction for either SA or CD. Thus, the current results suggest that protective factors may not differ significantly from risk factors and that protective factors are nothing more than the inverse of risk factors. Although this interpretation is limited by the measures used and the sample specific to this study, it does

raise the need for further clarification of the concepts of risk and protection in the child psychopathology literature. At present, risk and protective factors are viewed as different as apples and oranges and yet there has been little empirical evidence to support this assumption. Future research is necessary to address this issue.

There are two limitations to the current study which must be addressed with regard to the interaction of risk and protective factors. First, investigators such as Achenbach and Edelbrock (1981) used a broader definition of social competence in assessing the impact of child protective factors on child outcome, and they found significant results. Included in their definition were several of the factors that were treated separately in the current study (i.e., getting along well with others, academic achievement, and participation and performance in activities). With the exception of the child temperament measure, each of the factors assessed in the current study were less robust than the measures used to represent important risk variables. Thus, the current results may reflect problems with the measurement instruments and may

therefore suggest a need to use alternative measures in future research.

A second limitation to the present study concerns the nature of the design. A prospective longitudinal design would have permitted a more detailed analysis of the antecedent conditions for child problematic behaviour. The cross-sectional nature of this study did not allow for a separation of the temporal sequence of the presence of risk and protective factors from that of the presence of child problematic behaviour. To more fully explain their influence, risk factors and protective factors must be examined over time so that the temporal links can be identified.

Despite the limitations posed by the current study, the results were consistent with those reported by other investigators. In addition, exploratory analyses examining the interaction of risk and protective factors suggest that children rated highly on socialized aggression or conduct disturbance had fewer attributes that served a protective role, while the opposite was true for nonproblematic children.

Summary and Conclusions

The current study highlights the importance of multidomain sampling in the identification of risk factors and protective factors for child behavioural outcome and parenting behaviour. Our ability to draw firm conclusions from the analyses of 72 families is limited by the characteristics of the sample, the relatively small numbers involved, and the cross-sectional nature of the research design.

Despite these limitations, the sample did not differ significantly from the larger population of families living in low-income housing on demographic variables. In addition, the majority of findings in this study were corroborated by those of past research. Other results can only be suggestive and will hopefully stimulate researchers to investigate to what extent they can be replicated with other samples.

As noted previously, there is considerable evidence that conduct disturbance and delinquent behaviour are influenced by a multiple of factors. Correlates of child problematic behaviour were identified from three domains: family interaction, parent characteristics, and the community.

The present findings add to the current body of research in several ways. The results clearly support the inclusion of multiple predictors to increase our understanding of child conduct disturbance and socialized aggressive behaviour. Behavioural outcome (by either criterion) is a consequence of an accumulation of individual and environmental factors. No single factor is able to account for child behavioural outcome at a level that allows its exclusive use for risk identification. Even the relatively strong predictive power of the discipline measure does not preclude the need to consider additional variables. In fact, by including variables outside the realm of parent-child interaction, we were able to increase predictive accuracy.

Another major finding to emerge from both the regression and path analyses was support for the theoretical model presented in Figure 1 (p. 40). Measures representing three domains - family interaction, parent characteristics, and the community - each contributed additional information in the composite regression analyses. By examining the direct and indirect effects of important predictors and

integrating the results with previous research findings, a clearer understanding was provided of how these factors influence child behavioural outcome.

The proposed model permitted the identification of factors important not only to child problematic behaviour but also to the differential prediction of SA and CD. Factors most sensitive in identifying socialized aggressive children included monitoring, parental antisocial attitudes, and child delinquent associations. For conduct disturbance, general family functioning and levels of maternal stress appeared to have the strongest influence.

Furthermore, the current model points to the importance of previously neglected variables in this area, particularly parental antisocial attitudes. It appears that antisocial attitudes have a direct impact on parenting practices, which in turn influence the likelihood of child misbehaviour.

Finally, the current study successfully identified several protective factors that may serve to ameliorate the impact of negative environmental circumstances. The data clearly suggest that children reared in a high-risk environments who have a positive temperament, good

academic performance, and a confidante and who get along well with others are less likely to be described as problematic by their parents.

Given these findings, several avenues of future research seem worthwhile. The first area concerns the nature and design of future prediction studies. The predictive power of the risk factors identified in the present study provides preliminary evidence to support the inclusion of these variables in future research. In addition, child attributes that were identified exert a protective influence for children who are faced with chronic environmental stress. The development of new procedures to evaluate child cognitive competence is necessary to provide a more accurate assessment of child competence. Although the complexity of this construct has been recognized, empirical work has not adequately reflected the multicausal nature of child competence (Garmezy, 1985).

Longitudinal research is required to elucidate the mechanisms by which risk factors and protective factors operate to predict outcome. Ultimately, there is a need to determine whether identified variables precede or predict child problematic behaviour or are a derivative

of these behaviours. Additional research is also required to examine causal relationships among variables and to demonstrate the cumulative impact of risk and protective factors as they relate to outcome. An interactional model examining the relationships between individual, familial, and community factors across the major developmental stages of childhood and adolescence would facilitate achievement of these goals.

A second avenue of research concerns the development of intervention strategies. Given the limited supply of resources available, it is important that interventions target those who are at greatest risk. To assist in the development of prevention strategies, it is also important to identify variables that are dynamic in nature and thus amenable to change (Andrews, Bonta & Hoge, 1990).

Intervention strategies that provide parent skill training in family management practices have demonstrated effectiveness in decreasing child antisocial behaviour (cf. Gordon & Arthbutnot, 1987). However, as indicated by Wahler and Dumas (1987), multidistressed mothers often fail to maintain

therapeutic gains once clinical contact is terminated.

Spivack and Shure (1974) have offered some insights into the cognitive processes of maladjusted persons. In their clinical research with children, antisocial behaviour was decreased by enhancing the child's interpersonal, cognitive, problem-solving skills (Spivak & Cianci, 1987). Similarly social-skills training has been found to assist delinquent adolescents to reduce their emotional reactivity, improve their self-concept, and shift toward a more internal locus of control (Sarason, 1968; Sarason & Ganzer, 1973).

These child attributes are important in buffering the effect of risk factors. These same attributes might be instilled in the parents of problematic children to improve coping responses to daily stressors and to assist them in engaging themselves in more supportive relationships with friends. Programs that emphasize the consequences and management of stressors may be especially appropriate interventions for single parents. To increase the long-term effects of interventions, an emphasis should also be placed on the assessment and alteration of parental antisocial

attitudes. Finally, the current data clearly suggest that intervention efforts will be most effective if they are comprehensive and multileveled. Child behavioural change is unlikely to occur without complementary changes in the immediate family and broader social environment.

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APPENDICES

Appendix A

**Letter of Approval to Conduct the Study from the
General Manager of the Ottawa-Carleton Regional
Housing Authority**

MEMORANDUM

DATE: June 30, 1988

TO: J. Hagglund, Housing Administrator, ERHPO

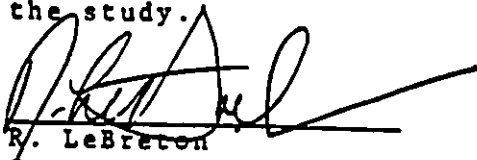
FROM: R. LeBreton, General Manager, OCRHA

RE: RESEARCH PROPOSAL - "THE EFFECT OF FAMILY INTERACTION AND ENVIRONMENTAL FACTORS ON CHILDHOOD SOCIALISATION AND DEVELOPMENT" - M. VAN DIETEN

This is to advise that at the June 28th meeting of the Members of the Authority, the following resolution relating to the above research proposal was made:

RESOLVED that approval be given for the research proposal in the manner specified, providing the Housing Authority receives a copy of the completed document.

I assume that you will make contact with the appropriate party and arrange for a meeting with myself and other members of OCRHA staff who will be involved in facilitating the study.


R. LeBreton
General Manager

:jk
0630.6

Appendix B

**Letter from the Ontario Ministry of Housing
Specifying the Conditions of Approval to Conduct
the Current Study**

June 29, 1988

Mr. Brian J. Sutherland
Regional Manager
Eastern Regional Housing Programs Office
Ministry of Housing
1365 Richmond Road
Ottawa, Ontario
K2B 6R7

Dear Mr. Sutherland:

Further to your letter of June 21, 1988 regarding the doctoral research proposal, I have now had an opportunity to review the matter.

One of the major purposes of the Freedom of Information and Protection of Privacy Act is to prohibit disclosure of personal information from government files except for a number of limited and specific situations. Disclosure of personal information for a research purpose is very restrictive. The disclosure must be reasonably consistent with the purpose for which the information was collected. In this instance, our tenant would not have reasonably expected when they provided their personal information that their files would be reviewed by a graduate student nor even that their names and addresses would be released in connection with a study on child rearing patterns.

It is my view, and it is shared by Peter Eagen, Senior Solicitor, Social Housing, that we cannot provide names, addresses or personal information to the researcher in this case.

We may however, provide the researcher with the name and municipal address of each housing project and the number of units at each project.

We may also, allow the researcher to post information about the study on bulletin boards.

If the researcher and tenant contact one another without us providing names and addresses, and if the tenant then consents to participate in the study and provides a written consent to information being released from his or her file, we may then do so.

Please feel free to contact me for any further information.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "H Jones".

Howard Jones
Co-ordinator
Freedom of Information and Privacy

HJ:elr

cc: John Hägglund
Peter Eagen

Appendix C

Recruitment Script

Recruitment Script

1. Recruiters will first introduce themselves as students from the University of Ottawa and provide a brief explanation of the study. Essentially, the parent will be told that we are interested in recruiting families to participate on a voluntary basis, in a study about how single parents raise their children and the kind of difficulties that they face. The parent will then be informed that we are focusing on families who have children between the ages of 10-15 years.

2. Parents who express an interest in participating in the study will be provided with more detailed information, including:

- the level of involvement required by the participants and the time commitment (i.e., approximately 2- 2 1/2 hours).

- a description of the types of measures which will be administered (i.e., interviews, questionnaires, interaction task).

- a description of the topics to be covered and the types of questions which will be asked (i.e., we will be asking you a lot of questions about child rearing, the way in which family members behave, the types of stressors they experience and their attitudes toward the neighbourhood and community. As some of the questions may be of an intimate nature, you are free to withdraw from the assessment or to abstain from answering any questions which you find uncomfortable).

- the issue of confidentiality (i.e., all information that you provide will be treated as confidential, with the exception of reported child abuse).

- the participants may request feedback on the family interaction task and the overall study.

- the family is also told about the honorarium (i.e., we will give your family \$20.00 as an honorarium for your

donation of time to the project).

3. A meeting will then be scheduled in the home of all families who consent to participate.

Appendix D

Consent Form

Consent Form

Whenever a research project or study of individuals is undertaken by a member of the University of Ottawa, the Ethics Committee of the University requires the written consent of the participants. This does not imply that the project is risky. The intention is simply to ensure the respect and confidentiality of the individuals involved in the study.

The present study is being conducted by graduate students from the School of Psychology at the University of Ottawa. The study is concerned with how single parents raise their children, and the factors which influence parenting behaviour.

Participation is voluntary and involves:

1. That the parent and one child between the ages of 10-15 be involved in the assessment process. This will take place in the home and involve approximately 2 - 2 1/2 hours of the family's time. The parent and child will be asked to complete questionnaires, to participate in an interview and to take part in an interaction task. During this time, participants will be asked to provide information about child rearing, the way in which family members behave, the types of stressors they experience and their attitudes toward the neighbourhood and community.
2. The interaction task will be audiorecorded. The tapes will be used for scoring purposes only and will be erased no later than one month following completion of the project.
3. Information gathered during the course of involvement in this study will be held in the strictest confidence. Family names will not be recorded. Rather each participant who consents to become involved will be assigned a code number and this number will be used on all documentation.

Information regarding the family will not be made

available to individuals or agencies who are not directly involved with the project with one exception. The Child and Family Services Act states, that all citizens who have knowledge of child abuse must report its occurrence. As such, the appropriate agency must be notified if participants report any incident of child abuse.

4. Should participants desire feedback with respect to the family interaction task or overall research results, a summary of the findings will be provided upon request.

5. Upon completion of the assessment process the family will be given \$20.00 as an honorarium for their participation in the study.

6. Participants are free to withdraw from the assessment at any time and to abstain from answering questions which they find uncomfortable. Withdrawal or abstention from the study will in no way jeopardize the provision of services.

7. If participants have any questions or concerns about the study they are invited to call Dr. James Bonta (Principle Investigator; Clinical Associate Professor, University of Ottawa) at 824-6080 or Marilyn Van Dielen (Graduate Student) at 230-2497.

I understand the conditions specified above and hereby give my consent to participate:

Parent: _____

Witnessed By: _____

Date: _____

Identified Child: _____

Witnessed By: _____

Date: _____

Appendix E

Parent Interview

Parent Interviewer Impression Rating Scale

FAMILY I.D. #: _____

FIRST NAME OF TARGET CHILD: _____

FIRST NAME OF PARENT: _____

DATE: ____/____/____
 M D Y

INTERVIEWER: _____

PART I: DEMOGRAPHICS

1. PARENT

1.1 Age: _____

1.2 Religion:

- 1 Protestant
- 2 Jewish
- 3 Catholic
- 4 None
- 5 Other: [specify] _____

1.3 {IF CLIENT INDICATES A RELIGIOUS AFFILIATION IN QUESTION 1.5 ASK THE FOLLOWING}

Do you practice your religion?

- 1 Regularly
- 2 Occasionally
- 3 Never

1.4 Ethnic Background:

- 1 Anglo
- 2 Francophone
- 3 Native
- 4 Other: [specify] _____

2. FAMILY SIZE

2.1 How many adults are currently residing in your home?
_____ # of adults.

2.2 How many children are currently residing in your home?
_____ # of children.

2.3 How many extra familial members reside in the family home?
_____ # extra familial members.

2.4 {INTERVIEWER TO SPECIFY TOTAL NUMBER OF INDIVIDUALS
WITHIN THE FAMILY HOME}

3. MARITAL STATUS

3.1 CODE

- 1 Married - Common Law
- 2 Divorced
- 3 Separated
- 4 Widow
- 5 Boyfriend

3.2 Are you satisfied with your single or equivalent status?

- 1 Yes
- 2 Sometimes
- 3 No

4. FAMILY STATUS

4.1 How long has TC's father been absent from the home?
Specify: _____

4.2 Does TC ever have contact with his/her father?
1 Regular contact
2 Infrequent
3 No contact

4.3 {INTERVIEWER TO COLLECT DATA ON EACH CHILD RESIDING
IN THE HOME - FIRST NAME, AGE, SEX, GRADE, AND INDICATE
HOW EACH CHILD IS RELATED TO THE PARENT BEING INTERVIEWED
USING THE RATING SCALE BELOW}

- 1 Biological child
- 2 Step-child
- 3 Adopted
- 4 Other Relative
- 5 Foster child
- 6 Other [specify]: _____

	Child's Name	Age	Sex	Grade	Rating
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____

PART II: CHILD BEHAVIOUR

During this part of the interview I am going to ask you some questions about TC. What s/he was like when growing up and how s/he behaves right now.

