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UMI
Adolescent Risk Behaviour as Related to Parenting Styles

by

Claudia Petersmeyer
B.Ed., University of Regina, Saskatchewan, 1970
M.A., University of Victoria, 1988

A Dissertation Submitted in Partial Fulfilment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY
in the Department of Psychological Foundations

We accept this dissertation as conforming
to the required standard

Dr. Donald W. Knowles, Supervisor (Department of
Psychological Foundations)

Dr. Brian Harvey, Departmental Member (Department of
Psychological Foundations)

Dr. John O. Anderson, Departmental Member (Department of
Psychological Foundations)

Dr. Theodore J. Riecken, Outside Member (Department of
Social and Natural Sciences)

Dr. Leona L. Eggert, External Examiner (Psychosocial Nursing
Department, University of Washington)

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University of Victoria

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Supervisor: Dr. Don Knowles

Abstract

The purpose of this study was to determine adolescents' level of interest and engagement in risk behaviours as it relates to adolescents' and parents' perceptions of the parenting variables, demandingness and responsiveness. Data were collected from both adolescents and parents. The sample was obtained from two schools: (a) 44 Grade 8 students (28 girls, 16 boys) from a local junior high school and their parents (44 mothers, 37 fathers); and (b) 33 Grade 8 students (10 girls, 23 boys) from a second local junior high school. In order to examine perceptions of parenting, participants were asked to complete a 33 item questionnaire adapted from Lamborn et al.'s (1991) parenting measure and Greenberg's (1991) Inventory of Parent and Peer Attachment. Adolescents were also asked to report on their level of engagement in 26 risk behaviours, adapted from Lavery et al.'s (1993) 23-item Risk Involvement and Perception Scale.

Results indicate adolescents' interest in becoming involved in risk behaviours although a relatively low incidence of actual engagement in risk behaviours is evidenced at this time. Adolescents from one school report significantly higher interest in risk behaviours than those from the other ($F_{3,73} = 4.98$, $p<.03$). However, the relationships between adolescents' ratings of risk
behaviours and the two parenting variables were similar at the two schools. Findings were, therefore, reported for the combined group of adolescents (N = 77).

Adolescents' perceptions of parental demandingness and responsiveness were relatively positive overall. Relationships between adolescents' perceptions of parental demandingness and responsiveness, particularly with regard to mothers, were inversely related to interest in risk behaviours (ranging from r = -0.62 to r = -0.35 for Total Risk Behaviour). Multiple regression analyses indicated that mothers' demandingness, as perceived by adolescents, is the most significant predictor (Standard beta = -0.56, p.001) of teens' interest propensity for engagement in risk behaviours.

Adolescents' perceptions of parenting are more strongly related to their interest in risk behaviours than are parents' perceptions of their own parenting. Discrepancy scores between perceptions of demandingness and responsiveness indicate that parents typically rated themselves higher on the parenting variables than did their teens. However, the absolute magnitude of discrepancy in parental demandingness was found to be only moderately associated with adolescents' ratings of risk behaviours (r = 0.32) and no relationship was found for discrepant perceptions of parental responsiveness.

Four parenting style groups (Authoritative,
Authoritarian, Permissive Indulgent, and Permissive Indifferent), based on Baumrind's conceptual framework, were formed on the basis of adolescents' ratings of their parents' demandingness and responsiveness. Adolescents parented Authoritatively (scores above the median on both variables) reported the lowest level of interest in risk behaviours, whereas teens from Permissive Indifferent families report the highest ($F_{3,45} = 8.03, p<.001$).

A qualitative study was conducted by examining adolescents' use of leisure time. Eight adolescents, a male and a female chosen from each of the four parenting groups, completed a four-day Activity Log describing what they did, where, and with whom in out-of-school time. Those who were parented Authoritatively reported the fewest risk factors and the lowest level of interest in risk behaviours. Further investigation of adolescents' interest or engagement in risk behaviours, using the Activity Log in conjunction with comprehensive interviews, is warranted.

This study contributes to knowledge in this area in several ways: (a) a wide range of risk behaviours was examined in relation to the parenting variables, demandingness and responsiveness; (b) in addition to adolescents' data, both fathers' and mothers' data were examined in relation to adolescents' interest and engagement in risk behaviour; and, (c) new measures, some derived from others' work and one newly created, were employed.
Examiners:

Dr. Donald W. Knowles, Supervisor (Department of Psychological Foundations)

Dr. Brian Harvey, Departmental Member (Department of Psychological Foundations)

Dr. John O. Anderson, Departmental Member (Department of Psychological Foundations)

Dr. Theodòre J. Riecken, Outside Member (Department of Social and Natural Sciences)

Dr. Leona Eggert, External Examiner (Psychosocial Nursing Department, University of Washington)
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Chapter 1

Statement of the Problem

"Drug use on rise in high schools: Experts say more students smoking marijuana but they aren't sure why"
"Teens (cough) laugh at anti-smoking ads"
"Drug survey points to risky behavior patterns"
"Students having sex 'earlier, more often'"
"Public discussion on bullying timely with teenager's death"
"Negotiation 'key' to youth-adult conflict"
"Irresponsible parents should pay victims of kids' crimes"
"Parents have key role in preventing kids' violence"

(Times Colonist, 1995-96)

Society has certain expectations regarding adolescents' behaviour as well as parents' behaviour. The concerns of society seem to be about number and rate of increase in particular behaviours or attitudes of teens today (Bibby & Posterski, 1992). Although society's concerns seem fairly straightforward, the solutions are not. To meet the needs of society on the issue of adolescent behaviour, systematic studies should be done to help understand youth activities and attitudes about their world with special consideration of influential contextual factors; specifically, primary people in adolescents' lives. Research resulting in a better understanding of both our teens' and parents' beliefs and attitudes, may enable us to provide a more favourable and harmonious environment within which youths can endeavour to fulfil their potential.

Adolescence

Few developmental stages are distinguished by so many changes at so many varied levels as adolescence, which explains the increased attention paid to early adolescence as a time when problem behaviours commence (Eccles, Midgley,
Wigfield, Buchanan, Reuman, Flanagan, & Ever, 1993). It is a time of vulnerability for adolescents and, as a result, a time of challenge for parents.

Adolescence has been defined as "the developmental period of transition between childhood and adulthood that involves biological, cognitive, and social changes" (Santrock, 1993, p.29). Although the age range is relatively arbitrary, most developmentalists mark the beginning of adolescence at ages 10 to 13 and the ending at around the age of 18 to 22 (Santrock, 1993, p.29). Early adolescence, therefore, is considered to include youths aged 10 to 14.

Early adolescence is a critical time in the life-span because "one is no longer a child, nor is one yet an adult (Hamburg & Takanishi, 1989, p.826). It is a time of vulnerability due to many varied changes leading to adolescents' reappraisal of themselves and the world around them. The following fundamental tasks or concerns represent developmental challenges common to all adolescents: coming to terms with identity, establishing autonomy, forming intimate relationships, expressing sexuality, and exploring future aspirations (Steinberg, 1993a; Baumrind, 1987; Jessor, 1984; Feldman & Elliott, 1993).

Increased desire for independence is considered a normal developmental task of adolescence (Baumrind, 1987), however, it is potentially unsettling to the family. The
resulting conflict and frustration may be potentially harmful to the youth who must, nevertheless, be afforded some opportunity to experiment and explore new horizons. Although experimentation with smoking cigarettes, drugs, and sexual intimacy may be considered normal (Baumrind, 1987), these behaviours are regarded as problem or risk behaviours by society because of the potential compromise to health and psychological well-being.

Given that normal adolescent development is characterized by increased risk-taking, what can be done to delay or minimize the possible costs of engagement in problem behaviours? The focus of this study is on the family environment and, more specifically, parenting variables that may relate to early adolescents' behaviours. Kegan (1982) contended that the family must recognize, confirm, and support the evolving adolescent. Distressing levels of problem behaviours may arise if adolescents are not provided with opportunities to experiment and take risks within a safe, supportive, and responsive family environment (Eccles et al., 1993).

**Risk Behaviour**

Hamburg and Takanishi (1989) state that adolescence is naturally accompanied by potential risks: immediate, delayed, or long-term. In addition, the fact that adolescence spans a long time presents its own problems.
This notion is supported by the following statement by Jessor and Jessor (1977):

Adolescence is not a psychologically or socially homogeneous period...it encompasses those transitions that are organized around the passage out of childhood as well as those...that are preoccupied with the entry into adulthood...and the social-psychological definition of this period of the life span is problematic...adolescence itself can be construed as a "social problem" (p.6).

Adolescence is considered by Jessor and Jessor (1977) to be a "socially structured position in a larger, age-graded system" (p.7) with limited access to socially valued goals such as personal autonomy, sexual freedom, economic independence, and unrestricted freedom. This limited access to socially valued goals potentially fosters frustration, rebellion, and despair in those on the fringes of adulthood.

Jessor (1984) considers all learned behaviours to be purposive because they fulfil multiple needs of adolescents. "Adolescent risk behaviours are functional, purposive, instrumental, and goal-directed" (Jessor, 1991, p.598). These behaviours are often central to normal adolescent development in that they may, for example, serve the purpose of gaining acceptance by the peer group. On the other hand, risk behaviours may also jeopardize the accomplishment of normal developmental tasks by limiting the youth's social skills and coping strategies. For the purposes of this study, risk behaviour, risk-taking behaviour, or problem behaviour are defined as any behaviour that can compromise
adolescent development, whether the adolescent is motivated by, or even aware of the risk involved. Risk behaviours are targeted because of their potential risk to adolescents' health and psychological well-being as well as their negative consequences for society (Donovan, Jessor, & Costa, 1988; Jessor & Jessor, 1977). Examples of such behaviours which may compromise health and well-being include the following: cigarette smoking, alcohol use, drug use, aggression, stealing, and engaging in sexual activity.

Thus, risk behaviours can have both positive and negative social, personal, or psychological outcomes (Jessor, 1991). Using marijuana, for example, may compromise health, increase the likelihood of legal sanction, create conflict with parents, or heighten a disinterest in school. At the same time, this behaviour may lead to social acceptance by peers and promote a feeling of autonomy and maturity, thereby also serving a normal developmental need.

Much research in the area of early adolescent risk behaviour has focused only on a single problem or risk behaviour such as substance use (Richardson, Dwyer, McGuigan, Hansen, Dent, Johnson, Sussman, Brannon, & Flay, 1989; Larson, Csikszentmihalyi, & Freeman, 1984). To counter this view, Irwin (1993), recommends that researchers adopt a risk-taking perspective which would discourage "the examination of isolated categories of behaviors" (p.2).
Problem behaviours coexist with other problem behaviours; they rarely exist in isolation.

**Family Context**

The acknowledgement of context in social interactions has been evidenced in the shift of research from the laboratory to the home as well as shifts from considering genetic influences to studying environmental contributions and, finally, the influence of the psychosocial environment. Steinberg (1993b) emphasized that "major realignments in family relations occur during the adolescent years" (p.258). In support of this notion, Eccles and colleagues (1993) and Youniss and Smollar (1985) agree that issues of control and autonomy within the family are renegotiated so that the asymmetry of power and authority in the family begins to shift toward a more equal status between parents and adolescent resulting in a variety of levels of disequilibrium depending on individual family variables.

Parents must struggle with the delicate balance "between providing direction and providing room - giving emerging young people the help they need to move into adulthood, while having the good sense to give them increasing room to become our equals" (Bibby & Posterski, 1992, p.2). Kegan (1982) agrees in stating:

healthy holding lays the stage for separation...failure to assist the child in the natural 'emergency' of its further becoming can take the form of holding too firmly, and of too emphatically or harshly stressing the separation. The latter can paradoxically have the effect of
further complicating the tangle between the developing child and the human context in which it is embedded (p.127).