1. SEPARATION FROM PARENT

{INTERVIEWER SHOULD TELL PARENT THAT UNLESS SPECIFIED THE REMAINDER OF THE INTERVIEW IS CONCERNED ONLY WITH THE TARGET CHILD (TC)}

ASK BIOLOGICAL PARENT ONLY FOR INFORMATION IN 1.1

1.1 Has your child always lived with you?

{IF YES SKIP TO QUESTION 1.3}

- 0 No
- 1 Yes

Who else has your child lived with? {CIRCLE ALL THAT APPLY}

	YES	NO
1.2 Biological Parent	1	0
1.3 Mother's Partner	1	0
1.4 Foster Parent	1	0
1.5 Relative	1	0
1.6 Agency [Specify]: _____	1	0
1.7 Other [Specify]: _____	1	0

2: EARLY CHILDHOOD DIFFICULTIES

Now I am going to ask you a number of questions about how TC behaved as a young child. Try to think back to when TC was an infant or toddler (birth to three years of age) and to give the answer which best describes his/her behaviour at this time.

{READ EACH DESCRIPTION OF THE BEHAVIOURS LISTED BELOW AND ASK PARENT TO USE THE FOLLOWING CODING SYSTEM TO RATE THE CHILD'S BEHAVIOUR}

Never	Sometimes	Often	Nearly Always or Always
1	2	3	4

2.1 High Activity Level

Was TC very active as a young child; did s/he always get into things; make you tired; "run before s/he walked; did s/he get wild or revved up, lose control, or hate to be confined?

[Rating]:____

2.2 Distractibility

Did TC have trouble concentrating and paying attention, especially when s/he wasn't interested; did TC listen to you, follow your commands?

[Rating]:____

2.3 Poorly Adaptable

Did TC have trouble with transition and change- of activities or routines; was TC stubborn, and nag or whine for things that s/he wanted; was TC very persistent if s/he really liked an activity; were his/her tantrums long and hard to stop; did he/she get used to things and refuse to give them up? For example did TC have difficulty giving up a toy, etc.

[Rating]:____

2.4 Initial Withdrawal

Did TC dislike new situations, places, people, food, or clothes; did s/he hold back or protest by crying or clinging when forced to do new things.

[Rating]:____

2.5 High Intensity

Was TC a loud child? Did s/he speak loudly when interacting with you or other kids.

[Rating]:____

2.6 Irregular

Was TC unpredictable; could you tell when he'd be hungry or tired; was there any conflict over meals and bedtime; did his/her mood change suddenly; did s/he wake up at night?

[Rating]:____

2.7 Low Sensory Threshold

Was TC sensitive to sounds, lights, colours, textures, temperature, pain, tastes or smells; did his/her clothes have to feel just right; was dressing a problem; did s/he fuss over food or overreact to minor cuts or scrapes; did s/he feel warm when everyone else was cold; did s/he tantrum easily.

[Rating]:____

2.8 Negative Mood

Would you say that TC was a serious or cranky child. Did s/he whine or complain a lot; was TC unhappy as a child.

[Rating]:____

2.9 TOTAL SCORE: _____

2.10 Overall, how easy would you say it was to take care of TC as an young child?

- 1 Easy to care for
- 2 Moderately ease to care for
- 3 Extremely difficult to care for

2.11 Did TC have any medical problems during birth or early infancy? (Accidents or serious illness as opposed to colds, flu)

- 0 No
- 1 Yes [Specify]: _____

3: CURRENT MEDICAL/PSYCHIATRIC

3.1 Is your child currently taking prescription medication?

- 0 No
- 1 Yes [Specify]: _____

3.2 Is your child currently experiencing any medical difficulties?

- 0 No
- 1 Yes [Specify]: _____

3.3 Have you ever sought professional help from a psychiatrist or counsellor (psychologist, school psychologist, therapist, other mental health professional) for help with your child?

- 0 No
- 1 Psychiatrist
- 2 Psychologist
- 3 Social Worker
- 4 Guidance Counsellor
- 5 Other

3.4 Specify reason for treatment: _____

4: SCHOOL PERFORMANCE

4.1 What average grade is your child currently receiving in school?

- 1 A Excellent
- 2 B Good
- 3 C Average
- 4 D Poor
- 5 E
- 6 F

4.2 How important do you think it is for TC to get good grades?

- 1 Very important
- 2 Somewhat important
- 3 Fairly important
- 4 Not important
- 5 Don't know

4.3 How important do you think grades are for TC to get ahead in life?

- 1 Very important
- 2 Somewhat important
- 3 Fairly important
- 4 Not important
- 5 Don't know
- 6 Don't care

4.4 How far would you like to see your child go in school?

- 1 4 or more years college, university
- 2 1-3 years college, university
- 3 13th grade
- 4 9th-12th grade
- 5 0-8th grade
- 6 Up to child; as far as s/he wants
- 7 Other [Specify]: _____

4.5 On the average, how many nights does TC do homework?

- 1 0 nights
- 2 1-2 nights
- 3 3-4 nights
- 4 5-6 nights
- 5 7 nights

4.6 When TC has homework is it hard to get him/her to finish?

- 1 Never
- 2 Occasionally
- 3 Sometimes
- 4 Always
- 5 Doesn't have homework
- 6 Don't know

4.7 Has TC ever been suspended from school?

- 0 No
- 1 Yes [Specify # of times in the last year]:_____

4.8 {IF PARENT ANSWERS YES TO 4.7, ASK THE FOLLOWING, IF NOT SKIP TO NEXT QUESTION}

Was the suspension justified?

- 1 Yes
- 0 No [SPECIFY]:_____

4.9 How much school would you say TC has missed in the last year?

- 5 No days
- 4 1-4 days [Specify why]:_____
- 3 5-9 days [Specify why]:_____
- 2 More than 10 days [Specify why]:_____
- 1 don't know

4.10 Are you aware of any behavioural difficulties that

TC might be experiencing in school?

0 No

1 Yes [Specify]: _____

4.11 Are you aware of any academic difficulties that TC might be experiencing in school?

0 No

1 Yes [Specify]: _____

4.12 Has TC ever failed a grade?

0 No

1 Yes [Specify]: _____

4.13 Remedial education

0 No

1 Yes [Specify]: _____

4.14 How well does TC get along with his teachers

1 Very well

2 Quite well

3 Okay (50/50)

4 Not very well

5 Poorly

5: DELINQUENCY INVOLVEMENT

[THE FOLLOWING ARE YES OR NO ANSWERS]

5.1 Has TC ever been in trouble with the police?

0 No

1 Yes [Specify]: _____

{IF PARENT ANSWERS NO SKIP TO NEXT SECTION}

5.2 Has TC ever been to Young Offender Court?

0 No

1 Yes [Specify]: _____

5.3 Has TC ever been brought to a juvenile training facility, group home, etc. because of his/her criminal involvement?

0 No

1 Yes [Specify]: _____

6. REVISED BEHAVIOUR PROBLEM CHECKLIST

{INTERVIEWER SHOULD NOW INTRODUCE AND ADMINISTER THE REVISED BEHAVIOUR PROBLEM CHECKLIST (QUAY & PETERSON, 1983).}

Now I would like to read you a list of child behaviours which parents have reported as problematic for their children. Using this scale {Use "NO PROBLEM - SEVERE PROBLEM" response card} just let me know if the behaviour is a problem for your child.

(0) No Problem (1) Mild Problem (2) Severe Problem

1. Restless; unable to sit still	0	1	2
2. Seeks attention; shows off	0	1	2
3. Stays out late at night	0	1	2
4. Self-conscious; easily embarrassed	0	1	2
5. Disruptive; annoys and bothers others	0	1	2
6. Feels inferior	0	1	2
7. Steals in company with others	0	1	2
8. Preoccupied; "in a world of his/her own;" stares into space	0	1	2
9. Shy, bashful	0	1	2
10. Withdraws; prefers solitary activities	0	1	2
11. Belongs to a gang	0	1	2
12. Repetitive speech; says same thing over and over	0	1	2
13. Short attention span; poor concentration	0	1	2
14. Lacks self-confidence	0	1	2
15. Inattentive to what others say	0	1	2
16. Incoherent speech, what is said doesn't make sense	0	1	2
17. Fights	0	1	2
18. Loyal to delinquent friends	0	1	2
19. Has temper tantrums	0	1	2
20. Truant from school, usually in company with others	0	1	2
21. Hypersensitive; feelings are easily hurt	0	1	2
22. Generally fearful; anxious	0	1	2
23. Irresponsible, undependable	0	1	2
24. Has "bad" companions, ones who are always in trouble	0	1	2
25. Tense, unable to relax	0	1	2
26. Disobedient; difficult to control	0	1	2

27. Depressed; always sad	0	1	2
28. Uncooperative in group situations	0	1	2
29. Passive, suggestible; easily led by others	0	1	2
30. Hyperactive; always on the go	0	1	2
31. Distractible; easily diverted from the task at hand	0	1	2
32. Destructive in regard to own and/or other's property	0	1	2
33. Negative; tends to do the opposite of what is requested	0	1	2
34. Impertinent; talks back	0	1	2
35. Sluggish, slow moving, lethargic	0	1	2
36. Drowsy; not "wide awake"	0	1	2
37. Nervous, jittery, jumpy; "easily startled"	0	1	2
38. Irritable, hot-tempered; easily angered	0	1	2
39. Expresses strange far-fetched ideas	0	1	2
40. Argues; quarrels	0	1	2
41. Sulks and pouts	0	1	2
42. Persists and nags; can't take "no" for an answer	0	1	2
43. Avoids looking others in the eye	0	1	2
44. Answers without stopping to think	0	1	2
45. Unable to work independently; needs constant help and attention	0	1	2
46. Uses drugs in company with others	0	1	2
47. Impulsive; starts before understanding what to do; doesn't stop to think	0	1	2
48. Chews on inedible things	0	1	2
49. Tries to dominate others; bullies, threatens	0	1	2
50. Picks at other children as a way of getting attention; seems to want to relate but doesn't know how	0	1	2
51. Steals from people outside the home	0	1	2
52. Expresses beliefs that are clearly untrue (delusions)	0	1	2
53. Says nobody loves him or her	0	1	2
54. Freely admits disrespect for moral values and laws	0	1	2
55. Brags and boasts	0	1	
56. Slow and not accurate in doing things	0	1	
57. Shows little interest in things around him or her	0	1	2
58. Does not finish things; gives up easily; lacks perseverance	0	1	2

59. Is part of a group that rejects school activities such as team sports, clubs, projects to help others	0	1	2
60. Cheats	0	1	2
61. Seeks company of older, "more experienced" companions	0	1	2
62. Knows what's going on but is listless and uninterested	0	1	2
63. Resists leaving mother's (or other caretaker's side)	0	1	2
64. Difficulty in making choices; can't make up mind	0	1	2
65. Teases others	0	1	2
66. Absentminded; forgets simple things easily	0	1	2
67. Acts like he or she were much younger; immature, "childish"	0	1	2
68. Has trouble following directions	0	1	2
69. Will lie to protect his/her friends	0	1	2
70. Afraid to try new things for fear of failure	0	1	2
71. Selfish; won't share; always takes the biggest piece	0	1	2
72. Uses alcohol in company with others	0	1	2
73. School work is messy, sloppy	0	1	2
74. Does not respond to praise from adults	0	1	2
75. Not liked by others; is a "loner" because of aggressive behaviour	0	1	2
76. Does not use language to communicate	0	1	2
77. Cannot stand to wait; wants everything right now	0	1	2
78. Refuses to take directions, won't do as told	0	1	2
79. Blames others; denies own mistakes	0	1	2
80. Admires and seeks to associate with "rougher peers"	0	1	2
81. Punishment doesn't affect his or her behaviour	0	1	2
82. Squirms, fidgets	0	1	2
83. Deliberately cruel to others	0	1	2
84. Feels he or she can't succeed	0	1	2
85. Tells imaginary things as though true; unable to tell real from imagined	0	1	2
86. Does not hug and kiss members of family; affectionless	0	1	2
87. Runs away; is truant from home	0	1	2

88. Openly admires people who operate outside the law	0	1	2
89. Repeats what is said to him or her; "parrots" others' speech)	0	1	2
90. Disobeys at home	0	1	2
91. Disobeys at school	0	1	2

RBPC TOTAL SCORE: ITEMS 1-89: _____

SUBSCALES:

CD _____ AW _____

SA _____ PB _____

AP _____ ME _____

PART III: PARENTING BEHAVIOUR

During this part of the interview I am going to ask you a lot of questions about how parents raise their children. I want to stress that there are no right or wrong answers. We just want to learn what parents as a group think about child-rearing. During this interview I would like you to focus on TC.

Once again, your responses are confidential. If you don't understand or are uncomfortable about any of the questions, please feel free to say so.

First, we will start off with some questions about your child's daily routine.

1. MONITORING

1.1 During an average week, how many hours does TC spend in activities outside of the home (ie., playing with friends, in sports, in an after school program etc.; excluding time spent in school).

_____ # hrs.

1.2 During an average week, how many hours is TC outside of home where s/he is not directly supervised by an adult? (excluding time spent at school).

_____ # hrs.

1.3 What time does your child usually go to bed during the week, or on a school night?

____:____ p.m.

1.4 How often do you talk with your child about his/her plans for the coming day (e.g., what's happening with school or friends)?

- 1 Never
- 2 Hardly ever
- 3 Most days
- 4 Almost every day

RULES

(USE "ALWAYS - NEVER" CARD)

Always or almost always	Often	About half the time	Occasionally	Never or almost never
5	4	3	2	1

1.5 Would you know if TC came home an hour late? 1 2 3 4 5

1.6 Does TC tell you when s/he will be back before s/he goes out? 1 2 3 4 5

1.7 If you or a sitter are not at home, does TC leave a note for you, call you, or communicate with you in some way about where s/he is going? 1 2 3 4 5

1.8 When your child gets home from school, is there someone there within an hour? (an adult, 18+ years) 1 2 3 4 5

1.9 Does your child usually eat supper with the family? 1 2 3 4 5

1.10 Do you leave your child 1 2 3 4 5
 home at night without adult [5 4 3 2 1]
 supervision?

1.11 Does TC have a special friend or friends that s/he spends time with on a regular basis? (ie., does things with a friend(s) at least 2 or 3 times per week).