Control or demandingness

In his book on family processes, Patterson (1982) hypothesized that "family management variables...account for a significant amount of the variance associated with differences among children in rates of performance of antisocial behaviors" (p.215). Family management practices are assumed to provide a perspective of what parents do to maintain the family system. Family management practices include clearly stated house rules, monitoring, providing consequences contingently, and problem solving. Their main function is to minimize family crises. This social learning perspective assumes that children have an affinity for engaging in antisocial behaviours and must be taught prosocial behaviours through modelling and punishment. In a subsequent study, Patterson and Stouthamer-Loeber (1984) found that the family management skills of monitoring and discipline were both significantly related to delinquency measures whereas problem solving and reinforcement were not.

Attachment or responsiveness

Recent developments have underscored the following: that adolescent autonomy occurs within an atmosphere of attachment; that the beliefs, attitudes, and perceptions of parents cannot be ignored when studying family relations
during adolescence; and, that the family must be viewed as a
system rather than an assembly of individuals (Steinberg, 1993a).

Adolescents' increased desire for independence is
considered normal and, contrary to past views, is not
intended to sever ties with family. Renegotiation of the
power structure within the family more appropriately
describes this stage of development (Santrock, 1993; Eccles,
et al., 1993; Youniss & Smollar, 1985). Unfortunately, this
disequilibrating aspiration of adolescents causes some
parents to take a firmer stance with their teen in order to
retain control and power, resulting in conflict and
frustration for all. Thus, the attainment of autonomy
depends greatly upon the parents' reactions to their
adolescent's increased desire for self-sufficiency and their
wisdom and ability to provide opportunities for the
adolescent to experience independence and autonomy.
Families need to be flexible in order to adjust to change.
Problems occur when there is a mismatch between adolescents'
desire for increasing autonomy and opportunities for
independence provided by the parents (Eccles, et al., 1993;
Hansen & L'Abate, 1982; Treat, 1978). Parents must
endeavour to find the optimal level or balance of control
and freedom; a "crucial balance" (Richardson, Galambos,
Schulenberg, & Petersen, 1984).
Autonomy is not an instant acquisition, rather it is a developmental occurrence beginning during infancy (Hill & Holmbeck, 1986) and the successful outcome of secure attachment. Ausubel (as cited in Santrock, 1993) used the term satellization to describe children's cognitive acceptance of their dependence on their parents. Successful satellization relies upon warm, supportive, and responsive parents and a trusting relationship. Satellization is eventually replaced by desatellization which describes adolescents' imminent independence from parents' governance. This process, according to Coleman (1980), entails changing attitudes toward authority from a stage in which authority is accepted to one in which it is questioned.

According to attachment theory (Ainsworth & Bowlby, as cited in Dacey & Kenny, 1994; Santrock, 1993), a trusting relationship between child and caregiver(s) instills feelings of safety, stability, and confidence in the child. Parents' warmth, responsiveness, and sensitivity facilitate secure attachments during infancy providing a psychologically healthy basis for further development. The positive outcomes of this model are assumed to be increased social competence and independence.

It is only within the last ten years that attachment theory has been applied to adolescence. As in infancy, attachment to parents during adolescence provides a secure base from which to explore new environments.
Risk factors

Risk factors are variables that, through much varied research, have been found to correlate with an increased likelihood of engagement in behaviours that can compromise normal development. Hawkins, Catalano, and Miller (1992) employed a risk-focused approach, targeting multiple early risk factors, for the purpose of preventing drug and alcohol problems. Numerous risk factors found to be associated with adolescent drug abuse, were summarized and divided into two categories: sociocultural or contextual factors and personal or interpersonal factors (families, school, peer group). Included in the broad social context are laws and norms favourable toward the use of drugs, availability of drugs, extreme economic deprivation, and neighbourhood disorganization. Individual and interpersonal factors consisted of the following: physiological factors, family alcohol and drug behaviour and attitudes, poor and inconsistent family management practices, family conflict, low bonding to family, early and persistent problem behaviours, academic failure, low degree of commitment to school, peer rejection in elementary grades, association with drug-using peers, alienation and rebelliousness, attitudes favourable to drug use, and early onset of drug use. Hawkins et al. (1992) emphasized that many of the risk factors mentioned previously, are also associated with other problem behaviours (Hawkins, et al., 1992; Jessor, 1991).
Protective Factors

Protective factors are variables that might protect or serve as moderators against risk (Garmezy, 1993; Rutter, 1987). Protective factors are "those elements in person, family, community, and culture that may conduce to the development of adaptive...behaviors" (Garmezy, 1993, p.127); factors conceptualized as decreasing the likelihood of maladaptive behaviour. Garmezy summarized three recurrent protective influences: (a) personality factors (self-esteem, activity level, reflectiveness, cognitive skills, positive responsiveness to others); (b) family factors (warmth, cohesion, presence of some caring adult in the absence of a parent or in the presence of strong marital discord); (c) external support or strong maternal substitute (teacher, neighbour, parents of peers).

Parenting Style

Both attachment and autonomy are incorporated into the concept of parenting style (Hill, 1980; Santrock, 1993) which constitutes a way of "being" or form of interaction between parent and adolescent. Expectations, controls, and demandingness are also affected by parenting style (Baumrind, 1991d; 1994). Parenting style creates the milieu or "home climate" (Jessor & Jessor, 1977) within which the parent-adolescent relationship exists and develops. Some examples of protective factors within the family provided by Jessor (1991) are cohesion, interested adults, and normative
conduct (p.602). Home climate wields the power to influence adolescent behaviour by way of proffering either risk or protective factors (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1994).

Parents are highly influential in creating and maintaining the most important and immediate context within which children and adolescents flourish (Bronfenbrenner, 1979). What they do and how they do it is of vital concern to researchers in their endeavours to identify key influences on and correlates with positive outcomes in children and adolescents. Parenting styles provide a conceptualization which organizes fundamental parental behaviours so as to enable differentiation among them on certain dimensions.

The ultimate goal of becoming more knowledgeable about parenting styles is the prevention and intervention of adolescent risk behaviours through parent education. Surprisingly enough, the basic elements of "good parenting" cannot be considered common sense because parents differ widely in their experiences and their beliefs and consequently behave differently toward their children. However, there is abundant evidence for the importance of studying parenting behaviour and for the utility of grouping particular characteristics into domains.

Baumrind (1994), in depicting characteristics of parenting styles, highlights two primary dimensions of
parenting, *demandingness* and *responsiveness*. When combined in various ways, these dimensions yield the following four distinct domains or parenting styles: authoritative, authoritarian, permissive indulgent, and permissive indifferent (negligent), which will be reviewed in detail in the next chapter.

Smetana (1994) believes "we know little about how different components of parenting, including parenting beliefs, parental practices, and the way in which these are conveyed, are related to child development and behavior" (p.33). It has been inferred that the greater the controls and the greater the affectionate interaction with teens, the lower the amount of problem behaviour (Jessor & Jessor, 1974). As John Hill (1980) pointed out, parents, not the children, are inevitably accountable for creating the family environment. Parenting styles offer a taxonomy for analyzing relevant parental behaviours.

**Divergent Perceptions of Parenting**

Numerous studies have found adolescents' perceptions of family environment and parenting factors to be valuable predictors of adolescent adjustment, competence, engagement in a variety of problem or risk behaviours, adolescent aggression, and adolescent-parent conflict (Barnes & Farrell, 1992; Kurdek & Fine, 1994; Larson, Csikszentmihalyi, & Freeman, 1984; Richardson, Dwyer, McGuigan, Hansen, Dent, Johnson, Sussman, Brannon, & Flay,
1989; Richardson, Galambos, Schulenberg, & Petersen, 1984; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Stice & Barrera, 1995). These studies included only adolescents' perceptions and all supported the notion of high demandingness or high responsiveness, or both, as being related to positive outcomes.

Although adolescents' perceptions may be more important predictors of adolescent outcomes than parents' perceptions, "surprisingly little research has compared parents' and adolescents' perceptions of parents' parenting styles" (Smetana, 1994, p.30). Some researchers (Carlton-Ford, Paikoff, & Brooks-Gunn, 1991; Collins, 1991; Holmbeck & O'Donnell, 1991; Smetana, 1991), having noted discrepancies between adolescents' and parents' perceptions of parent-adolescent relationships, have included one or both parents as well as adolescents as participants in their studies. Two worthwhile considerations, assuming that discrepancies among perceptions exist, are: a) how adolescents perceive dimensions of parenting and, b) how parents, both mothers and fathers, perceive these dimensions.

**Purpose of this Study**

What we currently know about adolescents' engagement in risk behaviours comes from research that has focused mainly on a single problem or a narrow range of problems (Richardson, et al., 1984; Jessor, et al., 1994). We also know that certain parenting behaviours such as monitoring
are linked to problem behaviours such as delinquency (Southamer-Loeber (1984), for example.

What is yet to be clearly determined is how adolescents perceive their parents' parenting, how parents perceive their own parenting, and how this relates to adolescents' interest or engagement in a wide variety of potentially risky behaviours. Further, there is the additional question of whether adolescent-parent congruency on the parenting variables would be linked to adolescents' behaviour.

Another area in need of further study is the actual activities adolescents engage in during their out-of-school time and how they may relate to parents' behaviours.

The purpose of this study is to examine early adolescents' level of interest and engagement in a wide variety of risk behaviours as they relate to their own as well as their parents' perceptions of the parenting variables, demandingness and responsiveness. Adolescent-parent discrepancy on these parenting variables will also be examined in relation to adolescents' risk behaviours.
Chapter 2

Review of Related Literature

Adolescence is a time in the life-span when exploration and experimentation are developmentally normal and preparatory to the commitments of adulthood (Baumrind, 1987). Engaging in exploratory behaviours may be a way of taking control of one's own life and asserting independence from parental control; a way of expressing opposition to adult authority; a coping mechanism for dealing with anxiety, frustration, inadequacy, and failure; a way of gaining admission to the peer group; confirmation of a worthwhile identity; a transition marker or symbol of maturity; a vehicle for having fun (Jessor, 1984).

At the same time, however, early adolescence is an extremely formative period when young people are faced with increasing responsibility for making decisions which are inevitably fraught with risks. Some decisions may be about sexual experimentation, the use of drugs and alcohol, cigarette smoking, and riding around in cars (Millstein, 1993), to name but a few. Many adolescent behaviours are considered to be developmentally risky and unacceptable by societal standards (Jessor & Jessor, 1977).

Replete with a myriad of changes, both personal and contextual, adolescence is characterized by increases in the potential for exposure to and engagement in behaviours that "can jeopardize the accomplishment of normal developmental
tasks, the fulfilment of expected social roles, the acquisition of essential skills, the achievement of a sense of adequacy and competence, and the appropriate preparation for transition to…adulthood" (Jessor, 1991, p. 599).

The onset of adolescence opens doors to new social horizons and gives way to a normal desire to explore the parameters of novel situations. The unique transitional and experimental nature of this stage of development is, however, by its very nature of rapid change, accompanied by risk. Further research into risky behaviours which have the potential to jeopardize adolescents' health and well-being, may help to prevent, delay, or minimize involvement.

**Risk Behaviour**

Despite varied theoretical perspectives apparent in adolescent risk behaviour research, one consistently encounters similar albeit ambiguous terminology such as risk behaviour, problem behaviour, risk-taking behaviour, at-risk, risk factors, and protective factors. Some of these terms may hold various meanings commensurate with the theoretical framework within which they reside. Clearly defined terms are vital for the specific intentions of each research study. For the purpose of differentiation, a brief review follows of how some of these terms have been used in the literature. Those terms considered to be appropriate to the present study are then contrasted and defined.
Risk behaviour and risk-taking behaviour are terms which often refer to the same types of activities such as smoking, sex, drinking, or drug use. Levitt, Selman, and Richmond (1991), for example, whose theoretical orientation is that risk-taking is developmental in nature resulting from biological and socio-cultural interaction (see Appendix A), outline two classes of risk-taking behaviours. The first class threatens physical health and includes smoking, drinking, drug usage, and sexual activity. The second, most likely jeopardizes socioeconomic status and includes school truancy and failing or dropping out of school. Both classes of risk-taking may be threatening to emotional well-being. The authors imply conscious choice in engaging in these behaviours based on adolescents' knowledge, social skills, and personal meanings of the behaviours.

Furby and Beyth-Marom (1990) define risk-taking as engaging in risky behaviour which is any activity involving a chance of loss. Their decision-making perspective is based on steps people should follow sequentially in order to maximize their well-being. These steps are outlined in Appendix B. In the event of the choice to drink or not to drink, there is a chance of loss in either scenario; choosing to drink may result in legal problems but it may also result in feeling good. Choosing not to drink may result in being rejected as a member of the peer group while being held in high regard by parents and teachers. Both
personal priorities and the assessment of various alternatives, therefore, appear to play an integral role in choices and decision-making. Methodologically speaking, the decision-making process is extremely subjective, complex, and difficult to operationalize. Behaviour is not necessarily deliberate and research participants may, therefore, not be able to articulate their perceptions, values, and rules.

Social exchange theory (Emerson, 1976, as cited in Small, Silverberg, & Kerns, 1993), in combination with behavioral decision-making theory (Furby & Beyth-Marom, 1990), has provided the framework for examining age-related patterns in adolescents' perceived costs and benefits when deciding whether or not to engage in such risky behaviours as being sexually active and consuming alcohol (Small, et al., 1993). Humans are seen as avoiding costly behaviour and seeking rewarding behaviours; they seek to maximize benefits and minimize costs. Contrary to this hypothesis, Small et al. (1993) found that adolescents' perceived costs rather than benefits accounted for their involvement in risk behaviours. There were strong differences in perceived costs between users and non-users of alcohol, for example. Conversely, all teens perceived benefits for drinking alcohol and engaging in sex but this knowledge did not appear to make a difference in their inclination to get involved.
A methodological challenge in the Small study, similar to that found by Furby and Beyth-Marom (1990), is the assumption that personal perceptions and beliefs consciously guide behaviour choices. Further related questions remain: do beliefs precede behaviour or does behaviour lead to beliefs? Do teens engage in behaviour because they fail to perceive the costs or do they change their beliefs regarding perceived costs after becoming involved?

Baumrind (1987) also used the term risk-taking when referring to smoking, drinking, and drug use. She advised that researchers "should seek to understand why so many young people today fail to avoid, or consciously seek, experiences that adults and many young people themselves perceive to be personally and socially destructive" (p.94). Despite Baumrind's cognitive perspective, contexts within which choices are made were acknowledged as being critical to the understanding of personal meaning underlying decisions.

In contrast to previous discussion about risk-taking, the definition used within the context of the present study is in agreement with Jessor (1991), whose social-psychological framework has its roots in social learning theory. Jessor prefers to distinguish between the terms risk behaviour and risk-taking behaviour because the latter connotes conscious engagement in a risky endeavour, for which, of course, there is some evidence in adolescent
behaviours. One example would be choosing to play "chicken" in cars. Few adolescents, however, engage in sex for the thrill of beating the odds against disease or pregnancy. Risk behaviour then, is considered in the present study to be any behaviour that can compromise health, well-being, or social performance, conscious or otherwise. Risk or problem behaviours are defined by society as unacceptable (Donovan, Jessor, & Costa, 1988) distinguishing them from other behaviours which may be considered risky but not "a problem" in the eyes of society; for example, rock climbing, scuba diving, sports competition, or monetary investments. While risk-taking can have both positive and negative repercussions, Baumrind (1985) agrees that we must distinguish between risk behaviour which facilitates fulfilment of potential and risk behaviour which is compromising to health and psychological well-being.

Jessor and Jessor (1977) employ a theoretical framework where risk behaviours are seen as outcomes associated with the interaction of personal, environmental, and behavioral factors (Jessor & Jessor, 1977) (see Appendix C & D). Three major systems, Personality, Perceived Environment, and Behavioral, organize these interrelated factors in such a way as to enable prediction of proneness; a risk indicator. There can be proneness indicators in each of the three systems, the combination of which would provide a measure of psychosocial proneness toward problem behaviour. This
concept of psychosocial proneness provides the theoretical basis for predicting and explaining variations in adolescent behaviour (Jessor, 1984). Problem-behaviour theory is based on the social-psychological relationships occurring within and between each of these systems. Once a youth is engaged in risk behaviours, the level of engagement becomes one indicator of the level of commitment to a "way of being" or lifestyle. "The framework is designed to apply to youth in general and to account for problem behaviour out of the normal processes and relationships, both personal and social, that organize the daily lives of young people" (Jessor & Jessor, 1977, p.40). According to Jessor and Jessor (1977), the perceived environment is the one to which a person responds. For example, adolescents' perceived relationships within the family have proven to be of significance.

Being at-risk generally refers to a state or situation where influential factors may contribute to engagement in risk behaviours or to developmental pathology. Children who live in poverty, for example, are considered to be at-risk for maladaptive behaviours depending upon a variety of personal, family, community, and cultural variables (Garmezy, 1993) as well as the number of risk factors (Rutter, 1987) with which they must cope.

A more general perspective, however, and the one adopted in the present study, is that early adolescence
itself may be considered an at-risk stage of development (Jessor, 1984; Baumrind, 1987; Larson & Richards, 1994). Larson and Richard's (1994) sentiments further augment this notion: "whereas adolescence used to correspond to the teenage years, now eleven-year-olds...are often midway through puberty and experiencing enticing lures to the world of...'sex, drugs, and rock 'n' roll'" (pp.5-6).

Jessor (1991) differentiates at-risk youth who are already engaged in risk behaviours, from those who are not yet involved but are considered to be at-risk due to the presence of particular risk factors. The focus in this case would be "the degree of risk represented in the various conceptual domains of risk...and the likelihood that risk will generate involvement in risk behaviors...an earlier stage in the ontogeny of risk" (p.604). The primary issue becomes one of either intervention or prevention.

Intervention and prevention of risk behaviours often tend to target only one or two behaviours at a time. Jessor (1991), however, has found that risk behaviours are not isolated, rather they covary and are interrelated; they are conceived as a problem-behaviour syndrome. This perspective gives rise to factors which relate to and maintain such behaviour clusters. Firstly, the social context of adolescent life provides socially organized opportunities to learn risk behaviours together and expectations that they be performed together. Secondly, different risk behaviours can
serve the same functions. Thirdly, Donovan and Jessor (1985) hypothesized that, based on their research, the single common factor of unconventionality, in both personality and the social environment, underlies the syndrome of problem behaviour. This organized pattern of interrelated behaviours directs attention to the "whole" adolescent rather than to individual behaviours.

**Adolescence and Risk Behaviour**

Exploration and experimentation, characteristics of early adolescence, can be seen as necessary factors for furthering development throughout this stage. Unfortunately, these processes involve risk-taking which can have both positive and negative consequences. What are the signs of danger? How many early adolescents are already engaged in risk behaviours, what kinds of behaviours, at what level of involvement, and why; what is the personal meaning behind the behaviours? Past and recent research has struggled to answer some of these questions.

According to Baumrind (1991c), "risk taking is excessive when it is uncontrolled, impulsive, fatalistic, has little compensatory gain, and its consequences are left to chance" (p.112). When such behaviour "becomes self-perpetuating or interferes with school work or with the development of a more productive coping style, it should be considered problem behavior" (p.112).
Jessor's (1991; Jessor & Jessor, 1977) distinction between youth who are already engaged in risk behaviours and those who have a propensity or "proneness" to become involved in risk behaviours begs the question, "How does one judge between risk behaviours that may serve a healthy developmental function and those that may be physically and psychologically detrimental?"

A number of approaches to this question have been taken:

1. One such approach, according to Jessor (1991), is considering frequency or level of engagement as one measure of commitment to a "way of being" or to a lifestyle; that is, how many behaviours are involved and to what extent. Indicators of risk-proneness would be the presence of risk factors in the various conceptual domains (Personality, Perceived Environment, Behaviour) which underlie Jessor's psychosocial Problem Behaviour Theory framework. See Appendix E.

2. Adolescents' personal meaning of a risk behaviour can be another indicator of risk. Elkind (1967), for one, believes that early adolescents in particular, perceive themselves to be indestructible, protected by a personal fable. To the extent that this is true, personal meaning would logically relate to the type and level of engagement in risk behaviours. This view would, in part, support Jessor and Jessor's (1977) notion that all adolescents are
at-risk, but not all adolescents necessarily engage in risk behaviours. There has, however, been little empirical evidence to support the personal fable theory (de Rosenroll, 1987; Lapsley, 1991; Lapsley, Milstead, & Quintana, 1986).

3. Another means of investigating the personal meaning of risk is by exploring adolescents' perceptions of the costs and benefits of risk behaviours (Gonzalez, Field, Yando, Gonzalez, Lasko, & Bendell, 1994; Lavery, Siegel, Cousins, & Rubovits, 1993; Small, Silverberg, & Kerns, 1993). Results have been varied and often contradictory. Lavery et al. (1993) found that high levels of risk involvement correlated with higher perceived benefit and lower perceived cost. Small et al. (1993), on the other hand, whose work was mentioned previously, found that the costs adolescents perceive are more important than the perceived benefits. "Non-involved" adolescents perceived significantly more costs than did adolescents involved with sex and alcohol. In contrast, both involved and noninvolved teens perceived benefits for alcohol use and sexual activity. Therefore, perceptions of costs seems the crucial variable in understanding why some teens engage in risky behaviours while others do not.

Furby and Beyth-Marom (1990) also employed a decision-making perspective which was acknowledged, methodologically speaking, to be difficult to operationalize. Behaviour is not necessarily deliberate and research participants may,
therefore, not be able to articulate their perceptions, values, and rules commensurate with their behaviour.

Many risk behaviour studies have been done on isolated behaviours such as drug use (Baumrind, 1985; Richardson, et al., 1988). Richardson et al. (1988), for example, found that for eighth-grade students, self-care is a salient risk factor for substance use. In contrast, Jessor has documented the coexistence and interrelationships of a variety of problem behaviours (including alcohol use, drug use, delinquency, sexual activity - see Appendix E) and, therefore, discourages researchers from approaching studies of isolated risk behaviours.

The other two domains in Jessors' (1977) framework, demographic background factors and socialization influences, remain relatively unexplored. Regarding demographic factors, Jessor concluded that samples in his studies were relatively homogeneous in terms of socioeconomic status and ethnicity. In addition, he considered demographic factors to be conceptually remote to behaviour; that is, there exist far too many mediating variables. The domain of socialization, consisting of such factors as parental ideology, home climate, peer influence, and media influence was also deemed to be far removed from behaviour as well as "being a difficult domain to measure" (Jessor & Jessor, 1977, p.39). However, many developments have taken place since 1977, in conceptualizing and measuring family
variables. "Home climate" can now be considered very influential and of proximal importance to the behaviour of adolescents. Jessor and Jessor (1974) characterized this sphere of influence by "maternal controls" and "maternal affectional interaction" (p.38) which are very similar to the dimensions of demandingness and responsiveness which characterize parenting style, as used in the present study.