- 0 No
- 1 Yes
- 2 Don't Know

1.12 SPECIFY # OF CLOSE FRIENDS

1.13 How well do you know TC's friends?

- 1 Very well. Friends are often at the house or supervised by other parent.
- 2 Moderately well. See occasionally.
- 3 Not very well.

1.14 How much time per week on the average does TC play with his friends?

_____ hrs. per week.

1.15 In general, where did TC meet his/her friends?

- 1 School
- 2 Neighbourhood
- 3 Both school and neighbourhood

1.16 Where does TC usually go after school?

[specify]:

INTERVIEWER TO CODE:

- 1 Home
- 2 Organized activity
- 3 Play friends
- 4 Other

1.17 In general, how well does TC get along with kids his/her age?

- 1 Very well
- 2 Quite well
- 3 Okay 50/50
- 4 Not well
- 5 Not at all well

1.18 Does TC participate in any sports with adult instruction or coaching?

- 0 No
- 1 Yes

1.19 Does TC participate in any nonsport activities with adult instruction (ie., music, dance, etc.)?

- 0 No
- 1 Yes

1.20 Does TC participate in a club or group with adult leadership?

- 0 No
- 1 Yes

1.21 How would you rate TC's skill in sports compared to other kids his/her age?

- 1 Excellent
- 2 Very Good
- 3 Good
- 4 Fair
- 5 Poor

1.22 How would you rate TC's ability/skill in sports compared to other kid his/her age?

- 1 Excellent
- 2 Very Good
- 3 Good
- 4 Fair
- 5 Poor

1.23 How important do you think it is to know where TC is?

- 1 Very important
- 2 Somewhat important
- 3 Neither important or unimportant
- 4 Somewhat unimportant
- 5 Not important at all

REGULATION/RESTRICTION (Wells & Rankin, 1988)

To what degree would you say that you decide or control
....

- 1 = Mother has total control or most of the control
- 2 = 50/50, mother and child have equal input
- 3 = Child has total control or most of the control

1.24 who your child's friends are 1 2 3

1.25 the kinds of things TC does 1 2 3
(ie., sports, hobbies, etc.)

1.26 the kind of clothes TC wears 1 2 3

1.27 the kinds of movies and T.V. 1 2 3
programs TC watches

1.28 the types of places TC goes to. 1 2 3

1.29 Total Score: _____

2. DISCIPLINE

Parents use different kinds of discipline to control their child's behaviour. I'll read you a list of behaviours that parent's use and I'd like you to let me know if you use them.

	NO	YES
2.1 Nagging or scolding	0	1
2.2 By talking to TC and telling him/her what he/she has done wrong	0	1
2.3 Slapping or hitting TC	0	1
2.4 Taking away privileges	0	1
2.5 Promising TC something if his/her behaviour improves	0	1
2.6 Time out	0	1
2.7 Ignore child	0	1
2.8 Other [Specify]: _____	0	1

What are the disciplines you use most frequently with your child?

(Record by order of frequency).

- 2.9 _____
- 2.10 _____
- 2.11 _____
- 2.12 _____
- 2.13 _____
- 2.14 _____
- 2.15 _____
- 2.16 _____

2.17 Which type of discipline do you find most effective in controlling your child's misbehaviour?

- 0 None are effective
- 1 Nagging/ Scolding
- 2 Talking
- 3 Slapping/Hitting
- 4 Taking Away Privileges
- 5 Promising Something
- 6 Time Out
- 7 Ignore
- 8 Other

{GIVE PARENT ALWAYS - NEVER CARD}

Always or almost always	Often	About half the time	Occasionally	Never or almost never
5	4	3	2	1

2.18 If you tell your child s/he will get punished if he doesn't stop doing something and he keeps doing it, how often will you punish him.

2.19 How often do you get angry when you punish your child?

2.20 How often do you think that the kind of punishment you give your child depends on your mood?

2.21 How often do you feel you are having problems managing your child in general?

2.22 How much of the time do you feel confident that you can change or correct your child's misbehaviour?

2.23 How often is your child able to get out of a punishment when s/he really sets his/her mind to it?

Now I'm going to read you a list of reasons that parents have given us to explain why they don't discipline their children more often and I'd like you to think about how often you feel this way {USE ALWAYS - NEVER CARD}.

- 2.24 Discipline doesn't seem to work with him/her.
- 2.25 It gets discouraging when TC doesn't improve.
- 2.26 Discipline confrontations are too stressful and upsetting causing more trouble than leaving him alone.
- 2.27 You have so many other demands on your time that you can't give it all the attention you'd like.
- 2.28 You don't believe in discipline.
- 2.29 TC doesn't need disciplining more often.

3: DISOBEDIENCE RATING

{USE ALWAYS - NEVER CARD}

3.1 Is TC expected to get home at a certain time?

- 0 No
- 1 Yes

[IF NO SKIP TO QUESTION 3.3]

3.2 How often does TC get home on time?

- 1 Always or almost always
- 2 Often
- 3 About half the time
- 4 Occasionally
- 5 Never or almost never
- 6 Don't know

3.3 Are there any places where you do not like TC to go?

- 0 No
- 1 Yes

[IF NO SKIP TO QUESTION 3.5]

3.4 How often does TC go to places where you do not want him/her to go? [REVERSE SCORING]

- 1 Always or almost always
- 2 Often
- 3 About half the time
- 4 Occasionally
- 5 Never or almost never
- 6 Don't know

3.5 Does TC play with any kids that you disapprove of?

- 0 No
- 1 Yes

[IF NO SKIP TO QUESTION 3.7]

3.6 How often does TC see people that you disapprove of?
[REVERSE SCORING]

- 1 Always or almost always
- 2 Often
- 3 About half the time
- 4 Occasionally
- 5 Never or almost never
- 6 Don't know

3.7 Do you have any rules that TC is expected to follow
(i.e., going to bed at a certain time, coming home at a
certain time, etc.)?

- 0 No
- 1 Yes

3.8 How often does TC obey house rules?

- 1 Always or almost always
- 2 Often
- 3 About half the time
- 4 Occasionally
- 5 Never or almost never
- 6 Don't know

3.9 SUM ITEMS 3.2, 3.4, 3.6, 3.8 = ____

3.10 DISOBEDIENCE RATING TOTAL SCORE:

$$\frac{\text{SUM OF SPECIFIED ITEMS}}{\text{NUMBER OF ITEMS ENDORSED}} = \underline{\hspace{2cm}}$$

[CALCULATE TO TWO DECIMAL POINTS]

3.11 Is TC expected to do chores around the house?

- 0 No
- 1 Yes

3.12 How often does TC do his/her chores?

- 1 Always or almost always
- 2 Often
- 3 About half the time
- 4 Occasionally
- 5 Never or almost never
- 6 Don't know

3.13 In general, would you prefer that TC play with different kids?

- 0 No
- 1 Yes

{IN FAMILIES WITH ONE CHILD - SKIP TO NEXT SECTION}

3.14 How well does TC get along with his/her brothers and sisters?

- 1 Very well
- 2 Quite well
- 3 Okay (50/50)
- 4 Not well
- 5 Not at all well

3.15 In general how well would you say that TC gets along with you?

- 1 Very well
- 2 Quite well
- 3 Okay (50/50)
- 4 Not well
- 5 Not at all well

4. PARENTAL INVOLVEMENT

4.1 How much time in a week do you have a chance to sit around and talk with your child (maybe as a family)?

- 1 Usually no time
- 2 A couple of hours per week
- 3 More than 5 hours per week

4.2 About how much time each week do you have to do activities such as sports, hobbies, crafts, or games with your child? (other than watching TV or eating meals together)?

- 1 Usually no time
- 2 A couple of hours per week
- 3 More than 5 hours per week

4.3 In general, how enjoyable were these activities with your child?

- 1 Not at all
- 2 Slightly
- 3 Somewhat
- 4 Mostly
- 5 Very much

4.4 In the past year, have you had the time to help with youth activities, such as Scouts, special school events, or other activities for your children?

- 1 Never
- 2 Sometimes
- 3 Often

5. PARENT - CHILD REINFORCEMENT

5A PARENT REINFORCES CHILD

When TC has done something you are pleased with (e.g., get a good mark in school, do something special for you) do you ever reward him/her by: {READ RESPONSES}:

Indicate YES=1

NO=0

- 5.1 Verbal encouragement (praise, approval)
- 5.2 Physical affection (hugs, kisses, pats)
- 5.3 Give him/her food, money, toys
- 5.4 Allow special privileges (staying out late, staying up late to watch TV, having a friend over).

5.5 Do something together (make a cake, go to the movies, ride bikes?)

5.6 Don't do anything, not notice

What type of rewards do you use most frequently with your child?

(Record by order of frequency, up to five responses).

5.7 _____

5.8 _____

5.9 _____

5.10 _____

5.11 _____

Now I am going to read you a statement about child-rearing. Tell me whether you agree or disagree with it:

5.12 It is possible to give a child too much encouragement.

- 1 True
- 2 Somewhat true
- 3 False
- 4 Don't know

5.13 How does your child obtain spending money? [Read Responses and Circle Most Appropriate Response]:

- 1 Child is given money as needed or upon request.
- 2 Child is given a regular allowance, doesn't work for it
- 3 Child is given a regular allowance, does chores for it
- 4 Has job outside of home
- 5 Gifts
- 6 Other (specify): _____

5B CHILD REINFORCES PARENT

{USE "STRONGLY AGREE" - "STRONGLY DISAGREE" CARD}

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1	2	3	4	5

5.14 My child does things for me that make me feel good.
[Rating]:_____

5.15 Most times I feel that my child likes me and wants
to be close to me.
[Rating]:_____

5.16 My child is more affectionate than I expected.
[Rating]:_____

5.17 When I do things for my child I get the feeling that
my efforts are appreciated very much.
[Rating]:_____

6. PARENT SENSE OF COMPETENCE SCALE

Now I am going to read you a number of statements about being a parent. There are no right or wrong answers. Just give your personal opinion based on your own experience as TC's parent.

{USE PSOC- "NO - YES" CARD} 1 2 3 4 5 6

6.1 Parents have to sacrifice everything for their children.

6.2 Parents should help their children feel they belong and are needed.

*6.3 Even though being a parent could be rewarding, I am frustrated by the problems I have with my child right now.

*6.4 It's hard for me to know when to make a rule and stick by it.

*6.5 I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.

*6.6 My mother was better prepared to be a good mother than I am.

6.7 I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good parent.

6.8 Being a parent is easy, and any problems are easily solved.

*6.9 A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.

*6.10 I feel guilty after I discipline my child.

*6.11 It's hard for me to know what to do when my child is afraid of something that won't hurt him/her.

6.12 I do as good a job as I think I should in raising my child.

6.13 If anyone can find the answer to what is troubling my child, I am the one.

*6.14 It's difficult for me to know how much to expect of my child.

*6.15 My talents and interests are in other areas, not in being a parent.

6.16 I feel confident that I know what to do when my child is not feeling well.

*6.17 I worry that I am spoiling my child too much.

6.18 I honestly believe I have all the skills necessary to be a good mother to my child.

*6.19 Being a parent makes me tense and anxious.

6.20 Being a good mother is a reward in itself.

PSOC TOTAL SCORE: SUM ITEMS 3-19: _____

PSOC SUBSCALES:

SKILL: SUM ITEMS

KNOWLEDGE: SUM ITEMS

7. GENERAL FUNCTIONING (FAMILY) (Epstein, Baldwin, & Bishop, 1983)

Now I'd like to ask you a few questions about your family (Family refers to members residing in household only). {Use 4-point "STRONGLY AGREE - STRONGLY DISAGREE" card}.

7.1 Planning family activities is difficult because we misunderstand each other.

7.2 In times of crisis we can turn to each other for support.

7.3 We cannot talk to each other about the sadness we feel.

7.4 Individuals in the family are accepted for what they are.

7.5 We avoid discussing our fears and concerns.

7.6 We can express feelings to each other.

7.7 There are lots of bad feelings in the family.

7.8 We feel accepted for what we are.

7.9 Making decisions is a problem for our family.

7.10 We are able to make decisions about how to solve problems.

7.11 We don't get along well together.

7.12 We confide in each other.

7.13 TOTAL SCORE: _____

PART IV: PARENT CHARACTERISTICS

In the last part of the interview we would like focus on you and to ask you a number of questions about issues which are of concern to many parents. Again everything you say will be confidential. If you would rather not answer any of the questions, please do not hesitate to say so.

1. EDUCATION

1.1 What was the last grade parent completed in school?

[SPECIFY]: _____

1.2 Are you currently attending school?

- 0 No
- 1 Full-time
- 2 Part-time
- 3 Correspondence

{If NO, skip to Section 2}

1.3 If at school what type of school program is it?

- 1 Upgrading
- 2 Trade
- 3 College
- 4 University
- 5 Other: [specify] _____

1.4 How many hours on average per week do you attend school outside the home?

_____ # hrs.

1.5 How do you feel about school? [Discuss attitude toward school as well as level of participation and performance?]

1 High interest in school work and related activities. Does homework, readings, assignments promptly and reliably. Average to above average grades (C or higher). Regular attendance.

2 Expresses some interest in school. Feels it is a means of getting a better job. Generally reliable attendance. Recognizes the importance of doing well to advance position.

3 Active dislike for school work and activities. Homework late or not completed. Truancy, skipping classes. Wants to quit. Below average grades (D or F).

1.6 How do you get along with your fellow students?

1 Gets along with fellow students. Talk together, lunch together. Spend time together outside of school. Best friend is at same school.

2 Some difficulty getting along with fellow students but has a friend or friends who s/he spends time with.

3 Continuous problems with fellow students. Fighting, arguing, isolated.

1.7 How do you get along with your professors/teachers?

1 Talks to teachers in and out of class. Has (or would) seek opinion of teacher regarding a personal, interpersonal problem or accomplishment. Respects teacher. Values the opinion of teachers.

2 Has some difficulty relating to teachers, but only on occasion. In general, respects teachers.

3 Avoids teachers. Hates teachers. Arguments. Displays of disrespect.

2. EMPLOYMENT

2.1 Are you currently employed?

- 0 no
- 1 employed full-time
- 2 employed part-time
- 3 self-employed

2.2 What is your occupation? (Primary, or occupation before unemployed) [specify]

(IF UNEMPLOYED SKIP TO QUESTION 2.6)

2.3 How many hours (on the average per week) do you work outside the home?

_____ # hrs.

2.4 Work shift:

- 1 day
- 2 swing (evenings)
- 3 graveyard
- 4 variable shifts

2.5 How long have you been with your current employer?

[SPECIFY IN MONTHS]: _____

2.6 If currently unemployed: When were you last employed?

Where? [Specify]: _____

2.7 Briefly discuss employment history in order to rate stability of employment: What types of jobs have you held since leaving school?