A correlational study by Jessor and Jessor (1974) assessed the relationship of maternal ideology to adolescent problem behaviour. The hypotheses were that "the more conventional or traditional the mothers' beliefs, the less likely the occurrence of problem behavior (drug use, sexual intercourse, activism, problem drinking); and, maternal affectional interaction and controls, when taken in conjunction with ideological beliefs, would contribute to a stronger account of the variation in adolescent problem behavior" (p.247). Mothers' and adolescents' ideology was characterized by traditional beliefs, religiosity, and attitude toward deviance. Mothers' scores on ideology measures were correlated with adolescents' attitudes toward and engagement in problem behaviours.

Results of the study (see Appendix F) provided support for the hypothesis that the less conventional the mother, the more accepting were adolescents' attitudes toward problem behaviour and the higher the involvement. With regard to Home Climate, it was found that the greater the
controls and affectionate interaction, the lower the adolescent involvement in problem behaviour.

A shortcoming of many studies regarding adolescent problem behaviour is that they have not demonstrated causal antecedence or causal ordering among correlates (Furby & Beyth-Marom, 1990). Nevertheless, Jessor and Jessor (1977) believed that their 1974 study came closer than any other they had conducted, regarding sources of socialization influence, "to supporting an inference about an antecedent-consequent relationship" (p.229). Firstly, the study did not rely solely on self-report as do the majority of others. Secondly, "'socialization' carries a directional connotation, the vector of influence going from the environmental source or agent to the adolescent" (p.211). In other words, a unidirectional flow from maternal ideology does seem plausible although there had, thus far, not been concrete empirical support.

A more current adjudication of causal direction is evidenced in a longitudinal study by Steinberg et al. (1989), who investigated authoritative parenting in relation to adolescents' psychosocial maturity and academic success. Referring to the cross-sectional findings of Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh (1987), Steinberg et al. concluded that "parental authoritativeness is not merely a response to youngsters' demonstrated school success and calls into question the notion that parental
authoritativeness merely follows from, rather than precedes, the development of competence in children" (p.1433).

Although the correlations in Jessors' 1974 study were not always consistent or significant, it was inferred that the greater the controls and the greater the affectionate interaction which accompanied conventionality, the lower the amount of problem behaviour, the less positive and the more negative the attitude toward problem behaviour. The relationship found in this study, between maternal and adolescent variables is clearly important enough to warrant further pursuit.

Jessor (1991) refers to the intercorrelated conceptual domains of risk and protective factors as "a web of causation" (p.601). Multiple regression analyses using numerous measures, generally yield correlations of about .70 which account for 50% of the variance in adolescent risk behaviour, leaving 50% unaccounted for. Based on Jessor's previous research efforts, it was speculated that a "less than satisfactory grasp on the properties of the social environment" (p.602) presents a crucial challenge to researchers.

Most recently, Jessor et al. (1994), in their study of risk and protective factors, concluded that "the measurement of protection could be made more exhaustive in regard to family" (p.35) in order to account for a more substantial portion of the variance in adolescent problem behaviour. It
appears as though family variables were becoming more prominent in Jessor's research in terms of having more proximal influence on adolescents' behaviour. After all, early adolescents are just beginning to enter the transitional phase where establishing autonomy and coveting independence become a prime focus but parents continue to exert considerable influence throughout adolescence (Steinberg, et al., 1994).

**Family Relationships and Adolescent Risk Behaviour**

Bronfenbrenner (1979) claims that "we know much more about children than about the environments in which they live or the processes through which these environments affect the course of development" (p.844). The central thesis of an ecological approach is that the conditions under which human beings live have a powerful effect on how they develop (Bronfenbrenner, 1988). Development is perceived to be a human's evolving conception of the environment by way of interactions with its properties (Bronfenbrenner, 1979).

For children and adolescents, the most immediately influential environment is the family, a complex and dynamic unit comprised of a multitude of variables that influence and are influenced by its individual members. Many of these factors are directly or indirectly associated with adolescent risk behaviour.
**Risk Factors and Protective Factors**

Risk factors, as mentioned in Chapter 1, are factors or variables associated with a higher probability of behaviour that can compromise health and well-being (Jessor, et al., 1994). Jessor (1991) included family history, poverty, models for deviant behaviour, and parent-friend conflict among the many risk factors (Appendix E).

Protection has, in the past, been mistakenly defined as the absence of risk, or as the low end of the risk continuum (Jessor et al., 1994). Jessor et al. (1994) believed that risk factors and protective factors should be treated as conceptually distinct with the ability to have their own direct effects as well being able to moderate the association between risk factors and behaviour; a view with which there is now considerable agreement (Hawkins, et al., 1992; Jessor, 1991; Rutter, 1987). In support of this notion, Rutter (1987) argued that even if there were only a single concept visualized on a continuum, we would require a term to describe each pole and to help us emphasize our focus. Secondly, the processes of protection seem different from risk processes. For example, shyness may protect against delinquency but an out-going personality does not necessarily predispose one to delinquency. Thirdly, a protective factor to one individual may not serve as such to another; in fact, it could even be a risk factor (consider shyness again, for example). Most recently, protective
factors have been considered conceptually distinct from risk factors. For example, Jessor et al. (1994) have concluded that high risk does not necessarily imply low protection. Logically, high risk could be accompanied by high protection.

Identification of protective variables in Jessor et al.'s (1994) psychosocial model was accomplished by specifying either instigators (risk factors) or controls (protective factors) in each of the three systems, against engagement in problem behaviours. "Although the risk and protective factors...originate from a particular theory, their commonality with the variables used by others...[is] obvious" (p.7). In this most recent study of protective factors in relation to adolescent problem behaviour, the risk and protective factors employed are presented in Table 1.

The researchers tested the relationship between protective factors and problem behaviours. Protective factors were found to relate both directly and indirectly to adolescent involvement in problem behaviour; the greater the protection, the less problem behaviour. Protective factors can also act as moderator variables in their interaction with risk.

The longitudinal design of Jessor et al.'s 1994 study, consisting of four waves of data collection (one year intervals), provided information regarding the effect of
Table 1
Risk Factors and Protective Factors Associated with Adolescent Risk Behaviour

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personality System</strong></td>
<td><strong>Personality System</strong></td>
</tr>
<tr>
<td>- low expectations for success</td>
<td>- positive orientation to school</td>
</tr>
<tr>
<td>- low self-esteem</td>
<td>- positive orientation to health</td>
</tr>
<tr>
<td>- general sense of hopelessness</td>
<td>- intolerant attitudes toward deviance</td>
</tr>
<tr>
<td><strong>Perceived Environment System</strong></td>
<td><strong>Perceived Environment System</strong></td>
</tr>
<tr>
<td>- friends as models for problem behaviour</td>
<td>- the perception of strong social controls or sanctions for transgression</td>
</tr>
<tr>
<td>- greater orientation toward friends than toward parents</td>
<td>- high friends models for conventional behavior</td>
</tr>
<tr>
<td><strong>Behaviour System</strong></td>
<td><strong>Behaviour System</strong></td>
</tr>
<tr>
<td>- school record grade point average</td>
<td>- actual involvement in prosocial behaviors, such as volunteer work and family activities</td>
</tr>
</tbody>
</table>

*Note: derived from Jessar, Van Den Bos, Vanderryn, Costa, & Turbin, 1994, p.7*
protective factors over time. The question was whether antecedent protection had implications for change in the level of adolescent risk behaviour. Following hierarchical multiple regression analysis (using the Wave I problem behaviour score as a control, then entering the risk factor score followed by the protective factor score), it was noted that protective factors emerged consistently as the significant predictor of change in problem behaviour. While risk factors have a stronger relationship to problem behaviour involvement, protective factors turned out to be more influential on developmental change.

**Risk and Protective Factors in Context**

Tonkin (1987) maintains that adolescent lifestyles and the environment in which these lifestyles are expressed influence adolescents' selection of activities when they have free-time such as after school or, most particularly, on weekends or holidays. Larson and Kleiber (1993) examined adolescents' experiences within the context of free-time which provides "opportunities for the development of self-direction, self-expression, and motivated involvement" (p.125). The leisure context, more than any other, provides opportunities to engage in activities which may vary considerably. A few activities in which adolescents may be involved in their free time are: music lessons, sports, reading, listening to music, hanging out with friends, shoplifting, or doing drugs. Free-time activities which,
fill about 50% of teens' waking hours (Larson & Kleiber, 1993), may contribute either positively or negatively to personal health and well-being. As an example of a potentially negative contribution to well-being, Larson and Kleiber found that many (57%) high school seniors had tried an illicit drug and most (92%) had reported using alcohol.

The leisure contexts chosen by Larson (1988) to study the behaviour of 500 adolescents were time alone, time spent with family, and time spent with friends. The first of these contexts, time spent alone, was considered by adolescents to be a valued time for reflection, "hanging out", or listening to music. However, adolescents who are never alone or those who are alone too often tend to be less well adjusted, as indicated by their reported feelings and emotions.

The second context, the family, can potentially be a safe haven where adolescents can "be themselves", away from the pressures presented by school and peers. This context requires teens to learn about and engage in daily realities required to run a household (e.g., taking out the trash, looking after a sibling). When positive relationships existed at home, adolescents reported being more relaxed and more able to "be themselves" while with the family as opposed to being in other social contexts (e.g., school or peer group). Table 1 presents several risk and protective factors applicable to the family context.
Steinberg (1986), in his study of latchkey children, found that adolescents' susceptibility to peer pressure is relative to whether they are home alone, at a friend's house, or "hanging out" (unsupervised peer group activity). Furthermore, adolescents whose parents know of their whereabouts (without necessarily being physically present), provide behavioral guidelines, and are at the same time warm and responsive, are at less risk for problem behaviour than are adolescents whose parents are not as involved.

A more recent study by Galambos and Maggs (1991) augmented Steinberg's earlier findings. They found that adolescents whose parents are more accepting and less permissive are less involved in problem behaviours. They also noted that poor parent-adolescent relationships accounted for more variation in problem behaviours than did the variable of direct supervision.

Finally, the social context of friends is consistently touted by adolescents as providing more fun than any other context. While with friends, "the pressures of school, hassles with parents, and the neglect of youth in an adult-oriented society cease to exist" (Larson, 1988, p.9). On the other hand, this arena may provide incentives for problem behaviour if friends serve as role models for such behaviour (Jessor, et al., 1994). For older adolescents, being with friends is the primary weekend preoccupation. Activities include partying, driving around, and dating.
Not all teens have access to this kind of active social life and may spend many weekends at home alone, potentially resulting in internalized distress (Larson & Kleiber, 1993).

In a study of eighth-grade students who take care of themselves after school (Richardson, et al., 1988), it was found that large amounts of time spent without adult supervision could be linked to alcohol, tobacco, and marijuana use. This was true across various family structures, socioeconomic situations, and students' academic status.

Thus, each of these contexts presents its own risk and protective factors. Understanding the world of adolescence becomes increasingly more important and necessitates, in part, obtaining an account of what adolescents do in their free-time and with whom.

**Family Discord, Conflict, or Abuse**

It is quite typical to assume that a family housing an early adolescent is involved in some degree of conflict (Richardson, et al., 1984). Montemayor (1983) concluded that conflict occurs in "all families some of the time and some families most of the time" (p.83). Galambos and Almeida (1992) found that conflict does not necessarily increase with the onset of adolescence, rather the specific domains of conflict change. High levels of conflict, however, are related to a wide range of problem behaviours during adolescence depending on personal, family, and peer
influences. Evidence shows that "many of today's adolescents have serious problems with drugs, alcohol, sex, and crime, and that these problems are at least partly the result of stressful parent-adolescent relations" (Montemayor, 1983, p.86).

Separation and divorce are likely preceded and accompanied by family conflict. According to Santrock (1993), the level of conflict present is more important than the family structure. Numerous studies provide support for the conclusion that marital discord, rather than divorce or separation, is the cause of children's behavioral problems. Most likely, marital discord influences parents' feelings toward and interactions with their children (Nielsen, 1991).

Physically and sexually abusive environments are commonly associated with children who exhibit "aggressive behaviour, depression, lack of empathy toward others, inability to trust anyone... a decline in school performance" (Nielsen, 1991, p.332), or sexual promiscuity. According to Nielsen (1991), self-esteem is often affected for a lifetime. Since much of the data regarding studies of children and adolescents from abusive families are correlational, it is difficult to make causal assumptions. Nevertheless, it makes intuitive sense to believe that abuse causes developmental problems for children and adolescents.
Family Systems Theory

This theoretical perspective views the family as a system in which relationships respond to the changing needs of its members and to the changing demands and expectations of society (Steinberg, 1993a). Virginia Satir (1978) proposed a family communication systems model based on the interactional and transactional relationships between people; a system that produces and supports the behaviour of its individual members. Communication, a skill learned initially within the family, is the fundamental factor determining the quality of the family's relationships. According to Satir (1978), problem behaviours, presumably a result of maladaptive communication, are assumed to disappear when the person exhibiting the behaviours is removed from the dysfunctional system or the system is changed. A target problem behaviour or symptom is perceived as a signal of family dysfunction.

Gjerde (1986) emphasized that the family system is "more than mutual interdependence among family members: It entails interdependence among relationships. That is, the quality of one relationship influences and is, in turn, influenced by other relationships" (p.297). Second-order socialization effects (Bronfenbrenner, 1977; 1979) exemplified the interconnectedness of family relationships in Gjerde's study which focused on the effect of the father's presence on the quality of the mother-son
relationship. The sample was comprised of 44 intact families of early adolescents. Two evocative interaction situations were devised; one for parent-adolescent (dyadic) interaction and one for mother-father-adolescent (triadic) interaction. As Steinberg (1993b) later confirmed, the father's presence enhanced the mother-son relationship, but the mother's presence diminished father-son involvement despite the strong paternal engagement in the father-son dyad. "The findings demonstrate the utility of adopting a systems perspective on parent-adolescent relations" (Gjerde, 1986, p.303). The father's role may well be misunderstood if studied exclusively in dyadic or triadic settings.

Family systems react to pressures from within and without. Outside pressures come primarily from schools, the peer group, work, and community while inside pressures come from changes in individual family members. The onset of adolescence undoubtedly qualifies as a major change, carrying with it potential for strain on the family system (Easterbrooks & Emde, 1988).

Attachment or responsiveness is perceived in the present study to be a key factor in facilitating the transition between childhood and adulthood. The systems approach is reflected in the application of attachment theory in clinical practice in that the two orientations share an underlying precept: that the developmental nature
of earlier relationships affect later relationships (Easterbrooks & Emde, 1988).

**Attachment and Responsiveness**

According to Hill and Holmbeck (1986), securely attached teens perceive their parents as supportive role models for social relationships. Secure attachment in adolescence has been associated with positive self-esteem, social competence, emotional adjustment, and physical health. In contrast, insecure attachment has been linked with feelings of parental rejection, insecure attachment to peers, and conflict in key relationships.

There has been speculation regarding a critical period of attachment during which impact on future relationships has the greatest effect; that is, if attachment is not successful during this time, there are likely to be lasting results (Rutter, 1988). A basic question here concerns how the qualities of a relationship become transformed into some aspect of individual functioning. Possibly, children who have insecure attachment with their parents develop maladaptive social skills which, in turn, foster maladaptive social interactions. Perhaps children form expectations about relationships based on earlier experiences which later influences their social responses; for example, a distrust or misinterpretation of another's intentions (Dodge, 1980).

Greenberg, Siegel, and Leitch (1983) assessed the influence of the perceived quality of attachments to parents
and peers on adolescent self-concept and life satisfaction. Two separate hierarchical multiple regressions were run using self-esteem and life satisfaction as the criterion variables. Life events scores were entered prior to the family predictors because of the assumed correlations to the criterion variables. The quality of affect toward parents was highly significant, accounting for 11% of the variance in self-esteem and 10% of the variance in life satisfaction after peer variables were controlled. The overall effect of peer attachments, while significant, accounted for only about 5% of the variance in both measures of well-being.

Despite the intuitively reasonable assumption that quality of attachments would be related to well-being, the cross-sectional and correlational nature of this study means that cause may not be inferred. It may be that more poorly adjusted adolescents perceive less satisfactory relationships. Developmental research on childhood attachments and effects on self-esteem, however, has demonstrated the causal influence of family relationships to self-esteem (Coopersmith, 1967, & Rosenberg, 1965 as cited in Greenberg et al., 1983).

Healthy independence and autonomy is most effectively facilitated for children and adolescents by a sense of secure attachment to at least one parent (Treat, 1978; Rutter, 1988). "The attachment construct provides the critical link between parental responsiveness and children's
socioemotional development...it is the key construct integrating the affective and cognitive aspects of development within the social domain" (Sigel, et al., 1984, p.46). Influential work by Ainsworth and colleagues (as cited in Maccoby & Martin, 1983) has stressed parental responsiveness as a prominent factor in the parent-child bonding experience. There appears to be ample support to suggest that positive secure attachments generally persist through adolescence (Hill & Holmbeck, 1986). Assuming that early adolescence can be a conflictual period for the family, due in part to teens' first-time encounters with many risk-laden opportunities, it would seem reasonable that positive parent-adolescent relationships would minimize serious transitional difficulties. Parental responsiveness to the onset of adolescence creates an accepting and adaptive climate for experimentation and exploration (Baumrind, 1994), hence, one might expect that problem behaviours would either be delayed or minimized.

**Parenting**

Parenting characteristics have been a central focus for many researchers in their endeavour to identify or unravel characteristics of the family environment. Aspects of the home climate are seen to influence the behaviour and the quality of children's and adolescents' development (Jessor & Jessor, 1974).
The family functions as a major socialization agent for the child and adolescent. "Having positive and warm family relationships stands out as one of the most powerful predictors and correlates of healthy psychosocial growth during the adolescent years" (Steinberg, 1993a, p.120). In view of this, it is reasonable to assume that parents' behaviours would be related to their adolescents' level of engagement in risk or problem behaviours.

**Family Management**

Patterson and Stouthamer-Loeber (1984) hypothesized that family management was related to children's antisocial behaviour. Family management practices are assumed to provide a perspective of "what the parent is doing that relates to the maintenance of the family system" (p.215). Four measures of family management skills (monitoring, disciplining, problem-solving, and reinforcing) were examined in terms of their relationship to criterion measures of adolescent delinquent behaviour in a cross-sectional study. Multiple measures of parenting behaviours (interviews, questionnaires, home visits, daily telephone contacts, and laboratory measures) were employed. The target sample was the families of approximately 1000 boys from 21 schools in a city with a population of 100,000.

Intercorrelations among family management skills were moderately high (.45) supporting the notion that parents who are unskilled in one domain of family management, tend to be
unskilled in the others also. The family management skills of monitoring and discipline were both significantly related to delinquency measures whereas problem solving and reinforcement were not. One reason for this could be that monitoring and discipline relate more specifically to certain prosocial and/or antisocial behaviours.

Although there has been ample support for the notion that parenting characteristics are related to children's and adolescents' problem behaviours (Maccoby & Martin, 1983), Smetana (1994) believes "we know little about how different components of parenting, including parenting beliefs, parental practices, and the way in which these are conveyed, are related to child development and behavior" (p.33).

Parenting Styles

A number of researchers have been studying parenting styles, directing their attention toward parental models that are appropriate and effective in providing contemporary adolescents with optimal environments for healthy development. In the early 1960's, Elder (as cited in Coleman, 1980) distinguished among three parental control models - autocratic (parents rule), democratic (parents makes decisions in consultation with child), and permissive control (child makes own decisions). These varied levels of control were correlated with children's competence in decision-making. Children parented in a democratic fashion demonstrated the most confidence while those from autocratic
families were least confident in self-direction. Parental supervision, according to Elder, that allows adolescents experience with decision-making, results in individuals who are independent and who associate with peers of whom the parents approve. The democratic environment is conducive to the acquisition of autonomy and the learning of social conventions.

Baumrind (1968) made similar distinctions among modes of parental control using a slight variation in terminology; namely, authoritarian (autocratic), authoritative (democratic), and permissive control. Authoritarian parents were considered to be restrictive, controlling, and demanding. Authoritative parents encourage independence while still providing firm limits and controls. Permissive parents are relatively uninvolved in setting limits, allowing the child total freedom. Thus, the major difference between Baumrind's typology and others was the simultaneous focus on the importance of autonomy and responsibility.

This typology was born out of a reaction to permissive parenting predominating in the late 1960's and 1970's (Baumrind, 1987) when experts espoused that punishment had inevitable negative effects, high demands provoked rebelliousness, firm control generated passivity and dependence, and permissiveness provided the child with freedom from adult authority. Baumrind countered these
beliefs stating that both authoritarian control as well as permissive noncontrol may deny a child the opportunity to experience interaction with people. That is, both minimize conflict, one by suppression and the other by avoidance. The permissive parenting domain has been subdivided in a number of different ways, but most commonly into the two categories of indulgence and indifference.

Subsequent to earlier studies of parenting styles, salient dimensions of parenting were revised and clarified (Maccoby & Martin, 1983). Two major dimensions, demandingness and responsiveness, surfaced as a means of differentiating four distinctive styles of parenting. Detailed descriptions appear in Appendix G. Various levels of each dimension serve to set the styles apart.

Parenting styles differing mainly along the two dimensions, responsiveness and demandingness, are presented in Figure 1.

<table>
<thead>
<tr>
<th></th>
<th>Accepting Responsive Child-centered</th>
<th>Rejecting Unresponsive Parent-centered</th>
</tr>
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<tbody>
<tr>
<td>Demanding, controlling</td>
<td>Authoritative reciprocal High in bidirectional communication</td>
<td>Authoritarian Power assertive</td>
</tr>
<tr>
<td>Undemanding, low in control attempts</td>
<td>Indulgent</td>
<td>Neglecting, ignoring, indifferent, uninvolved</td>
</tr>
</tbody>
</table>

Figure 1. (derived from Maccoby & Martin, 1983, p.39)
Following is a brief summary of the four parenting styles differentiated by their relative levels of demandingness and responsiveness as well as by adolescent behaviours associated with each parenting domain:

(a) **Authoritarian** (high demandingness, low responsiveness): parents are highly demanding, place a high value on obedience and conformity, tend to favour more punitive and absolute disciplinary measures, demonstrate low levels of warmth and psychological autonomy (encouragement of independent behaviour), and employ low levels of communication. Adolescents are "less socially at ease with their peers, less spontaneous, less self-confident", and possibly more aggressive toward other people (Nielsen, 1991, p.307). Adolescents are likely to follow rules and stay out of trouble. They report less school misconduct, less delinquency, and less drug use than adolescents from permissive homes (Lamborn, Mounts, Steinberg, and Dornbusch, 1991).

(b) **Authoritative** (high demandingness, high responsiveness): parents are highly demanding based on the adolescent's level of maturity, have clear expectations and provide explanations for rules, decisions are frequently discussed and negotiated although parents have the final say (Nielsen, 1993), high level of warmth and psychological autonomy (Steinberg, Elmen, Mounts, 1989). Adolescents show high levels of responsibility and self-confidence, exhibit
appropriate social skills, strong self-concept, high self-esteem, social and academic competence, and significantly lower levels of problem behaviour (Lamborn et al., 1991; Baumrind, 1991b) than adolescents parented in any other way.