- 1 steadily employed or homemaker
- 2 frequently unemployed; employed less than 50% of the time since leaving school
- 3 never employed for a continuous 12 months

2.8 Have you ever been fired from a job?

- 0 No
- 1 Yes

{FOR QUESTIONS 3.9, 3.10, 3.11, IF SUBJECT IS NOT CURRENTLY EMPLOYED DISCUSS MOST RECENT JOB IN THE LAST 12 MONTHS. IF NO JOB WAS HELD IN THE LAST YEAR A SCORE OF 3 IS AUTOMATICALLY AWARDED}

2.9 Discuss attitude toward the job as well as level of participation and performance to rate the following: How do you feel about your job?

1 Expresses a strong interest in job. Expresses pride in abilities/ performance. Has received positive feedback from boss for performance. Attendance is reliable. Willing to stay overtime. Wants to stay in same line of work.

2 Expresses some interest in job. Feels it is a means of earning a living until something better comes along. Generally reliable attendance. Recognizes the importance of doing well to advance position.

3 Hates job. Boring/dangerous/unpleasant/ can't perform well. A means of earning a living only and not even satisfying on these terms. Unreliable attendance. Often late. Wants to change jobs. May quit even if another job is not yet available.

2.10 How do you get along with your fellow workers?

1 Gets along with fellow workers. Talks together, takes breaks together, lunch together, leisure pursuits together. Help each other on the job. Cooperative. Friendly atmosphere.

2 Some difficulties with fellow workers, but has a close friend or friends who s/he spends time with.

3 Continuous problems. Fighting, arguing, isolated.

2.11 How do you get along with your boss/supervisors?

1 Respect, if not liking for supervisor. Talks with boss, even regarding non-job matters. Would approach boss with problems. Follows orders willingly.

2 Has some difficulty with boss but only on occasion. Generally respects boss and follows orders.

3 Significant and continuing problems/conflicts. Won't follow orders. Arguments. Feels others are treated better by boss.

3. INCOME/FINANCIAL

3.1 With reference to the household in which you live, what is the estimated total income from all sources?

- 1 Less than 4,999
- 2 5-9,999
- 3 10-14,999
- 4 15-19,999
- 5 20-24,999
- 6 25-29,999

Financial aid in the last year: [Record all that apply]

	NO	YES
3.2 Mothers allowance	0	1
3.3 Welfare	0	1
3.4 Medical compensation	0	1
3.5 Unemployment insurance	0	1
3.6 Family Benefits	0	1
3.7 Other [specify] _____	0	1
3.8 No financial aid	0	1

3.9 How long have you received social assistance?
(Include number of years since leaving home?)

of years _____

3.10 Did your parents receive social assistance?

- 0 No
- 1 Yes

3.11 [Specify # of years parent received social assistance]

of years _____

3.12 Do you ever worry about having sufficient money to live?

- 1 Always or almost always
- 2 Often
- 3 About half the time
- 4 Occasionally
- 5 Never or almost never

4. ACCOMMODATION

4.1 How do you feel about your present living accommodation?

1 Very satisfied with accommodation situation. Takes pride in house, yard and neighbourhood. Helps keep up the place.

2 Somewhat satisfied. Would like to move but helps keep up the place.

3 Unhappy/ dissatisfied. No pride, no attempt to improve residence. Wants to move. Landlord would like client to move.

4.2 How long have you resided at your present addresses?
[Record length of residence in years]

Length of Stay: _____

4.3 Number of moves in the last 12 months.

of moves: _____

INTERVIEWER TO COMPLETE

4.4 Number of bedrooms

1 Bedroom

2

3

4+

4.5 Type of unit [TO BE DETERMINED BY INTERVIEWER]

1 Highrise (more than three stories)

2 Lowrise (two to three stories)

3 Townhouse/Maisonette

4 Detached Dwelling

5: NEIGHBOURHOOD/COMMUNITY

5.1 How do you feel about the neighbourhood you are currently residing in?

- 1 Very dissatisfied.
- 2 Somewhat satisfied.
- 3 Very satisfied.

5.2 How long do you plan to stay here?

- 1 Wish to move as soon as possible.
- 2 No plans.
- 3 No interest in moving, like it here.

5.3 In general, how well do you know your neighbours?

- 1 Not at all
- 2 Somewhat
- 3 Very well

5.4 In general do you get along well with your neighbours?

- 1 Not at all
- 2 Somewhat
- 3 Very well

5.5 Do you have any close friends in the neighbourhood who you spend time with on a regular basis (i.e., weekly).

- 1 Don't know anyone
- 2 Choose not to socialize with anyone
- 3 One or two
- 4 More than two

5.6 Are you involved in neighbourhood activities or community meetings?

- 0 No
- 1 Yes

Please answer TRUE or FALSE for the following questions.

- | | | |
|--|----------|----------|
| 5.7 In general, people around here keep up their houses and yards. | T | F |
| 5.8 Young people are always getting into trouble. | T | F |
| 5.9 There aren't enough places for children to play. | T | F |
| 5.10 Most people in the neighbourhood do not have work. | T | F |
| 5.11 A lot of people moving in are running down the neighbourhood. | T | F |
| 5.12 Most of the families in the neighbourhood know each other. | T | F |
| 5.13 Most of my friends live in the neighbourhood. | T | F |
| 5.14 Most people around here don't care what happens to you. | T | F |
| 5.15 This is a good neighbourhood to raise my children in. | T | F |

5.16 ATTITUDE TOWARD NEIGHBOURHOOD: TOTAL SCORE = SUM OF BOLDFACED ITEMS _____

Parents have become increasingly concerned with issues of safety and crime in Ottawa.... Answer True or False to the following questions.

- | | | |
|---|----------|----------|
| 5.17 I do not feel safe in this neighbourhood. | T | F |
| 5.18 While living in this neighbourhood my property has been damaged. | T | F |
| 5.19 My neighbours have been vandalized. | T | F |
| 5.20 My home has been broken into. | T | F |
| 5.21 My neighbour's home has been broken into. | T | F |

5.22 Homes in the neighbourhood have been broken into. T F

5.23 I or my children have been threatened or assaulted. T F

5.24 The police have been called to my home. T F

5.25 The police have been called to the neighbourhood. T F

5.26 Total Boldfaced Items: _____

6. MEDICAL/PSYCHIATRIC HISTORY

{IF SINGLE PARENT FAMILY ASK PARENT FOR SAME INFORMATION ABOUT ABSENT BIOLOGICAL PARENT - SCORE SEPARATELY}

6.1 Have you ever suffered from a long-term medical illness?

- 0 No
1 Yes [specify]: _____

6.2 Have you ever been hospitalized for medical reasons?

- 0 No
1 Yes [specify]: _____

6.3 Are you currently seeing a counsellor? (i.e., doctor, psychiatrist, psychologist, therapist, other mental health professional)

- 0 No
1 Yes [Specify]: _____

6.4 Reason for treatment?

- 0 Not receiving treatment

1 Yes [Specify]: _____

7: SUBSTANCE ABUSE

{ASK PARENT FOR SAME INFORMATION ABOUT ABSENT BIOLOGICAL
PARENT - SCORE SEPARATELY}

7.1 Do you drink alcohol? If yes, how much and how often?

- 0 Never
- 1 Less than once per month
- 2 Monthly
- 3 Weekly
- 4 Daily

7.2 Do you know if TC's father drinks?

- 0 No
- 1 Yes
- 2 Don't know

7.3 Do you use any nonprescription drugs?
How much and how often?

- 0 Never
- 1 Less than once per month
- 2 Monthly
- 3 Weekly
- 4 Daily

7.4 Do you know if TC's uses nonprescription drugs?

- 0 No
- 1 Yes
- 2 Don't know

{IF PARENT RESPONDED YES TO ANY OF THE QUESTIONS ABOVE,
PROCEED WITH THE FOLLOWING. IF NOT, GO TO SECTION 8}

7.5 Have drugs or alcohol ever contributed to violation
of the law?

- 0 No
- 1 Yes

7.6 Have drugs or alcohol ever contributed to a law violation for TC's father?

- 0 No
- 1 Yes
- 2 Don't know

7.7 Has your use of drugs or alcohol ever contributed to problems with your marital or family situation? Or have friends ever complained about your drinking or drug use?

- 0 No
- 1 Yes

7.8 Has this been a problem for TC's father?

- 0 No
- 1 Yes
- 2 Don't know

7.9 Has your use of drugs or alcohol ever contributed to problems with school or employment opportunities?

- 0 No
- 1 Yes

7.10 Has this been a problem for TC's father?

- 0 No
- 1 Yes
- 2 Don't know

7.11 Has your use of drugs or alcohol ever contributed to physical complaints or has a medical doctor warned you about alcohol/drug use.

- 0 No
- 1 Yes

7.12 Has this been a problem for TC's father?

- 0 No
- 1 Yes
- 2 Don't know

INTERVIEWER TO DETERMINE SEVERITY OF CURRENT ALCOHOL AND DRUG USE ON BASIS OF INFORMATION PROVIDED ABOVE.

7.13 PARENT

- 1 No problem
- 2 Moderate problem
- 3 Extreme problem

7.14 ABSENT PARENT

- 1 No problem
- 2 Moderate problem
- 3 Extreme problem

8. CRIMINAL HISTORY

{IF SINGLE PARENT FAMILY ASK PARENT FOR SAME INFORMATION ABOUT ABSENT BIOLOGICAL PARENT - SCORE SEPARATELY}

8.1 Have you ever been convicted of a criminal offence or have you had any difficulties with the police?

- 0 No
- 1 Yes

{IF NO SKIP TO QUESTION 8.4}

8.2 Number of convictions.

[Specify]: _____

8.3 Type of offence(s) and when they occurred.

[Specify]: _____

8.4 Has TC's father ever been convicted of a criminal offence?

- 0 No
- 1 Yes
- 2 Don't Know

8.5 Number of convictions.

[Specify]: _____

8.6 Type of offence(s) and when they occurred.

[Specify]: _____

{IF "NO" SKIP TO SECTION 9}

8.7 Have you ever been on probation?

- 0 No
- 1 Yes

8.8 Has TC's father ever been on probation?

- 0 No
- 1 Yes
- 2 Don't know

8.9 Have you ever been incarcerated?

- 0 No
- 1 Yes

8.10 Has TC's father ever been incarcerated?

- 0 No
- 1 Yes
- 2 Don't know

8.11 Were you ever in trouble as a juvenile?

- 0 No
- 1 Yes

8.12 Has TC's father ever been in trouble as a juvenile?

- 0 No
- 1 Yes
- 2 Don't know

8.13 Have you ever been arrested for assault/violence?

- 0 No
- 1 Yes

8.14 Has TC's father ever been arrested for assault/violence?

- 0 No
- 1 Yes
- 2 Don't know

9: LEISURE/RECREATION

9.1 Are you currently involved with any formal organizations (i.e., service club, sports club or team, church, etc.)

0 No

1 Yes [Specify]: _____

9.2 What types of activities are you involved in during your free time? [Specify]:

1. _____
2. _____
3. _____
4. _____

9.3 INTERVIEWER TO RATE USE OF LEISURE TIME:

1 Good use of leisure time.

0 Poor use of leisure time.

10. FAMILY EVENTS LIST

During the last THREE WEEKS, have any of the following events occurred in your immediate family?

{INTERVIEWER TO PLACE A CHECK MARK BESIDE EACH ITEM ANSWERED "YES" BY THE PARENT.}

FAMILY

10.1 Someone moved in with the family for a day or more.

10.2 Someone that was living with the family for a month or more left (not a parent).

10.3 Parent left town overnight or longer.

10.4 One of the children left town overnight or longer.

10.5 Argument with boyfriend

- 10.6 Argument with child.
- 10.7 Conflict with ex-spouse.
- 10.8 Conflict with relative.
- 10.9 Family member is pregnant.
- 10.10 Birth of a child.

HOUSEHOLD AND TRANSPORTATION

- 10.11 Didn't have enough money to pay the bills.
- 10.12 A major repair was necessary for car or household item.
- 10.13 Babysitter quit.
- 10.14 Moved.
- 10.15 Sentimental, useful, or valuable item lost.
- 10.16 Automobile accident.

ECONOMIC

- 10.17 Trouble with boss or coworker at work or school.
- 10.18 Lost job or began a new job.
- 10.19 Something stolen from family member.

HEALTH

- 10.20 Someone in the family was ill or in the hospital for longer than three days.
- 10.21 Someone in the family, a relative died.

SCHOOL

- 10.22 Child started a new school.

10.23 School called to complain about child's behaviour.

10.24 Child was suspended from school.

10.25 School complained about child's academic progress (doing poorly).

SOCIAL

10.26 Parent had a serious disagreement with a neighbour or friend.

10.27 Child had a serious disagreement with a neighbour or friend.

LEGAL

10.28 Family member was arrested.

10.29 Policeman came to the door.

10.30 Family member in jail.

10.31 Other problems [Specify]: _____

10.32 TOTAL SCORE ON THE FAMILY EVENTS LIST: _____

In the last part of the interview I would like to ask you how you feel about a number of issues concerning society in general. That is, how you feel about laws, police, and your attitudes about day-to-day events. Remember there are no right or wrong answers, I simply want your impressions.

11. CRIMINAL ATTITUDES AND SENTIMENTS

{USE STRONGLY AGREE - STRONGLY DISAGREE CARD}

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	2	3	4	5

Tolerance for Law Violations

11.1 Sometimes a person like me has to break the law to get ahead. 1 2 3 4 5
[5 4 3 2 1]

11.2 Most successful people broke the law to get ahead. 1 2 3 4 5
[5 4 3 2 1]

11.3 You should always obey the law, even if it keeps you from getting ahead in life. 1 2 3 4 5

11.4 It's OK to break the law as long as you don't get caught. 1 2 3 4 5
[5 4 3 2 1]

11.5 Most people would commit crimes if they knew they wouldn't get caught. 1 2 3 4 5
[5 4 3 2 1]

11.6 There is never a good reason to break the law. 1 2 3 4 5

11.7 A hungry person has the right to steal. 1 2 3 4 5
[5 4 3 2 1]

11.8 It's OK to get around the law as long as you don't actually break it. 1 2 3 4 5
[5 4 3 2 1]

11.9 You should only obey those laws that are reasonable. 1 2 3 4 5

11.10 You're crazy to work for a living if there's an easier way, even if it means breaking the law. 1 2 3 4 5
[5 4 3 2 1]

11.11 TLV TOTAL SCORE: _____

Identification with Criminal Others

11.12 People who have broken the law have the same sorts of ideas about life as I do. 1 2 3 4 5
[5 4 3 2 1]

11.13 I prefer to be with people who obey the law rather than people who break the law. 1 2 3 4 5

11.14 I'm more like a professional criminal than like people who break the law only now or then. and then. 1 2 3 4 5
[5 4 3 2 1]

11.15 People who have been in trouble with the law are more like me than people who don't have trouble with the law. 1 2 3 4 5
[5 4 3 2 1]

11.16 I have very little in common with people who never break the law. 1 2 3 4 5
[5 4 3 2 1]

11.17 No one who breaks the law can be my friend. 1 2 3 4 5

11.18 ICO SCALE- TOTAL SCORE: _____

12. SOCIALIZATION SCALE- CALIFORNIA PERSONALITY INVENTORY (CPI)

The remainder of questions that I would like to ask you require a "true" or "false" answer. Try to answer according to how you feel. If you agree or mostly agree with the statement answer "true". If you disagree or mostly disagree answer "false". If you are unsure choose which comes closest to your general feeling or to the way you usually feel.