(c) **Permissive Indulgent** (low demandingness, high responsiveness): Parents exert little control over their adolescents, exhibit low levels of demandingness and a laissez-faire attitude; they place a high value on freedom, show high levels of warmth, are accepting of adolescent's choices, are benign and passive in discipline, and demonstrate low levels of supervision. Nielsen (1991) states that permissive parents often believe this style will produce creative, confident, and uninhibited individuals. In effect, these adolescents often expect to get their own way, are self-indulgent, and wilful (Santrock, 1993). They are likely to be "impulsive, irresponsible, and undisciplined" (Nielsen, 1991, p.308). These adolescents are likely to have positive self-concepts but may do poorly at school and may engage in higher levels of problem behaviour than those adolescents parented authoritatively (Lamborn et al., 1991).

(d) **Permissive Indifferent** (low demandingness, low responsiveness): This category of indifference has also been labelled rejecting or negligent. Steinberg (1993a), Santrock (1993), as well as Maccoby and Martin (1983, pp.44,48), however, refer to this category as "indifferent".
Parents in this group tend to be parent-centred. They are characterized by a laissez-faire attitude toward decision making and demonstrate low levels of demandingness. Low levels of warmth, caring, supervision, and involvement are the main identifying characteristics of this style. Adolescents raised in this manner are at greatest risk for negative developmental outcomes (Steinberg, 1993b). They tend to be socially incompetent, lack self-direction, and lack self-control (Santrock, 1993). These adolescents exhibit low self-esteem, low social competence, impulsivity, and high engagement in problem behaviours such as delinquency, sex, drugs, and alcohol (Baumrind, 1991b; Lamborn, et al., 1991).

Baumrind's model (1994) included demandingness as an important dimension: setting high but reasonable expectations based on the maturity of the adolescent and monitoring the adolescent's activities. Parental monitoring appears to be a key variable of demandingness. Steinberg (1986) in a study of latchkey adolescents, concluded "that at least some of the problem behavior of young people can be traced to the large amounts of time they spend outside of the company of adults" (p.438). Galambos and Maggs (1991) supported this conclusion and added that latchkey adolescents' over-exposure to peers and potential for problem behaviours are mitigated by less permissive but more accepting parenting.
The simultaneous existence of relatively high levels of responsiveness and demandingness, which characterize authoritative parenting, is most likely to produce a healthy adolescent. Responsiveness is associated with social skills and a strong self-concept, whereas demandingness fosters the development of self-control and cooperation with others (Maccoby & Martin, 1983).

Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh (1987) tested Baumrind's typology in the context of adolescent school performance. A questionnaire, intending to examine adolescents' perceptions of parental attitudes and behaviour, family communication patterns, and adolescents' grades, was administered to a heterogeneous group (based on family structure, ethnicity, and socioeconomic status determined on the basis of years of education) of 7,836 adolescents in the San Francisco Bay area. Only three indices of parental style were used, namely Authoritative, Authoritarian, and Permissive. No distinction was made in the latter category between indulgent or indifferent styles which perhaps accounted for a relatively low alpha coefficient of .60 for items in this category. Results indicated that students with authoritative parents earned higher grades than students in the other two groups, across ethnic groups, social class, and varieties of family structure. The correlational nature of this study, however, precludes any causal conclusions.
A subsequent study by Steinberg, Elmen, and Mounts (1989), with the purpose of testing "the hypothesis that authoritative parenting facilitates rather than simply accompanies school success" (p.1424), was conducted with a sample of 120 middle-class, ethnically homogeneous families. Adolescents reported on their parents' levels of acceptance, psychological autonomy, and behavioral control. Adolescents also completed subscales of the Psychosocial Maturity Inventory measuring autonomy and identity, as well as reporting their grades. Path analyses were performed on two waves of data collected one year apart in order to test the effects of authoritative parenting practices on changes in school performance over a one-year period. Parenting practices in the first wave were compared to school performance as measured in the second wave, controlling for the effects of first wave school performance. All three characteristics of authoritativeness (levels of acceptance, psychological autonomy, behavioral control) made independent contributions to school success. Furthermore, authoritative parenting acted as a moderator between adolescents' school performance and autonomy. These findings based on a longitudinal study, when viewed alongside Dornbusch et al.'s (1987) cross-sectional findings, indicate "that parental authoritativeness is not merely a response to youngsters' demonstrated school success and calls into question the notion that parental authoritativeness merely follows from,
rather than precedes the development of competence in children" (p.1433). Continued research pursuant of authoritative parenting effectiveness was warranted.

In order to further study the four parenting styles, Lamborn et al. (1991) employed Maccoby and Martin's (1983) two-dimensional framework of parenting. They employed the parental dimensions of acceptance/involvement and strictness/supervision to contrast adolescents on psychosocial development, school achievement, internalized distress, and problem behaviour. This study employed self-report measures from a large sample of teens aged 14 to 18, varying in ethnic and socioeconomic backgrounds. Four parenting styles were devised by trichotomizing adolescents' scores on each of the parenting variables. For example, those in the upper tertile on both variables were considered authoritative. Those in the middle tertile were excluded from the analysis. They also conducted analyses using median splits and found that results were not substantively different.

Data analyses consisted of a four-way multivariate analysis of variance. Interactive effects were systematically examined for parenting style with each of the other variables (4 parenting styles, sex, ethnicity, and parental education). All MANOVA's indicated a significant effect for parenting style and no interactions. The authors concluded that "the benefits of authoritative parenting and
the costs of neglectful parenting transcend demographic groups" (p.1062).

Results and discussion were organized in terms of adolescent profiles for each parenting style. Those from Authoritative homes scored highest in competence and adjustment, higher in psychosocial development, and lower in problem behaviour. GPA, drug use, and delinquency were no different than those from Authoritarian homes. Adolescents from Permissive Indifferent families scored most poorly across all four sets of outcomes. Self-reliance, perceived social competence, and perceived academic competence were no different than those from Authoritarian homes. Behaviour problems, school achievement, self-reliance, and somatic symptoms were no different than those parented by Permissive Indulgent families. Adolescents from Permissive Indulgent or Authoritarian homes tended to score somewhere between the previously mentioned groups on almost all outcome measures.

It was noted by the authors that although many of the contrasts were statistically significant, the magnitude of the effect sizes was small and the greatest difference was found between authoritatively and indifferently parented adolescents. It was speculated that responsiveness may be the primary contributor to positive self-concepts and psychological well-being while demandingness may be the primary contributor to academic achievement and fewer problem behaviours.
Authoritative parenting is considered optimal in supporting adolescent development because parents provide opportunities for their child to explore and experiment within reasonable limits. These experiences result in higher levels of competence, self-esteem, better school performance, and fewer problem behaviours (Baumrind, 1991a; Dornbusch, et al., 1987; Jessor & Jessor, 1974; Maccoby & Martin, 1983; Steinberg, et al., 1989).

Barnes and Farrell (1992), in a study of 699 adolescents and their families, examined the effects of parental support and control on adolescent engagement in drinking, delinquency, and other risk behaviours. Both independent variables, support and control, were found to be highly significant predictors of behavioral outcomes in adolescents.

Steinberg, (1993a) concluded that categorization of parenting variables has proven to be "a useful way of summarizing and examining some of the relations between parenting practices and adolescent psychosocial development" (p.143). There can be little doubt that parenting styles create and maintain the family atmosphere or home climate. Communication, clarity and pertinence of expectations, levels of warmth, monitoring, and discipline combine to establish and support relationships among family members.

Consistent research support has been found for the resilience of the association between parenting style
indices, particularly demandingness and responsiveness, and adolescent well-being across socioeconomic and ethnic groups.

**Divergent Perceptions**

Researchers have begun to move from focusing solely on unidirectional perceptions to multiple views (Youniss & Smollar, 1985; Smetana, 1991; Larson & Richards, 1994) of behaviours and events occurring within the family. Smetana (1991), for example, examined mothers' and adolescents' discrepant views of conflict. In contrast to typical correlational studies of adolescent characteristics and concurrent measures of parental behaviours, researchers are attempting to understand the nature and significance of joint patterns of perception in parent-adolescent relationships (Collins, 1991).

Carlton-Ford, Paikoff, and Brooks-Gunn (1991) emphasized two important methodological issues that are critical to researchers of divergent views within the family. The first issue dealt with the clear definition of the concept of divergence. For the purposes of the present study, the definition of divergence or discrepancy is the simple difference in scores between adolescent-parent perceptions on the parenting dimensions, demandingness and responsiveness. Absolute-value discrepancy scores (the positive value of the difference score) between the adolescent and parent perceptions may then be used to define
the degree of divergence (described in Holmbeck and O'Donnell, 1991, p.56) and to examine relationships with adolescent risk behaviour.

A second issue emphasized the importance of clarity regarding the hypothesized relation between divergence and the chosen outcome variable. One of the objectives of the present study was to investigate a possible relationship between differences in adolescent-parent perceptions of parenting variables and adolescents' level of engagement in risk behaviour. Collins (1991) emphasized three important points concerning parent-adolescent relationships. Firstly, congruence or divergence of perceptions varies according to particular topics of exchange in the family. "Variations in distinctiveness of perceptions are a function of the relevance to adolescent autonomy from versus connectedness to the family" (Collins, 1991, p.104). Secondly, the degree of congruence or discrepancy depends on the particular dyad being observed. According to Carlson, Cooper, and Spradling (1991), fathers and adolescents are congruent in their perceptions of affective dimensions of their relationships but diverge on their views of instrumental domains while the opposite is true for mothers and adolescents. Finally, Collins (1991) stressed that congruence or discrepancy may vary based on the developmental status of the adolescent.

Holmbeck and O'Donnell (1991) explored the consequences of discrepancy between 99 adolescents' (ranging in age from
10 to 18) desire for autonomy and their mothers' willingness to allow for autonomy. Differing perceptions about decision making, that is, who is in charge, was also a focus. Mothers were chosen over fathers given that prior research (Montemayor, 1982) found mother-adolescent relationships to be more sensitive to the onset of adolescence and also more conflictual. A decision making questionnaire and a desire for autonomy scale were completed by mothers and adolescents to assess the independent variables. Families were then categorized according to high or low scores on these variables. Dependent variables were level of conflict, attachment, and family cohesiveness. Two waves of data were collected 6 months apart. Discrepancies were determined by employing multiple-regression analyses. Regarding decision making, more conflict was reported by mothers when there were higher discrepancies. Adolescents, on the other hand, reported less conflict and more emotional detachment from mother when they perceived themselves to be more in charge of decisions than was reported by mother.

Mothers reported conflict when their teens desired more autonomy than mothers were willing to give. The adolescents reported more detachment from mother and exhibited more externalizing symptoms at school as reported by their teachers. Mothers who were not willing to grant autonomy were associated with adolescents who reported more internalizing symptoms and lower self-concept scores.
An interesting finding, between Time 1 and Time 2 of autonomy assessment revealed that "the greatest increases in attachment as reported by mothers occurred for those pairs evidencing the highest discrepancies in their judgments of autonomy granting at Time 1" (Holmbeck & O'Donnell, 1991, p.62). The authors stressed that parents and adolescents must, therefore, persist in confronting the disparities in their views in order to attain healthy interaction.

Recent research (Larson & Richards, 1994) has highlighted the different realities of mothers, fathers, and adolescents. The authors found that individual family members who may have been engaged in the very same activity, often experienced quite contrasting emotional responses.

Although there has been some significant and encouraging research in the area of adolescent risk behaviour, parenting styles and their relationship to adolescent behaviours, as well as adolescent-parent perceptual incongruities, several areas of inquiry remain. First, problem behaviours have typically not been the primary focus. Many researchers have advocated that a wide variety of risk behaviours, not isolated problems, must be considered (Jessor, 1991). Second, there has been the question of adequate characterization of parenting variables (Jessor & Jessor, 1974). Dornbusch et al. (1987) used only three indices to differentiate parental styles; namely, authoritative, authoritarian, and permissive. The alpha
coefficients were relatively low (.66, .70, and .60, respectively). Third, given Larson and Richard's (1994) work on divergent realities within the family, adolescents' perceptions of parenting variables as well as those of both mothers and fathers, should be examined in relation to adolescent risk behaviour. Further investigation is warranted in order to determine the meaning of discrepancies between adolescent and parent perceptions vis a vis adolescents' outcome behaviours (Smetana, 1991). Fourth, further study is needed to examine adolescent leisure time activities with particular consideration given to contextual risk and protective factors as related to adolescents' engagement in problem behaviours.

Limitations of Parenting Research and Potential Future Directions

Maccoby and Martin (1983) present an overview of methodologies used in studying family interaction. Early studies of the 1950's and 60's favoured using parents as informants of their parenting practices. Parental report had appeal because parents, mainly mothers, were considered to have ample opportunity to observe their children interacting within the family over extended periods of time. Questionnaires and interviews, despite their strengths, fell into disfavour because some aspects of parenting were considered not to be obvious or conscious to parents. These methods of data collection, however, have resurfaced and are abundantly evident in current literature. Two pronounced
problems accompanying their resurgence have been the questionable reliability of retrospective data and the social desirability factor in self-reports (Hill & Holmbeck, 1986). Observation methods are popular (Baumrind, 1991c) but have weaknesses as well: time-consuming observer training, misinterpretation, observer bias, and observer presence. There may also be problems with analyses of data, and concerns about ecological validity. Most of the current studies appear to be simple correlational designs which do not enable one to make causal inferences (Nielsen, 1991). Nevertheless, "more and more, it seems evident that circular processes, in which the influence flows in both directions, are the rule" (Maccoby & Martin, 1983, p.24).

Multimethod approaches, which derive information from a variety of data sources, are becoming more preferred. Baumrind (1985), for example, used observations in home and laboratory, videotaped family sessions, interviews, and questionnaires. Data were collected from both parents and adolescents. Problems arising from distortions and incorrect inferences can be minimized by using several data sources (Maccoby & Martin, 1983).

Mapping the domains of parenting styles can be troublesome due to disagreement of definitions of such constructs as permissive, democratic, authoritarian, authoritative, warmth, and responsiveness (Nielsen, 1991). "Arriving at a clearcut operational definition for each
style of parenting and then having the data for every study collected in accord with these definitions would be the ideal, but it is not the reality" (Nielsen, 1991, p.306). Baumrind (1994) has operationalized two dimensions of parenting behaviour, demandingness and responsiveness, in an endeavour to provide clear definition.

A further problem is that there has been a restricted range of populations included in this area of research. "Research on nonwhite and nonintact families is urgently needed" (Steinberg, 1993b, p.276) as are more heterogeneous samples of families.

A major limitation of parenting studies to date is that we now know that parenting practices implicate child and adolescent behaviour, however, we know very little about how (Nielsen, 1991).

Sampling issues are complex and of vital concern to any thorough research endeavour. First, adolescents may be reluctant participants in cases where their privacy could be infringed upon. Second, researchers must decide whether they will collect data from both parents or just one. Baumrind measured mothers and fathers separately and then combined scores to determine a parenting style. When there was a conflict, precedence was given to mothers' scores because "correlations are much higher and more significant...for mothers" (Baumrind, 1991a, p.148). Third, it is very difficult to obtain permission from parents when
the researcher's intentions are to examine parenting variables. Fourth, those parents who participate or give permission for their adolescents to participate in a study about parenting are most likely those who are concerned, involved, and employ an authoritative style.

An attempt was made to address some of the previously mentioned limitations in the present study. Information from adolescents regarding their present interest or involvement in a variety of risk behaviours was examined in relation to the variables of parental demandingness and responsiveness. The revised measures were intended to more clearly and thoroughly reflect the characteristics of the parenting variables, demandingness and responsiveness. The perceptions of demandingness and responsiveness held by adolescents, mothers, and fathers, were considered. Information was collected from adolescents both through questionnaires as well as an activity log, in an attempt to minimize incorrect inferences.

The specific research questions are as follows:

1. What levels of engagement in risk behaviour are a) reported by early adolescents and, b) indicated by their actual out-of-school behaviours?

2. Are adolescents' self-reported risk behaviours and actual out-of-school activities related to a) early adolescents' perceptions of mothers' and fathers' demandingness and responsiveness, b) mothers' and fathers' perceptions of their own demandingness and responsiveness, and c) discrepancies between mothers-adolescents' and fathers-adolescents' perceptions of parental demandingness and responsiveness?
3. Is adolescents' engagement in actual out-of-school activities related to a) self-reported engagement in risk behaviours, b) perceptions of parental knowledge about their adolescents' activities, and c) perceptions of parental approval of their adolescents' activities?
Chapter 3

Method

Design

This correlational study entailed parents' and adolescents' responses to a questionnaire regarding their perceptions of the parenting variables, demandingness and responsiveness. Adolescents were also asked to complete a questionnaire regarding their interest or level of engagement in a variety of risk behaviours.

Following preliminary analyses of questionnaire data, a smaller sample of adolescents, chosen from the sample of adolescents for whom parent data were also available, was asked to complete a Wednesday through Saturday activity log describing their actual out-of-school or free-time activities; specifically where, when, what, and with whom.

Sample

Approximately 235 Grade 8 students from one local junior highschool, located in a busy suburb of a city with a population of approximately 300,000, were invited to participate in the study. Fifty families originally consented to participate (21% recruitment rate). However, due to 3 students being absent from school on two separate administration dates, 1 student moving to another school, and incomplete information from 2 families, the response rate was 88%. The resulting sample comprised forty-four Grade 8 students (28 girls and 16 boys) and their parents.
(37 two-parent families and 7 single-parent families headed by mothers). The school from which the sample originates draws students from all areas of the city due to a French Immersion program. The population of the school is comprised of students from a wide range of socioeconomic backgrounds and, according to the estimations of the principal and his staff, was made up of approximately 70% Caucasian, 20% Asian, and 10% other origins. As social class was not a focus of this study, a rudimentary classification system consisting of 3 groups was employed solely for descriptive purposes. This system comprised the following classes: Professional (professional and managerial), White Collar (lower level white collar and skilled blue collar), and Blue Collar (semi-skilled and unskilled workers) (Hess, 1970, p.461). From the information provided only by the parents in this study regarding occupation and education, it was determined that this sample was socioeconomically heterogeneous in that 25% were blue collar, 53% were white collar, and 22% professional. These classifications were cross-checked by making comparisons to Blishen's (1958) scale of Canadian social class rankings which are also based on occupation and education. In terms of family structure, this sample consisted of 82% two-parent families, 16% single-parent families, and 2% other.
For the qualitative part of the study (completion of a four-day journal of free-time activities), a group of 8 adolescents (1 boy and 1 girl from each of the 4 parenting styles) was chosen from the previously described group of adolescents for whom parent data were available, using a stratified-random selection process.

The second sample of 33 Grade 8 students (10 girls and 23 boys) was obtained from a school within the same school district as the first, with a total of 175 Grade 8 students. Parents of students from this school were purposely not recruited since it was believed that a larger sample of adolescents could be obtained. As it turned out, however, only thirty-seven students (21% recruitment rate) secured parental consent and 33 students (89% participation rate) were present to complete the questionnaire on the day of administration. The principal of the school judged the volunteer participants to be a "good cross-section" of the student body; that is, students on the honour roll, those involved in sports, average students, and those involved in problem behaviours. The principal's judgement about the relatively low response rate was that active parental consent was a consistent problem at the school. It was generally the experience of administrators that requiring active parental consent typically yields low and slow response, whether it be for student inoculations, report cards, or field trips.
The second school, located in the same city as the first but somewhat nearer to the downtown core, had a population of approximately 540 and encompassed a wide ethnic range (60% Caucasian, 12% Asian, 12% First Nations, 16% other). Since parents from this school were not involved in the study, demographic information was provided by the school principal. The socioeconomic range of the sample was roughly estimated to be mainly middle-class. Family structure was reported by the adolescents as 85% two-parent families, 12% single-parent families, and 3% other.

It should be noted that the administrators in both schools from which the sample for this study was obtained, were anxious for the research to be conducted as quickly and as unobtrusively as possible.

**Measures**

Of interest to this study were data regarding demographic variables, parenting indices used to construct the parenting styles, and self-reports of risk behaviour. The parenting questionnaire as well as the risk behaviour questionnaire employed in this study, were derived from existing measures which required reworking in order to better correspond with the conceptual and theoretical framework of the study. The revised parenting measure, however, continues to reflect the same dimensions as have been studied by others (e.g., Lamborn, et al., 1991), thereby permitting general comparisons of research findings.
**Demographic variables**

Parents were asked to provide information on their family's structure, formal education, and occupation. Adolescents from both schools were asked to indicate their age and sex. The principals of the schools from which the samples were obtained were asked to provide data in regard to students' ethnic and socioeconomic distribution. It was believed that these demographic variables, often considered to be valid indicators of social class (Hess, 1970), may relate to variation in perceptions of parenting practices and levels of engagement in risk behaviours (Dornbusch, et al., 1987). Demographic information was obtained solely for descriptive purposes. The focus of the study, however, was on the relation of parenting variables to adolescent risk behaviour regardless of socioeconomic status or ethnicity. Steinberg et al. (1994) found parenting style effects not related to ethnic and socioeconomic factors. For example, the Authoritative parenting style had similar effects, particularly in the domains of problem behaviour and internalized stress, across various status groups.

**Parenting style**

The index of parenting style, developed specifically for this study, approximated the responsiveness and demandingness dimensions suggested by Baumrind (1994) (see Appendix G). The adolescent and parent forms of the Perceptions of Parenting Questionnaire (PPQ) (Appendix H and
I) include items that were borrowed or adapted from existing measures. The measure employed by Lamborn and colleagues to assess parenting style (Dornbusch, et al., 1987; Lamborn, et al., 1991) consisted of 10 items representing the dimension of warmth/involvement (alpha .72) and 9 items representing the dimension of strictness/supervision (alpha .76) (see Appendix J). Their measure was intended to reflect the demandingness and responsiveness dimensions proposed by Baumrind (as cited in Maccoby and Martin, 1983). For the present study, however, it was felt that the measure did not reflect Baumrind's recent and more comprehensively defined dimensions of demandingness and responsiveness (Baumrind, 1994). See Appendix G complete definitions.

**Demandingness.** Demandingness, as measured by Lamborn, and colleagues' (1991) dimension entitled Parental Strictness/Supervision, was characterized mainly by parental monitoring of adolescents' curfews and whereabouts, overlooking the additional demandingness characteristics of family responsibilities, confrontation, and clear communication, described by Baumrind (1994) in Appendix G. Lamborn's measure examined demandingness by asking adolescents about specific curfews, perceptions of parental knowledge of teens' whereabouts after school, and perceptions of parental effort to be knowledgeable about teens' whereabouts. In addition, the majority of response choices were limited to yes/no or true/false.
Baumrind's (1994) definition implies that demandingness incorporates confrontation, monitoring, and consistent discipline by the parent. A high level of demandingness would reflect parents' reasonable demands of responsibility from their children, commensurate with their level of maturity. Parental expectations are communicated clearly and assertively.