- | | |
|---|---|
| 12.1 While I was in school I played hookey quite a bit. | F |
| *12.2 If someone dares me to do something, I usually do it. | F |
| 12.3 The way things look, it's pretty hard to keep up the hope of amounting to something. | F |
| 12.4 I feel more strongly about right and wrong than most people. | T |
| 12.5 Most things don't excite or thrill me. | F |
| 12.6 My parents often didn't like my friends. | F |
| 12.7 I was always happy about my home life. | T |
| 12.8 I often do things on the spur of the moment. | F |
| 12.9 Most of the time my parents let me make my own decisions. | T |
| 12.10 I wouldn't ask for a favour even if it meant going without something. | F |
| 12.11 I have had more things to worry about than most people. | F |
| 12.12 Before I do something I try to think of how my friends will react to it. | T |

- 12.13 When I was in school I was sometimes sent to the principle for fooling around. F
- 12.14 I try to stay out of trouble at all costs. T
- 12.15 I usually feel pretty happy. T
- 12.16 Many times I feel as though I have done something wrong or wicked. F
- 12.17 I have often done things against my parent's wishes. F
- 12.18 How I look, and what impression I am making upon others, is important to me. T
- *12.19 I have never drank heavily. T
- 12.20 It is hard for me to drop, or break with a friend. T
- 12.21 When I was younger I often felt like leaving home. F
- 12.22 The way I look has never worried me. F
- 12.23 My sex behaviour has gotten me into trouble before. F
- *12.24 If I see trouble I go out of my way to meet it rather than to try to escape it. F
- 12.25 My home life was never enjoyable. F
- 12.26 I seem to have more regrets than other people about the things I do. F
- 12.27 My table manners are better when I am out in company than they are at home. T
- 12.28 It doesn't take much for someone to win an argument with me. F
- 12.29 Seeing a smart lawyer get a criminal free makes me pretty discouraged with the law. T

- 12.30 At times in the past I drank far too much alcohol. **F**
- 12.31 Even when I have gotten into trouble I was usually trying to do the right thing. **T**
- 12.32 Having enough friends and social life is very important to me. **T**
- 12.33 I often had the urge to run away from home. **F**
- *12.34 I have gotten a pretty raw deal out of life. **F**
- 12.35 I often find people talking about me behind my back. **F**
- 12.36 When I was in school I used to give the teachers a lot of trouble. **F**
- 12.37 I think most other people are happier than I am. **F**
- 12.38 When I was a youngster I stole something occasionally. **F**
- 12.39 When I was a child my home was less peaceful and quiet than those of most other people. **F**
- 12.40 If I could make enough money I would like to travel with a circus or carnival. **F**
- *12.41 Going to school never interested me much. **F**
- 12.42 My family was always very close to one another. **T**
- 12.43 I don't think my parents ever really understood me. **F**
- *12.44 The only way to get along nowadays is not to trust anyone. **F**

- 12.45 My parents were very strict (lots of rules). **F**
- 12.46 My parents liked to know where I was when I was out of the house. **T**
- 12.47 The idea of giving a talk in public makes me afraid. **T**
- 12.48 I know who is responsible for most of my troubles. **T**
- 12.49 I get nervous when I apply for a job. **T**
- 12.50 It is hard for me to act natural when I am with new people. **T**
- 12.51 I have never been in trouble with the law. **T**
- 12.52 When I meet people for the first time I often think that they are better than I am. **F**
- 12.53 I am somewhat afraid of the dark. **T**
- 12.54 I often feel that I made a wrong choice with regard to my lifestyle and career. **F**

Sum all circled items.

12.55 TOTAL SCORE: SOCIALIZATION : _____

13. PSYCHOPATHY SCALE

- 13.1 The only way to make big money is to steal it. T
- 13.2 I used to get into a lot of fights at school. T
- 13.3 I do what I want to, whether anybody likes it or not. T
- 13.4 I don't mind lying if I am in bad trouble. T
- 13.5 The only way to settle anything is to fight it out. T
- 13.6 A lot of times its fun to be in jail. T
- 13.7 I would rather be at home when things go wrong. F
- 13.8 I'm really too tough a person to get along with most people. T
- 13.9 I have run away from home. T
- 13.10 Police and judges will tell you one thing and do another. T
- 13.11 Winning a fight is more fun than anything. T
- 13.12 If you don't have enough to live on it's okay to steal. T
- 13.13 If somebody does something to me, I always get them back. T
- 13.14 A person like me hits first and asks questions later. T
- 13.15 The people that run things are usually against me. T
- 13.16 Police usually treat you dirty. T

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13.17 If the police don't like you, they will get you for anything. T

13.18 Most brothers and sisters are more trouble than they are worth. T

13.19 It's dumb to trust older people. T

13.20 I would have been more successful if people would have given me a fair chance. T

SUM ALL ITEMS CIRCLED. INCLUDE THE FOLLOWING ITEMS FROM THE SOCIALIZATION SCALE - BUT REVERSE THE SCORING 12.2, 12.19, 12.24, 12.34, 12.41, 12.44.

13.21 TOTAL SCORE PSYCHOPATHY: _____

INTERVIEWER IMPRESSIONS - PARENT INTERVIEW

FAMILY I.D. #: _____

FIRST NAME: _____

DATE: ____ / ____ / ____
 M D Y

INTERVIEWER: _____

Please rate the following statements concerning the parent who was interviewed according to how accurate you feel the statements are. Base your judgments on your interaction with the parent during the interview and try to exclude any other information you may have encountered. In the end, please indicate how long this interview took you, including your completion of this instrument.

1. In general, how accurate would you say that the information received from this parent is?

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

2. Parent seemed to enjoy parenting.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

3. In general, the parent seemed accepting of the target child.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

4. How would you describe this parent's social skills during the interview?

Exceptional	Above Average	Average	Below Average	Very Poor
1	2	3	4	5

5. How would you describe this parent's attitude toward social conventions?

Very Conforming	Somewhat Conforming	Neutral	Somewhat Deviant	Very Deviant
1	2	3	4	5

6. Parent appeared tense/anxious during the interview?

Very Much	Somewhat	Neutral	Not Much	Not at All
5	4	3	2	1

7. TC seems to be well supervised by the parent?

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
1	2	3	4	5

8. Parent was a very slow reader or nonreader.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
5	4	3	2	1

9. Parent resisted answering certain questions.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
5	4	3	2	1

10. Parent had a negative attitude toward the interviewer.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
5	4	3	2	1

11. Parent had difficulty answering many of the questions.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
5	4	3	2	1

12. Parent appeared tired, agitated.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
5	4	3	2	1

13. Parent appeared depressed or complained of depression.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
5	4	3	2	1

14. Dwelling neat and orderly.

Totally Accurate	Somewhat Accurate	Neither	Slightly Inaccurate	Very Inaccurate
1	2	3	4	5

15. How long did the interview take (total time)?

Beginning time: ____:____

Ending time: ____:____

Total: ____:____

Indicate below any concerns, observations, or additional information that you feel is important in assessing this family.

Appendix F

Child Interview

Child Interviewer Impressions Rating Scale

Child Interview

FAMILY I.D. #: _____

CHILD'S FIRST NAME: _____

DATE: ____ / ____ / ____
 M D Y

INTERVIEWER: _____

AGE OF CHILD: _____

SEX: M F

I am going to ask you a lot of questions about you, your family, and things you like to do. There are no right or wrong answers; we are only interested in learning more about kids and their families. We are talking to a lot of different kids your age, and what we find out from all of you will really help us understand families better.

Your answers are private and no one else will know what your answers are.

If you don't understand any question, or just don't feel comfortable about answering something, just let me know.

First I'd like to ask you some questions about things you do on a day-to-day basis.

PART I: PARENTING BEHAVIOUR**1. PARTICIPATION IN ACTIVITIES**

1.1 What kinds of things do you like to do after school (hobbies, sports, etc.)?

[LIST]:

INTERVIEWER TO RATE: (CIRCLE PRIMARY ACTIVITY)

Child involved in activities outside of home:

- 1 Community activities (organized)
- 2 School activities (organized)
- 3 Unorganized activities outside of home
- 4 No activities outside of home

[INTERVIEWER TO SOLICIT SPECIFIC INFORMATION RE: PARTICIPATION IN ACTIVITIES]

1.2 Do you participate in any sports with adult instruction or coaching?

- 0 No
- 1 Yes

1.3 Do you participate in any nonsport activities with adult instruction (ie., music, dance, etc.)?

- 0 No
- 1 Yes

1.4 Do you participate in a club or group with adult leadership?

- 0 No
- 1 Yes

1.5 If you compared yourself to other kids how would you rate your skill in sports?

- 1 Excellent
- 2 Very Good
- 3 Good
- 4 Fair
- 5 Poor

1.6 How would you rate your ability/skill in the nonsport activities you participate in?

- 1 Excellent
- 2 Very Good
- 3 Good
- 4 Fair
- 5 Poor

1.7 In the last year, how often have you done activities, such as sports, hobbies, crafts, or games with your mother?

- 1 Almost every day
- 2 Most days
- 3 Hardly ever
- 4 Never

1.8 Generally, how much do you enjoy doing these activities with your mother?

- 1 Very much
- 2 Mostly
- 3 Somewhat
- 4 Slightly
- 5 Not at all

1.9 About how much time in a week do you and your mom spend sitting around or doing something that you enjoy together (other than watching TV or eating meals)?

- 1 More than 5 hours per week
- 2 A couple of hours per week
- 3 Usually no time

2. MONITORING

Now I'm interested in asking you some questions about the kinds of rules you are expected to follow.

[INTERVIEWER SHOULD ELICIT INFORMATION TO RESPOND TO THE SUPERVISION QUESTION OF THE INTERVIEWER IMPRESSIONS SCALE]

2.1 Do you ever go out without telling your mother exactly where you are going?

- 1 Never
- 2 Sometimes
- 3 Always

2.2 Would your mother know if you came in late?
REVERSE SCORING

- 1 Never
- 2 Sometimes
- 3 Always

2.3 How many hours per week do you spend outside the home without adult supervision (on own or with friends)?

SPECIFY # HOURS/WK: _____

2.4 In comparison to other kid's parent's would you say that your mother is:

- 1 Strict (too many rules)
- 2 50/50 (some rules; in between)
- 3 Easy/Permissive (not many rules)

3. MONITORING SCALE 1 (Loeber, Dishion, Patterson, 1984)

3.1 How often does your mother know where you are when you are not in school?

[READ RESPONSES]

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

3.2 Is it important for your mother to know where you are all the time?

[READ RESPONSES]

- 1 Very Important
- 2 Somewhat Important
- 3 Neither
- 4 Not Very Important
- 5 Not at All Important

3.3 How often do you spend time with your mother?

- 1 Often
- 2 Sometimes
- 3 Hardly ever
- 4 Never

3.4 How often do you share your thoughts and feelings with your mother?

- 1 Often
- 2 Sometimes
- 3 Hardly ever
- 4 Never

3.5 When you have a problem who do you usually go to?

[SPECIFY]: _____

INTERVIEWER TO CODE:

- 1 Parent
- 2 Relative
- 3 Friend
- 4 Other

3.6 INTERVIEWER TO DETERMINE TOTAL SCORE (SUM OF ITEMS 1-5)

TOTAL SCORE: _____

MONITORING SCALE II (Patterson & Bank, 1987)

3.7 How often do you tell your parents when you'll be home?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

3.8 How often do you leave a note tell someone where you are going if your mother isn't home when you go out?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

3.9 How often do you check in with your mother after school?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

3.10 How often do you know where to reach your mother if she is out?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

3.11 How often do you talk to your mother about daily plans?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

3.12 INTERVIEWER TO DETERMINE TOTAL SCORE (SUM OF ITEMS 7-12)

TOTAL SCORE: _____

4. DISCIPLINE

4.1 How often can you do things without getting punished by your mother that other kids would get in trouble for?
REVERSE SCORING

- 1 Always
- 2 Sometimes
- 3 Never

4.2 If your mother decides to punish (discipline) you for doing some-thing that she doesn't like how often can you find a way out of it (or she forgets)?
REVERSE SCORING

- 1 Always
- 2 Sometimes
- 3 Never

4.3 If you do something wrong how often do you know what kind of punishment to expect?

- 1 Always
- 2 Sometimes
- 3 Never

4.4 In general, how often would you say that your mother ignores your misbehaviour rather than punish it?
REVERSE SCORING

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

4.5 TOTAL SCORE - ITEMS 1-5:_____

5. DISOBEDIENCE SCALE

5.1 Are there any places where your mother does not want you to go?

- 0 No
- 1 Yes [Specify]:_____

[IF NO SKIP TO QUESTION 5.3]

5.2 Do you go to any of these places?
REVERSE SCORING

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

5.3 Do you have any friends that your mother disapproves of?

- 0 No
- 1 Yes

[IF NO SKIP TO QUESTION 5.5]

5.4 How often do you see friends that your mother disapproves of?

REVERSE SCORING

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

5.5 Do you have any house rules (i.e., time expected to go to bed, come home, etc.)

- 0 No
- 1 Yes

[IF NO SKIP TO QUESTION 5.7]

5.6 In general, do you follow your mother's rules?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

5.7 Are you expected to do chores around the house?

- 0 No
- 1 Yes

[IF NO SKIP TO NEXT SECTION]

5.8 How often do you do your chores?

- 1 Always
- 2 Most of the time
- 3 Sometimes
- 4 Hardly ever
- 5 Never

5.9 INTERVIEWER TO CALCULATE:

SUM ITEMS 5.2, 5.4, 5.6, 5.8 : _____

5.10 INTERVIEWER TO CALCULATE: (To two decimal points)

DISOBEDIENCE SCALE SCORE: $\frac{\text{SUM OF ITEMS}}{\text{NUMBER OF ENDORSED ITEMS}}$ = _____

6. REGULATIONS/RESTRICTIONS (Wells & Rankin, 1988)

To what degree does your mother decide

- 1 = Mother has total control or most of the control
- 2 = 50/50, mother and child have equal input
- 3 = Child has total control or most of the control

6.1 who your friends are	1	2	3
6.2 the kinds of things you do (ie., sports, hobbies, etc.)	1	2	3
6.3 the kind of clothes you wear	1	2	3
6.4 the kinds of movies and T.V. programs you watch.	1	2	3
6.5 the types of places you can go.	1	2	3

6.6 Total Score: _____

PART II- FAMILY RELATIONS

Now I'd like to ask you some questions about how you get along with your family.

1.1 Generally speaking, how well do you get along with your mother?

- 1 Not at all
- 2 Not too well
- 3 Okay
- 4 Quite well
- 5 Very well

{SKIP FOLLOWING QUESTION IN FAMILIES WITH ONE CHILD}

1.2 In general, how well do you get along with your brothers or sisters?

- 1 Not at all
- 2 Not too well
- 3 Okay
- 4 Quite well
- 5 Very well

1.3 When you are an adult would you like to be like your mom (ie., personality)?

- 0 No
- 1 Somewhat
- 2 Yes

1.4 Would your mom stick by you if you got into trouble?

- 0 No
- 1 Depends
- 2 Depends
- 3 Yes

1.5 TOTAL SCORE: _____

Van Voorhis et al., 1988

2. FAMILY QUALITY

Now I would like you to rate how strongly you agree or disagree with the following statements. Use "VERY STRONGLY AGREE - VERY STRONGLY DISAGREE" card.

- 1 Very Strongly Agree
- 2 Strongly Agree
- 3 Agree
- 4 Uncertain
- 5 Disagree
- 6 Strongly Disagree
- 7 Very Strongly Disagree

Enjoyment of Home

2.1 I take pride in having my friends over. 1 2 3 4 5 6 7

2.2 I enjoy being at home. 1 2 3 4 5 6 7

2.3 My home life is better than most kids. 1 2 3 4 5 6 7

2.4 Total Score : _____

Supervision

2.5 My mother has a say in the kinds of things I do (i.e., activities, etc.) 1 2 3 4 5 6 7

2.6 I need my mother's permission to go out a night. 1 2 3 4 5 6 7

2.7 Total Score: _____

Conflict

- 2.8 My mother is often angry. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.9 People in the family hit each other a lot. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.10 My mother makes me feel uptight. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.11 I argue a lot with my mother. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.12 I get upset because people in our family argue alot. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.13 Total score: ____

Affection

- 2.14 My mother cares for me. 1 2 3 4 5 6 7
- 2.15 My mother shows me that she loves me. 1 2 3 4 5 6 7
- 2.16 I feel close to my mother. 1 2 3 4 5 6 7
- 2.17 Sometimes I don't feel love for my mother. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.18 Sometimes I feel that my mother doesn't love me. 1 2 3 4 5 6 7
[7 6 5 4 3 2 1]
- 2.19 My mother knows that I care for her. 1 2 3 4 5 6 7
- 2.20 I tell my mother that I care for her. 1 2 3 4 5 6 7
- 2.21 Total Score: ____
- 2.22 Combined Score: ____

3. GENERAL FUNCTIONING (FAMILY) (Epstein, Baldwin, Bishop, 1983)

Now I'd like to ask you a few questions about your family (Family refers to members residing in household only). (Use 4-point "STRONGLY AGREE - STRONGLY DISAGREE" card).

- 1 = Strongly agree Select 1 if you feel that the statement describes your family very accurately.
 2 = Agree Select 2 if you feel that the statement describes your family for the most part.
 3 = Disagree Select 3 if you feel that the statement does not describe your family for the most part.
 4 = Strongly Disagree Select 4 if you feel that the statement does not describe your family at all.

- | | |
|--|----------------------------------|
| 3.1 Planning family activities is difficult because we misunderstand each other. | 1 2 3 4
[4 3 2 1] |
| 3.2 In times of crisis we can turn to each other for support. | 1 2 3 4 |
| 3.3 We cannot talk to each other about the sadness we feel. | 1 2 3 4
[4 3 2 1] |
| 3.4 Individuals in the family are accepted for what they are. | 1 2 3 4 |
| 3.5 We avoid discussing our fears and concerns. | 1 2 3 4
[4 3 2 1] |
| 3.6 We can express feelings to each other. | 1 2 3 4 |
| 3.7 There are lots of bad feelings in the family. | 1 2 3 4
[4 3 2 1] |
| 3.8 We feel accepted for what we are. | 1 2 3 4 |
| 3.9 Making decisions is a problem for our family. | 1 2 3 4
[4 3 2 1] |

3.10 We are able to make decisions
about how to solve problems.

1 2 3 4

3.11 We don't get along well together.

1 2 3 4
[4 3 2 1]

3.12 We confide in each other.

1 2 3 4

3.13 TOTAL SCORE: _____

PART III: CHILD BEHAVIOUR/ATTITUDES**1. SCHOOL PERFORMANCE**

1.1 What average grade did you receive in school last year?

- 1 A Excellent
- 2 B Good
- 3 C Average
- 4 D Poor
- 5 E
- 6 F

1.2 How important is it for you to get good grades in school?

- 1 Very important
- 2 Somewhat important
- 3 Fairly important
- 4 Not important
- 5 Don't know

1.3 How important do you think grades are to get the kind of job you might want?

- 1 Very important
- 2 Somewhat important
- 3 Fairly important
- 4 Not important
- 5 Don't know
- 6 Don't care

1.4 How far do you think you will go in school?

- 1 4 or more years college, university
- 2 1-3 years college, university
- 3 12th grade
- 4 9th-11th grade
- 5 0-8th grade
- 6 Don't know

1.5 How often do you finish your homework?

- 1 Always
- 2 Sometimes
- 3 Occasionally
- 4 Never
- 5 Doesn't have homework

1.6 How seriously do you take your school work?

- 1 Very seriously
- 2 Seriously
- 3 50/50
- 4 Not very seriously
- 5 Not at all seriously
- 6 Don't know

1.7 Do you have any trouble keeping your mind on school work?

- 1 Almost Never
- 2 Sometimes
- 3 Often

1.8 In general, how much do you like school?

- 1 Very much
- 2 Mostly
- 3 Somewhat
- 4 Slightly
- 5 Not at all

1.9 Have you ever failed a grade?

- 0 No
- 1 Yes [Specify]: _____

{INTERVIEWER TO RATE}

1.10 Remedial education

0 No

1 Yes [Specify]: _____

1.11 How well do you get along with your teachers?

1 Very well

2 Quite well

3 Okay (50/50)

4 Not very well

5 Poorly

1.12 TOTAL SCORE: _____

2. DIFFERENTIAL ASSOCIATION SCORE

Now I am going to ask you some more questions about people you know. Try to tell me your own feelings not what you've heard from someone else. Remember whatever you tell me is confidential.

2.1 Do you have a special friend or friends that you spend time with on a regular basis? (ie., does things with a friend(s) at least 2 or 3 times per week).

0 No

1 Yes

2.2 SPECIFY # OF CLOSE FRIENDS

2.3 In general, how well do you get along with kids your age?

1 Very well

2 Quite well

3 Okay 50/50

4 Not well

5 Not at all well

2.4 Do you have anyone that you can talk to or confide in about your problems?

- 0 No
- 1 Yes

2.5 Think back to the first friends you can remember. Were any of them in trouble with school authorities at the time you knew them?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.6 Were any of the first friends you can remember in trouble with the police or did they ever do things that were against the law?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.7 Now think of kids your age that you have known for the longest time. Were any of them ever in trouble with school authorities?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.8 Were any of these kids ever in trouble with the police or do things against the law?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.9 Think of the friends that you have spent the most time with. Were any of them ever in trouble with school authorities (i.e., teachers, principal, etc.)?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.10 Were any of them ever in trouble with the police or did they do things that are against the law?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.11 Have any of your best friends been in trouble with school authorities while they were your best friends?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.12 Have any of your best friends been in trouble with the police or have they done things that were against the law while they were your best friend?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.13 Do any of your friends right now break the law or get into trouble with the police?

- 1 Most
- 2 Several
- 3 Very few
- 4 None

2.14 Would you say that young people do or have done a lot of things against the law in your neighbourhood?

- 1 Most were
- 2 Several were
- 3 Very few were
- 4 None were

2.15 Do you know any adults who have broken the law or been in trouble with the police?

- 1 Very well
- 2 Fairly well
- 3 Not very well
- 4 Only knew their names
- 5 Didn't even know their names

2.16 How well have you known anyone who has broken the law or been in trouble with the police?

- 1 Very well
- 2 Fairly well
- 3 Not very well
- 4 Only knew their names
- 5 Didn't even know their names

2.17 In general, where did you meet most of your friends?

- 1 School
- 2 Neighbourhood

Child Interviewer Impression Rating Scale

FAMILY I.D. #: _____

DATE: ____/____/____
 M D Y

INTERVIEWER: _____

Fill out this instrument as soon as possible after the interview. Please rate the following statements concerning this child according to how accurate you think the statements are. Base your judgments on your interaction with the child and try to exclude any other information you may have encountered.

This child....

1. was cooperative during the interview.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

2. seemed to answer the questions honestly.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

3. seemed shy and withdrawn.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
5	4	3	2	1

4. seemed generally positive toward the interviewer.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

5. seemed uncomfortable or threatened by some of the questions.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
5	4	3	2	1

6. seemed satisfied with his/her homelife.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

7. seemed to be well-supervised by his/her parent.

Very Accurate	Somewhat Accurate	Neither	Somewhat Inaccurate	Very Inaccurate
1	2	3	4	5

8. seemed tense/anxious during the interview?

Very Much	Somewhat	Neutral	Not Much	Not at All
5	4	3	2	1

9. How would you describe this child's social skills during the interview?

Exceptional	Above Average	Average	Below Average	Very Poor
1	2	3	4	5

10. How would you describe this child's attitude toward social conventions?

Very Conforming	Somewhat Conforming	Neutral	Somewhat Deviant	Very Deviant
1	2	3	4	5

11. INTERVIEWER TO CALCULATE TOTAL SCORE:

SUM OF ITEMS 1-10: _____

12. How long did the interview take (total time)?

Beginning time: ____:____

Ending time: ____:____

Total: ____:____

Indicate below any concerns, observations, or additional information that you feel is important in assessing this family.

Appendix G

Measures for Domain I: Child Problematic Behaviour

- Contents:**
- 1. Socialized Aggression Subscale**
 - 2. Conduct Disorder Subscale**
 - 3. Home Disobedience Scale**
 - 4. Total Aversive Behaviour**

1. Socialized Aggression Subscale

Parent Interview:

- | | | | |
|---|---|---|---|
| 1. Stays out late at night | 0 | 1 | 2 |
| 2. Steals in company with others | 0 | 1 | 2 |
| 3. Belongs to a gang | 0 | 1 | 2 |
| 4. Loyal to delinquent friends | 0 | 1 | 2 |
| 5. Truant from school, usually in company with others | 0 | 1 | 2 |
| 6. Has "bad" companions, ones who are always in trouble | 0 | 1 | 2 |
| 7. Uses drugs in company with others | 0 | 1 | 2 |
| 8. Steals from people outside the home | 0 | 1 | 2 |
| 9. Freely admits disrespect for moral values and laws | 0 | 1 | 2 |
| 10. Is part of a group that rejects school activities such as team sports, clubs, projects to help others | 0 | 1 | 2 |
| 11. Cheats | 0 | 1 | 2 |
| 12. Seeks company of older, "more experienced" companions | 0 | 1 | 2 |
| 13. Will lie to protect his/her friends | 0 | 1 | 2 |
| 14. Uses alcohol in company with others | 0 | 1 | 2 |
| 15. Admires and seeks to associate with "rougher peers" | 0 | 1 | 2 |
| 16. Runs away; is truant from home | 0 | 1 | 2 |
| 17. Openly admires people who operate outside the law | 0 | 1 | 2 |

Scoring: (0) No Problem (1) Mild Problem (2) Severe Problem

Scores range from 0-34, with higher scores indicating more severe behaviour problems.

2. Conduct Disorder Subscale

Parent Interview:

- | | | | |
|--|---|---|---|
| 1. Seeks attention; shows off | 0 | 1 | 2 |
| 2. Disruptive; annoys and bothers others | 0 | 1 | 2 |
| 3. Fights | 0 | 1 | 2 |
| 4. Has temper tantrums | 0 | 1 | 2 |

5. Disobedient; difficult to control	0	1	2
6. Uncooperative in group situations	0	1	2
7. Negative; tends to do the opposite of what is requested	0	1	2
8. Impertinent; talks back	0	1	2
9. Irritable, hot-tempered; easily angered	0	1	2
10. Argues; quarrels	0	1	2
11. Sulks and pouts	0	1	2
12. Persists and nags; can't take "no" for an answer	0	1	2
13. Tries to dominate others; bullies, threatens	0	1	2
14. Picks at other children as a way of getting attention; seems to want to relate but doesn't know how	0	1	2
15. Brags and boasts	0	1	2
16. Teases others	0	1	2
17. Selfish; won't share; always takes the biggest piece	0	1	2
18. Not liked by others; is a "loner" because of aggressive behaviour	0	1	2
19. Cannot stand to wait; wants everything right now	0	1	2
20. Refuses to take directions, won't do as told	0	1	2
21. Blames others; denies own mistakes	0	1	2
22. Deliberately cruel to others	0	1	2

Scoring: (0) No Problem (1) Mild Problem (2) Severe Problem

Scores range from 0-44, with higher scores indicating more severe behaviour problems.

3. Home Disobedience Scale

Child Interview:

- (1) Do you go to any of these places (ie., places that the parent does not want the child to go)?
- (2) How often do you see these friends (ie., friends that the parent does not approve of)?
- (3) Do you follow your parent's rules?
- (4) Do you do your chores?

Parent Interview:

- (1) How often does your child get home on time?
- (2) How often does your child go to these places (ie., places where the parent does not want the child to go)?
- (3) How often does your child see these people (ie., people the parent disapproves of)?
- (4) How often does your child obey them (ie., specified rules)?

The answer format is from 1 (always) to 5 (never). All items are followed by a question establishing the absence or presence of a parental rule. In case of the absence of the rule, the next question is skipped. For this reason, when the scores are added for the eight questions, the total is divided by the number of endorsed questions and is added to the total received on the items below.

- (5) This child disobeys at home
(0) not true (1) true (2) very true
- (6) This child disobeys at school
(0) not true (1) true (2) very true

Scores range from 2-46, with high scores indicating more severe behaviour problems.

4. Total Aversive Behaviour**Observational Ratings:****Definitions of Categories**

(1) Command Negative: A negative command differs from a reasonable command in the manner in which it is delivered. This kind of command must be characterized by at least one of the following: (i) immediate compliance is demanded; (ii) aversive consequences are implicitly or actually threatened if compliance is not immediate; (iii) sarcasm or humiliation is directed toward the receiver. Implicit use of aversive consequences is indicated by the tone of voice as well as the statement.

(2) Humiliate: This category was used when a person made fun of, shamed, or embarrassed another person. The tone of voice (in terms of nastiness or derisiveness), as well as the language used, is of prime importance in meeting the criteria for coding this category. Derisive or inappropriate laughter can also be humiliating. Playful verbal statements or nicknames are not humiliations. Some people call each other "stupid" more in terms of endearment than in humiliation.

(3) Negativism: This category is used only when a person makes a statement in which the verbal message is neutral, but which is delivered in a tone of voice that conveys an attitude of "don't but me," or "don't bother me." Also included are defeatist, "I-give-up" statements. This code is never to be used if the verbal meaning of the statement is interpreted as disapproving or humiliation.

(4) Whine: When a person uses a slurring, nasal, or high-pitched voice, use this category. The content of the statement can be an approving, disapproving, or neutral quality; the main element is the voice quality.

(5) Yell: This category is to be used whenever a person shouts, yells, or talks loudly. The sound must be intense enough that it is unpleasant or potentially aversive if carried on for a sufficient length of time.

(6) Disapproval: This category was used whenever a person gave a verbal or gestural criticism of another person's behaviour or characteristics. In verbal statements, it is essential that the content of the statement explicitly states criticism or disapproval of the subject's behaviours or attributes, looks, clothes, possessions, etc. Disapproval was coded only when verbal disapproval (ie., "I don't like you doing that") or the critical tone of voice was apparent. In addition, a disapproval was coded only if it was directed at someone within the dyad.

(7) Ignore: Is an intentional and deliberate non-response to an initiated behaviour. There is no doubt that the subject heard but has chosen not to respond.

(8) Tease: Teasing is defined as the act of annoying, pestering, mocking, or making fun of another person. Teasing behaviour is directed in such a manner that the other person is likely to show displeasure and disapproval. This behaviour is potentially provocative and disruptive to the other person.

(9) Noncompliance: This code is used when a person does not do what is requested of him in response to a command or command negative within 12 seconds of the request being made.

Scoring: Raters were provided with a transcript and audiotape made during the interaction task. They were then required to code the total number of aversive behaviours which occurred. A total aversive behaviour (TAB) rate was calculated by dividing the TAB score by the total number of minutes required to complete the task. High scores indicate a larger rate of aversive behaviour.

Appendix H

Measures for Domain II: Family Interaction

Contents: Parenting Behaviour

- 1. Monitoring Scale I**
- 2. Monitoring Scale II**
- 3. Global Impressions Checklist**
- 4. Discipline Scale**

Family Relations

- 5. Unrevealed Differences Questionnaire**
- 6. Observational Measures: Affect**
- 7. Observational Measures: Conflict**
- 8. General Family Functioning Scale**

1. Monitoring Scale I**Child Interview:**

1. How often does your mother know where you are when you are not in school?
Scoring: (1) always (2) most of the time (3) sometimes (4) hardly ever (5) never
2. Is it important for your mother to know where you are all the time?
Scoring: (1) very important (2) somewhat important (3) neither (4) not very important (5) not important at all
3. How often do you spend time with your mother?
Scoring: (1) often (2) sometimes (3) hardly ever (4) never
4. How often do you share your thoughts and feelings with your mother?
Scoring: (1) often (2) sometimes (3) hardly ever (4) never
5. When you have a problem, who do you usually go to?
Scoring: (1) parents (2) relatives (3) friends (4) other

Parent Interview:

1. How important do you think it is to know where your child is?
Scoring: (1) very important (2) somewhat important (3) neither (4) not very important (5) not important at all
2. Where does your child usually go after school?
Scoring: (1) comes home first (2) organized activities (3) out with friends (4) don't know

Interviewer Impressions (Child Interview):

1. This child seemed to be well supervised by his/her mother?

Scoring: (1) totally accurate (2) somewhat accurate
(3) neither (4) slightly accurate (5) very accurate

The total score is the sum of all items. The range is from 8 - 37 with a high score indicating insufficient parental monitoring.

2. Monitoring Scale II**Child Interview:**

1. How often do you tell your mother when you'll be home before you go out?
2. How often do you leave a note about where you are going?
3. How often do you check in after school?
4. How often is someone (an adult >18 years) home within one hour after school?
5. How often do you know how to reach parents if they are out?

Scoring: (1) always (2) most of the time (3) sometimes
(4) hardly ever (5) never

Interviewer Impressions (Child Interview & Parent Interview)

1. & 2. This child seemed to be well supervised by his/her mother?

Scoring: (1) totally accurate (2) somewhat accurate (3) neither (4) slightly inaccurate (5) very inaccurate

Parent Interview:

1. Would you know if your child came home an hour late?
2. Does your child tell you when s/he will be back before s/he goes out?
3. If you or a sitter are not at home, does your child leave a note for you, call you, or communicate with you in some way about where s/he is going?
4. When your child gets home from school, is there usually someone there within an hour (an adult, 18+ years)?
5. Does your child usually eat supper with the family?

Scoring: (1) always or almost always (2) often (3) about half the time (4) occasionally (5) never or almost never

The total score ranges between 12 - 60, with high scores indicating less effective monitoring practices.

3. Global Impressions Rating (Patterson & Bank, 1985)

Interviewer Impressions:

- (1) Parent did not give rationales to the child when compliance was expected
- (2) Parent overly strict (i.e., parent issued many commands; expectations were high; child's opinions or concerns not considered)
- (3) Parent erratic, inconsistent, haphazard
- (4) Parent permissive (i.e., parent gives in to child's commands or whims- child has control over parenting situation)
- (5) Parent used nagging to get compliance (i.e., parent nags at the child to get things done or to follow her commands)
- (6) Parent could not be teased out of sour mood (i.e., parent appears angry, upset, or concerned with child behaviour and is unable to respond to attempt made by other family members to drop negative attitude)
- (7) Parent did not follow-up on commands (i.e., parent requests that the child do something but does not ensure child compliance)

Scoring: (1) statement false (2) did not occur
(3) statement true

The total score is determined by calculating the average "true" responses across items. The higher the score the less effective the disciplinary practices.

4. Discipline Scale

Parent Interview:

1. If you tell your child s/he will get punished if he doesn't stop doing something, and he keeps doing it, how often will you punish him. [Reverse Scoring]
2. How often do you get angry when you punish your child?

3. How often do you think that the kind of punishment you give your child depends on your mood?
4. How often do you feel you are having problems managing your child in general?
5. How much of the time do you feel confident that you can change or correct your child's misbehaviour?
6. How often is your child able to get out of a punishment when s/he really sets his/her mind to it?
7. Discipline doesn't seem to work with him/her.
8. It gets discouraging when my child doesn't improve.
9. Discipline confrontations are too stressful and upsetting causing more trouble than leaving him alone.
10. I have so many other demands on my time that I can't give it all the attention I'd like.
11. I don't believe in discipline.
12. My child doesn't need disciplining more often.

Scoring: (1) always or almost always (2) often (3) about half the time (4) occasionally (5) never or almost never

Child Interview:

1. How often can you do things without getting punished by your mother that other kids would get in trouble for?
2. If your mother decides to punish you for doing something that she doesn't like, how often can you find a way out of it (or she forgets)?

3. If you do something wrong how often do you know what kind punishment to expect?

Scoring: (1) always (2) sometimes (3) never
[Reverse scoring for items 1-2]

4. In general, how often would you say that your mother ignores your misbehaviour rather than punish it?

Scoring: (1) always (2) most of the time (3) sometimes
(4) hardly ever (5) never
[Reverse scoring]

The total score ranges from 16 - 74 with high scores indicating less effective disciplinary practices.

5. Unrevealed Differences Questionnaire (Henggeler & Travormina, 1980)

Paper and Pencil Questionnaire (Parent and Child; Individual and Joint Administration):

Instructions:

Please rank-order the following items (that is, each of the different choices should be numbered according to your preference). For example, put the number 1 beside the answer you like best, a number 2 beside the answer which you feel is the next best, and so on.

1. The best thing about our family is how we
 - ☐ talk about our personal feelings
 - ☐ support and encourage each other
 - ☐ take care of ourselves
 - ☐ help each other out when needed
 - ☐ have strong ties with other relatives
2. In our family we need more
 - ☐ giving up things for each other
 - ☐ closeness and loyalty
 - ☐ love
 - ☐ individual freedom
 - ☐ discipline
3. Our biggest family problems should be
 - ☐ kept secret
 - ☐ openly talked about
 - ☐ blamed on all of us
4. A distant relative recently passes away and left the family \$500. What should be done with the money?
 - ☐ It should all be saved.
 - ☐ We should pay off some bills.
 - ☐ We should divide it equally among family members.
 - ☐ We should spend part on presents and save the rest.

5. Where should the family go for a vacation?

- ☐ beach
- ☐ mountains
- ☐ visit relatives outside of town
- ☐ New York City
- ☐ stay home and save money

6. The family is about to buy a used car. What kind should it get?

- ☐ pick-up truck
- ☐ fast sports car
- ☐ station wagon
- ☐ volkswagen
- ☐ cadillac

7. The school teacher telephones one evening when both parent and child are at home. The teacher says that the child has been skipping school. How should the problem be handled by the parent?

- ☐ the paren^t should explain how skipping school will affect the child's future
- ☐ the child should be told to stop skipping school
- ☐ the child should lose television/stereo privileges for a week
- ☐ the child should be warned that if s/he skips school again, s/he will be grounded for 4 weeks
- ☐ the parent should tell the child that s/he is very angry and disappointed
- ☐ the child should be taken to school every morning by his/her parent

8. A teenager was supposed to be home by midnight. It is now 2:00 in the morning when the teenager comes home. How should the problem be handled.

- the parent and teenager should sit down and discuss the teenager's reasons for staying out later than s/he was supposed to.
- the teenager should be told to come home on time in the future.
- the teenager should lose television/stereo privileges for a week.
- the teenager should be warned that if s/he comes home late again, s/he will be grounded for 4 weeks.
- the parent should tell the teenager that s/he is very angry and disappointed with him/her.
- the parent should pick the teenager up at midnight.

9. The child is spending more and more time with kids who have a reputation for causing trouble. How should the problem be handled?

- the parent should explain to the child how these friends could affect his/her future.
- the child should be told to stop spending time with these friends.
- the child should not be allowed out of the house after school for a week.
- the child should be warned that if s/he spends any more time with these friends, s/he will be grounded for four weeks.
- the parent should tell the child that s/he is very angry and disappointed with him/her.
- the parent should move the family to a different neighbourhood.

6. Affect Observational Ratings

(1) Qualitative Rating

Assess the presence or absence of behaviours such as acceptance, affection, understanding, concern, approval, empathy, pride in other person, to rate the level of affect in this family.

- 1 = Extremely Warm
- 2 = Warm
- 3 = Somewhat Warm
- 4 = Vacillate between mild levels of warm and cold
- 5 = Somewhat Cold
- 6 = Cold
- 7 = Extremely Cold

(2) Supportive Communication

This variable was scored when an individual requested or gave information that aroused minimal defensiveness, confined communication to problem solving, evidenced empathic understanding of another's feelings, or demonstrated equality through mutual trust and respect. The mother and child's total number of supportive communications was divided by that member's talking time to provide a rate. A dyadic score was then calculated by summing parent and child ratings.

7. Conflict Observational Ratings

(1) Qualitative Rating

The level of conflict was assessed by recording the presence of hostility, anger, sarcasm, annoyance, and irritation noted during the interaction task

- 5 = Extreme levels of conflict (argumentative/hostile)
- 4 = Conflict apparent but not extreme
- 3 = Some conflict
- 2 = Conflict rarely observed
- 1 = No conflict (cooperative/accommodating)

(2) Aggressive Communication

This variable was scored when one family member aggressed against another. Aggressions included contradictions, sarcasm, or any clear reaction of disdain to another's statement. A rate of each member's aggressions toward each other was derived by dividing the member's total number of aggressions against that member by his or her talking time. A dyadic score was then calculated by summing parent and child ratings.

(3) Defensive Communication

This variable was scored when an individual's statement evidenced judgmental-dogmatism (e.g., blaming, complaining, and negative criticism), control and strategy (e.g., insistence on great detail, restrictive rules, and rigid conformity), indifference and disregard for another family member, or an attitude of superiority (e.g., an unwillingness to enter a problem solving relationship or to receive feedback). The mother and child's total number of defensive communications was divided by that member's taking time to provide a rate. A dyadic score was then calculated by summing parent and child ratings.

7. General Family Functioning Scale

- | | | | | |
|---|----|---|---|----|
| 1. Planning family activities is difficult because we misunderstand each other. | 1 | 2 | 3 | 4 |
| | [4 | 3 | 2 | 1] |
| 2. In times of crisis we can turn to each other for support. | 1 | 2 | 3 | 4 |
| 3. We cannot talk to each other about the sadness we feel. | 1 | 2 | 3 | 4 |
| | [4 | 3 | 2 | 1] |
| 4. Individuals in the family are accepted for what they are. | 1 | 2 | 3 | 4 |
| 5. We avoid discussing our fears and concerns. | 1 | 2 | 3 | 4 |
| | [4 | 3 | 2 | 1] |

- | | | | | |
|--|---------|--------|--------|---------|
| 6. We can express feelings to each other. | 1 | 2 | 3 | 4 |
| 7. There are lots of bad feelings in the family. | 1
[4 | 2
3 | 3
2 | 4
1] |
| 8. We feel accepted for what we are. | 1 | 2 | 3 | 4 |
| 9. Making decisions is a problem for our family. | 1
[4 | 2
3 | 3
2 | 4
1] |
| 10. We are able to make decisions about how to solve problems. | 1 | 2 | 3 | 4 |
| 11. We don't get along well together. | 1
[4 | 2
3 | 3
2 | 4
1] |
| 12. We confide in each other. | 1 | 2 | 3 | 4 |

Scoring: (1) Strongly agree (2) Agree (3) Disagree
(4) Strongly disagree

The total score ranges from 12 - 48 with high scores indicating problematic family functioning.

Appendix I

Measures for Domain III: Parent Characteristics

- Contents:**
- 1. Psychopathy Scale**
 - 2. Socialization Scale**
 - 3. Tolerance for Law Violations**
 - 4. Identification with Criminal Others**
 - 5. Family Events Checklist**

1. Psychopathy Scale

Parent Interview:

1. The only way to make big money is to steal it.
2. I used to get into a lot of fights at school.
3. I do what I want to, whether anybody likes it or not.
4. I don't mind lying if I am in bad trouble.
5. The only way to settle anything is to fight it out.
6. A lot of times its fun to be in jail.
7. I would rather be at home when things go wrong.
8. I'm really too tough a person to get along with most people.
9. I have run away from home.
10. Police and judges will tell you one thing and do another.
11. Winning a fight is more fun than anything.
12. If you don't have enough to live on it's okay to steal.
13. If somebody does something to me, I always get them back.
14. A person like me hits first and asks questions later.
15. The people that run things are usually against me.
16. Police usually treat you dirty.
17. If the police don't like you, they will get you for anything.
18. Most brothers and sisters are more trouble then they are worth.
19. It's dumb to trust older people.
20. I would have been more successful if people would have given me a fair chance.
21. If someone dares me to do something, I usually do it.
22. I have never drank heavily.
23. If I see trouble I go out of my way to meet it rather than try to escape it.
24. I have gotten a pretty raw deal out of life.
25. Going to school never interested me much.
26. The only way to get along nowadays is not to trust anyone.

Scoring: Total number of false responses for items 7, 22 plus total number of true responses for all remaining items. High scores are indicative of psychopathy.

2. Socialization Scale

Parent Interview:

- | | | |
|---|---|---|
| 1. While I was in school I played hookey quite a bit. | T | F |
| 2. If someone dares me to do something, I usually do it. | T | F |
| 3. The way things look, it's pretty hard to keep up the hope of amounting to something. | T | F |
| 4. I feel more strongly about right and wrong than most people. | T | F |
| 5. Most things don't excite or thrill me. | T | F |
| 6. My parents often didn't like my friends. | T | F |
| 7. I was always happy about my home life. | T | F |
| 8. I often do things on the spur of the moment. | T | F |
| 9. Most of the time my parents let me make my own decisions. | T | F |
| 10. I wouldn't ask for a favour even if it meant going without something. | T | F |
| 11. I have had more things to worry about than most people. | T | F |
| 12. Before I do something I try to think of how my friends will react to it. | T | F |
| 13. When I was in school I was sometimes sent to the principle for fooling around. | T | F |
| 14. I try to stay out of trouble at all costs. | T | F |
| 15. I usually feel pretty happy. | T | F |
| 16. Many times I feel as though I have done something wrong or wicked. | T | F |
| 17. I have often done things against my parent's wishes. | T | F |
| 18. How I look, and what impression I am making upon others, is important to me. | T | F |
| 19. I have never drank heavily. | T | F |
| 20. It is hard for me to drop, or break with a friend. | T | F |
| 21. When I was younger I often felt like leaving home. | T | F |
| 22. The way I look has never worried me. | T | F |
| 23. My sex behaviour has gotten me into trouble before. | T | F |
| 24. If I see trouble I go out of my way to meet it rather than to try to escape it. | T | F |

25. My home life was never enjoyable.	T	F
26. I seem to have more regrets than other people about the things I do.	T	F
27. My table manners are better when I am out in company than they are at home.	T	F
28. It doesn't take much for someone to win an argument with me.	T	F
29. Seeing a smart lawyer get a criminal free makes me pretty discouraged with the law.	T	F
30. At times in the past I drank far too much alcohol.	T	F
31. Even when I have gotten into trouble I was usually trying to do the right thing.	T	F
32. Having enough friends and social life is very important to me.	T	F
33. I often had the urge to run away from home.	T	F
34. I have gotten a pretty raw deal out of life.	T	F
35. I often find people talking about me behind my back.	T	F
36. When I was in school I used to give the teachers a lot of trouble.	T	F
37. I think most other people are happier than I am.	T	F
38. When I was a youngster I stole something occasionally.	T	F
39. When I was a child my home was less peaceful and quiet than those of most other people.	T	F
40. If I could make enough money I would like to travel with a circus or carnival.	T	F
41. Going to school never interested me much.	T	F
42. My family was always very close to one another.	T	F
43. I don't think my parents ever really understood me.	T	F
44. The only way to get along nowadays is not to trust anyone.	T	F
45. My parents were very strict (lots of rules).	T	F
46. My parents liked to know where I was when I was out of the house.	T	F
47. The idea of giving a talk in public makes me afraid.	T	F

- | | | |
|---|----------|----------|
| 48. I know who is responsible for most of my troubles. | T | F |
| 49. I get nervous when I apply for a job. | T | F |
| 50. It is hard for me to act natural when I am with new people. | T | F |
| 51. I have never been in trouble with the law. | T | F |
| 52. When I meet people for the first time I often think that they are better than I am. | T | F |
| 53. I am somewhat afraid of the dark. | T | F |
| 54. I often feel that I made a wrong choice with regard to my lifestyle and career. | T | F |

Scoring: The total score equals the sum of the bold-faced items. The higher the score the more positive the social behaviour.

3. Identification with Criminal Others

- | | | | | | |
|---|----|---|---|---|----|
| 1. People who have broken the law have the same sorts of ideas about life as me. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 2. I prefer to be with people who obey the law rather than people who break the law. | 1 | 2 | 3 | 4 | 5 |
| 3. I'm more like a professional criminal than like people who break the law only now and then. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 4. People who have been in trouble with the law are more like me than people who don't have trouble with the law. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 5. I have very little in common with people who never break the law. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 6. No one who breaks the law can be my friend. | 1 | 2 | 3 | 4 | 5 |

Scoring: The total score equals the sum of circled items. Scores range from 6-30, with high scores indicating more deviant antisocial attitudes.

4. Tolerance for Law Violations

- | | | | | | |
|--|----|---|---|---|----|
| 1. Sometimes a person like me has to break the law to get ahead. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 2. Most successful people broke the law to get ahead. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 3. You should always obey the law, even if it keeps you from getting ahead in life. | 1 | 2 | 3 | 4 | 5 |
| 4. It's OK to break the law as long as you don't get caught. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 5. Most people would commit crimes if they knew they wouldn't get caught. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 6. There is never a good reason to break the law. | 1 | 2 | 3 | 4 | 5 |
| 7. A hungry person has the right to steal. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 8. It's OK to get around the law as long as you don't actually break it. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |
| 9. You should only obey those laws that are reasonable. | 1 | 2 | 3 | 4 | 5 |
| 10. You're crazy to work for a living if there's an easier way, even if it means breaking the law. | 1 | 2 | 3 | 4 | 5 |
| | [5 | 4 | 3 | 2 | 1] |

Scoring: The total score equals the sum of circled items.
 Scores range from 10-50, with high scores
 indicating more deviant antisocial attitudes.

5. Family Events Checklist

Parent Interview:

1. Someone moved in with the family for a day or more.
2. Someone that was living with the family for a month or more left (not a parent).
3. Parent left town overnight or longer.
4. One of the children left town overnight or longer.
5. Argument with boyfriend
6. Argument with child.
7. Conflict with ex-spouse.
8. Conflict with relative.

9. Family member is pregnant.
10. Birth of a child.
11. Didn't have enough money to pay the bills.
12. A major repair was necessary for car or household item.
13. Babysitter quit.
14. Moved.
15. Sentimental, useful, or valuable item lost.
16. Automobile accident.
17. Trouble with boss or coworker at work or school.
18. Lost job or began a new job.
19. Something stolen from family member.
20. Someone in the family was ill or in the hospital for longer than three days.
21. Someone in the family, a relative died.
22. Child started a new school.
23. School called to complain about child's behaviour.
24. Child was suspended from school.
25. School complained about child's academic progress (doing poorly).
26. Parent had a serious disagreement with a neighbour or friend.
27. Child had a serious disagreement with a neighbour or friend.
28. Family member was arrested.
29. Policeman came to the door.
30. Family member in jail.
31. Other problems [Specify]: _____
32. Other problems [Specify]: _____

Scoring: Total score equals sum of "yes" responses.

Appendix J

Measures for Domain IV: Community Factors

- Contents:**
- 1. Attitude Toward the Community**
 - 2. Differential Association Scale**
 - 3. Social Network Questionnaire**

1. Attitude Toward the Community**Parent Interview:**

1. How do you feel about the neighbourhood you are currently residing in?
 - 1 Very dissatisfied.
 - 2 Somewhat satisfied.
 - 3 Very satisfied.
2. How long do you plan to stay here?
 - 1 Wish to move as soon as possible.
 - 2 No plans.
 - 3 No interest in moving, like it here.
3. In general, how well do you know your neighbours?
 - 1 Not at all
 - 2 Somewhat
 - 3 Very well
4. In general do you get along well with your neighbours?
 - 1 Not at all
 - 2 Somewhat
 - 3 Very well
5. Do you have any close friends in the neighbourhood who you spend time with on a regular basis (i.e., weekly).
 - 1 Don't know anyone
 - 2 Choose not to socialize with anyone
 - 3 One or two
 - 4 More than two
6. Are you involved in neighbourhood activities or community meetings?
 - 0 No
 - 1 Yes

7. In general, people around here keep up their houses and yards.	T	F
8. Young people are always getting into trouble.	T	F
9. There aren't enough places for children to play.	T	F
10. Most people in the neighbourhood do not have work.	T	F
11. A lot of people moving in are running down the neighbourhood.	T	F
12. Most of the families in the neighbourhood know each other.	T	F
13. Most of my friends live in the neighbourhood.	T	F
14. Most people around here don't care what happens to you.	T	F
15. This is a good neighbourhood to raise my children in.	T	F
16. I do not feel safe in this neighbourhood.	T	F
17. While living in this neighbourhood my property has been damaged.	T	F
18. My neighbours have been vandalized.	T	F
19. My home has been broken into.	T	F
20. My neighbour's home has been broken into.	T	F
21. Homes in the neighbourhood have been broken into.	T	F
22. I or my children have been threatened or assaulted.	T	F
23. The police have been called to my home.	T	F
24. The police have been called to the neighbourhood.	T	F

Scoring: The total score equals the sum of circled responses for items 1 to 6 plus the sum of bold-faced responses circled for items 7 to 24. Scores range from 6 to 36, with high scores indicating satisfaction with the neighbourhood.

2. Differential Association Scale

Child Interview

1. Think of the friends you have been associated with **most often**. Were any of them in trouble with the police or do something against the law?
2. Think of the friends you have known **for the longest time**. Were any of them in trouble with the police or do something against the law?
3. Think back to the first friends you can remember. Were any of them in trouble with the police or doing something against the law at the time you first knew them?
4. Have any of your **best** friends been in trouble with the police or do something against the law while they were your best friend?
5. Do you know of young people who break the law where you live?
6. Have any of your friends broken the law?
7. Are any of your present friends in trouble with the police or have they broken the law?

Scoring: (1) most were, (2) several were, (3) very few were,
(4) none were

8. Do you know any adults who have broken the law? How well do you know them?

9. How well have you known anyone who has broken the law?

Scoring: (1) very well, (2) fairly well, (3) not very well,
(4) only knew their names, (5) didn't even know
their names.

The range of total scores was from 9, representing high involvement with those who break the law, to 38, representing little to no involvement with those who break the law.

3. Social Network Questionnaire

Parent Interview:

List those people who are most important to you. Include up to 20 people who you feel close too or who help you out. (For example, family, friends, professionals such as doctors, counsellors, etc.).

Just give the first name or initials and specify the type of relationship (i.e., mother, doctor, friend, etc.) you have with that person.

NAME OR INTITIAL

RELATION

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

SEX	TIME KNOWN (MONTHS)	LOCATION	FREQUENCY OF CONTACT
		1 = Within Neigh.	1 = Daily
		2 = Within City	2 = Weekly
		3 = Outside City	3 = More than once per month
			4 = Less than once per month

1.

2.

3.

4.

5.

6.

7.

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12.

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14.

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16.

17.

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19.

20.

Indicate how each frequently each person assists you with the following activities.

- 1 = Daily
- 2 = Weekly
- 3 = More than once per month
- 4 = Less than once per month
- 5 = Never

Child rearing info.	Information goods and services	Household help	Babysitting or help with kids	Emotional support	Personal & social (health, friends, etc.)
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1.

2.

3.

4.

5.

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10.

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12.

13.

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15.

16.

17.

18.

19.

20.

Indicate how helpful each person is.

1	2	3	4	5	6	7
Makes things a lot worse				Makes things a lot better		

Would this person
come to you to
for help or
information?

1 = Yes
2 = No

1.

2.

3.

4.

5.

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Appendix K

Protective Factors

- Contents:**
- 1. Gets along well with others**
 - 2. Good academic performance**
 - 3. Presence of good friendships**
 - 4. Good participation**
 - 5. Presence of confidante**
 - 6. Positive temperament**

1. Getting along with others

Parent Interview:

- (1) Child gets along well with parent.
- (2) Child gets along well with peers.
- (3) Child gets along well with teachers.

Scoring: (1) very well (2) quite well (3) moderately well (4) not well (5) not at all well

Present when a score of "very well" or "quite well" to all three was provided.

2. Good academic performance

Parent Interview:

- (1) Never failed or repeated a grade.
- (2) Never received remedial assistance.
- (3) Good or excellent student in the last three months.

Present when a positive response to all items was provided.

3. Presence of good friendships

Parent Interview:

- (1) Does things with a friend a least two or three times a week.
- (2) Has two or more close friends.

Present when a positive response to both items was provided.

4. Good participation

Parent Interview:

- (1) Sports with adult instruction or coaching.
- (2) Music, dance, or other nonsport activity with adult instruction.
- (3) Club or group with adult leadership.

Present when child participated in two or more activities from the above categories.

5. Presence of a confidant.

Child Interview:

- (1) Do you have anyone you can talk to or confide in about yourself or your problems?

Present when a positive response is provided to the above.

6. Positive Temperament

Parent Interview:

(1) High Activity Level:
Very active; always into things; made you tired; ran before s/he walked; wild or revved up; lost control, hated to be confined.

(2) Distractible:
Had trouble concentrating and paying attention; did not really listen.

(3) Poorly Adaptable:
Had trouble with transition or change of activities or routines; nagging and whining for things; stubborn- very persistent if s/he wants something; tantrums; got used to things and refused to give them up.

(4) Initial Withdrawal:

Didn't like new situations- new places, people, food, or clothes; held back or protested by crying or clinging.

(5) High Intensity:

A loud child-whether miserable, angry, or happy.

(6) Irregular:

Unpredictable. Could never tell when s/he would be hungry or tired; conflict over meals and bedtime; woke up at night; moods changed suddenly.

(7) Low Sensory Threshold:

Sensitive to sounds, lights, colours, pain, tastes, or smells; clothes had to feel right, making dressing a problem; fussy about food; overreacted to minor scrapes or cuts; felt warm when everyone else was cold; easily overstimulated.

(8) Negative Mood:

Basically serious or cranky. Whined or complained a lot. Not a happy child.

Scoring: 1 = Sometimes; 2 = Often; 3 = Nearly always or always

Present when a score of 1-6 is received.

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