The Perceptions of Parenting Questionnaire (PPQ), devised for the present study, measured demandingness more comprehensively (Baumrind, 1994) and offered respondents a wider range of response choices. A 5 point Likert scale, extending from "almost never or never true" to "almost always or always true" was used (Greenberg, et al., as cited in Fischer & Corcoran, 1994, p.486). In constructing the revised parenting questionnaire (PPQ), some items were taken from Lamborn and colleagues' (1991) warmth/involvement scale because they were judged by the researcher to better suit demandingness than responsiveness in light of the definition utilized in this study. For example, the item "when you get a poor grade in school, how often do your parents or guardians encourage you to try harder?" was judged to indicate demandingness rather than warmth or involvement. The demandingness subscale consists of 11 items. The reliability, as indicated by Cronbach's Alpha, is reported in Table 2.
Table 2

Scale Properties of Adolescents' responses to the Parenting Perceptions Questionnaire

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<th>Parenting Subscales</th>
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</tr>
<tr>
<td>Mother Demandingness</td>
<td>.77</td>
</tr>
<tr>
<td>Father Demandingness</td>
<td>.85</td>
</tr>
<tr>
<td>Mother Responsiveness</td>
<td>.94</td>
</tr>
<tr>
<td>Father Responsiveness</td>
<td>.94</td>
</tr>
</tbody>
</table>

N of items = 11 in demandingness subscale;
22 in responsiveness subscale.
The scores for the 11 demandingness items were summed to yield a total demandingness score ranging from a possible low score of 11 to a high score of 55. Higher scores were theoretically an indicator of more effective parenting.

*Responsiveness* entails warmth, friendly discourse, reciprocity, and attachment (Baumrind, 1994). Lamborn, et al.'s (1991) category entitled *Parental Warmth/Involvement*, appeared to lack warmth and attachment. One item, for example, read, "He keeps pushing me to think independently". This item as well as several others in this category, were judged by the researcher to be more suited to the demandingness dimension.

Greenberg's Inventory of Parent and Peer Attachment measure (as cited by Fischer & Corcoran, 1994) was deemed to satisfy all dimensions of responsiveness in the present study. Greenberg, et al. (as cited in Fischer & Corcoran, 1994, p.486) reported alphas for three subscales (trust, communication, and alienation) as being .91, .91, and .86 respectively with a three-week test-retest reliability coefficient of .93. Greenberg's measure was judged to include the essence of all items in Lamborn et. al's (1991) warmth/involvement scale and was in keeping with the definition of responsiveness referred to in this study (Baumrind, 1994). Only two items were discarded ("I wish I had a different mother"; "I feel angry with my mother") because it was felt by the researcher that they were too
temporal whereas the remaining items were not as ephemeral. The alphas for the revised scale for measuring adolescents' and parents' perceptions of responsiveness, comprised of 22 items, are presented in Table 2. The ratings for each item resulted in a total sum ranging from a low of 22 to a high of 110. The higher scores were considered to indicate the most effective parenting.

Greenberg's instrument was originally designed for use with adolescents. For the purposes of this study, the questionnaire was appropriately reworded to suit adolescent or parent respondents. The adolescent questionnaire combines items which refer to each parent in succession.

Demandingness items are #1-#11 (mothers) and #34-#44 (fathers), while responsiveness items are #12-#33 (mothers) and #45-#66 (fathers) on the adolescent form. A complete listing of the items is provided in Appendix H (adolescent's form) or I (mother's and father's forms). Adolescents were asked to complete this questionnaire for either both parents or only one parent, depending on the family structure. Parents each completed identical questionnaires, reworded appropriately to reflect perceptions of their own parenting behaviour.

**Risk behaviour**

Individual risk involvement was assessed in two phases. The first phase entailed a questionnaire, Adolescent Risk Behaviour Questionnaire (ARBQ), made up of 5 sets of risk
behaviours; namely, Criminal (against the law), Safety-related (implies immediate risk of harm/death), Health-related (implies immediate and long-term detriment to mental or physical health), Drug-related (mind-altering), and General Deviance (behaviours which often occur at this age but are judged inappropriate). Most of the items (21 out of 26) were chosen from the 23 item Risk Involvement and Perception Scale (Lavery, Siegel, Cousins, and Rubovits, 1993) which reported test-retest reliability coefficients over a 2-week period ranging from .72 to .97 and an alpha correlation of .72 for total risk involvement. The 23 items in the original measure were categorized as Criminal, Vehicular, Health-related, Status-related, and Drug-related activities. The authors arrived at these categories via an informal Q-sort method whereby the behaviour items were placed into consensual categories. The instrument was scored on a 9-point (0-8) scale ranging from never to daily. (See Appendix K).

Changes to the original measure culminating in its present form (Appendix L), resulted from an informal categorization method conducted with nine doctoral students pursuing degrees in the Department of Psychological Foundations. They all had Masters degrees and some expertise in the behaviour and development of children. Further input was sought from the researcher's doctoral committee members, two of whom are experts in the field of
child development and learning. After careful consideration of feedback, it was decided by the researcher that Safety-related Behaviours and General Deviance were more appropriate category headings than were Vehicular and Status. Sunbathing was omitted and two vehicle-related behaviours, driving a car or a motorcycle, were combined.

Finally, the Adolescent Risk Behaviour Questionnaire (ARBQ) and the Perceptions of Parenting Questionnaire (PPQ) were refined through consultation with 22 Grade 7 students who first completed the questionnaire and then engaged in open discussion about issues such as confidentiality, structure, wording of items, clarity of directions, and feasibility of specific items. Minor changes were made regarding their suggestions, the instruments were reviewed once again, this time with a smaller group (4) of the same Grade 7 students. This completed the process which resulted in the final measures employed in this study.

The items chosen for this study offered a wide range of risk behaviours designed to be particularly relevant to the risk behaviour definition employed in this study. Alphas for the risk behaviour instrument are presented in Table 3. The risk behaviour questionnaire (ARBQ) was scored on a 5-point Likert-scale ranging from would never try to often do. Anchors employed by Gonzalez, Field, Yando, Gonzalez, Lasko, and Bendell (1994), in their study of adolescents' perceptions of risk-taking, were selected in order to assess
### Table 3

Scale Properties of the Adolescent Risk Behaviour Questionnaire

<table>
<thead>
<tr>
<th>Risk Behaviour Categories</th>
<th>N Items</th>
<th>Alpha Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal</td>
<td>5</td>
<td>.55</td>
</tr>
<tr>
<td>Safety-related</td>
<td>5</td>
<td>.56</td>
</tr>
<tr>
<td>Health-related</td>
<td>6</td>
<td>.65</td>
</tr>
<tr>
<td>Drug-related</td>
<td>6</td>
<td>.81</td>
</tr>
<tr>
<td>General Deviance</td>
<td>4</td>
<td>.67</td>
</tr>
<tr>
<td>Total Risk Behaviour</td>
<td>26</td>
<td>.90</td>
</tr>
</tbody>
</table>

N of cases = 77
the level of propensity toward, as well as engagement in a wide variety of risk behaviours. Space was provided at the end of each questionnaire where respondents were encouraged to express any feelings they had in filling out the questionnaire or being part of this study.

Only adolescents were asked to complete this questionnaire. Self-reports of adolescent risk behaviour are considered the single best reporters of their own risk taking since other authorities, such as parents or teachers, for example, are unlikely to be present when adolescents engage in problem behaviour (Maggs, Almeida, & Galambos, 1995).

The second phase of assessing individual risk involvement comprised a smaller number of research participants (8) who were asked to describe their out-of-school activities for four days in a diary-like format. The purpose of this phase was to support and augment the quantitative information obtained through questionnaires. The case study approach was intended to provide a "real-life" dimension and offer a more personal glimpse of some adolescents' activities. This sample was selected only from those adolescents for whom parent data were available since parents' perceptions were being considered in analyses.

A booklet was specifically designed for this phase to determine what adolescents do with their out-of-school time, where they go, when, and with whom. It also asked
adolescents to predict whether or not their parents have knowledge or approve of each particular activity in which they engage. A small focus group comprised of four Grade 7 students (2 boys and 2 girls) provided helpful suggestions as to the construction and content of the diary. The final version of the booklet was called an Activity Log (AL) which included specific instructions for recording daily entries. See Appendix M.

The idea for this method of data collection came from the Experience Sampling Method (ESM) (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi & Larson, 1987; Larson, 1989; Larson, et al., 1984; Larson & Richards, 1994). "Survey methods may be useful for studying rates of (alcohol and marijuana) use and how these relate to well-established sociological and psychological variables. But, in order to learn how drug use is embedded within ongoing lives it is necessary to have more direct information" (Larson, et al., 1984, p.386).

The Experience Sampling Method (ESM) has been employed to seek comprehensive information about research participants' external and internal situation at the time of a predetermined signal (Csikszentmihalyi & Larson, 1987). It yields repeated measurements of a person's activities, emotions, thoughts, motivations, and physical symptoms. There are, however, several disadvantages to the original ESM Methodology. One is that the random sampling of
experiences may miss the occurrence of targeted behaviours
and a second is that a participant who is engaged in a risk
behaviour while being "beeped" may not be willing or able to
respond adequately or honestly. The researchers therefore
acknowledged that additional self-report information which
minimizes recall bias and memory distortion by having
respondents reconstruct recent events (Montemayor &
Brownlee, 1987), would be beneficial. This belief became
the underlying foundation of the Activity Log.

**Procedure for Data Collection**

Formal approval was acquired from the school district
and from the principal of the first school from which the
sample was to be selected. The sample from this school
consisted of adolescents as well as their parents (N = 44
adolescents, 44 mothers, 37 fathers). In an attempt to
increase parental support, sanction from the Parents'
Advisory Committee was obtained by the principal who then
voiced the school's support of this study by way of the
following excerpt appearing in a regular newsletter to all
Grade 8 parents at this school, encouraging them to
participate.

A doctoral candidate from the University of
Victoria is studying adolescent-parent
relationships and adolescent risk behaviours and
has requested our help. We agree that this is an
extremely important area of concern for parents,
adolescents, and educators and encourage parents
and students to participate in the study. Formal
approval from the school district has been
granted. You will be receiving more detailed
information regarding the study in the mail next
week and we hope you will give it serious consideration.

Homeroom periods were used as a vehicle to provide the students with information about the study. The following announcement was made by a teacher in each class:

A doctoral candidate from the University of Victoria is studying adolescent-parent relationships and adolescent risk behaviours (e.g., smoking, drinking) and has requested our help. All you will be asked to do is fill out a questionnaire during class time during the next couple of weeks. Your responses will be absolutely confidential; that is, your name will NOT appear anywhere on the questionnaire. Neither your parents, teachers, friends nor anyone but the researcher will ever see your responses. Your parent or parents will also be asked to complete a questionnaire which will be mailed out to them if you AND they agree to participate in the study. It's very important for researchers to learn more about adolescents and what's important to them and more about parents and what's important to them. One group of kids your age has already done the questionnaire and they found it really interesting and worthwhile. A detailed explanation of the study and a consent form, which must be signed by you and your parents, will be mailed this week. We hope you'll consider participating and encourage your parents to do the same!

A Grade 8 class list was utilized in order to assign each family a numeric identity code. Precoded letters and consent forms, including stamped return envelopes, were then mailed to the home of each student (see Appendix N). Initially, there was only a 16% response rate (37 families). Two weeks later, a second letter (see Appendix O), an abridged version of the original, was sent home with each Grade 8 student in an endeavour to obtain a more
representative sample. This process generated another 13 consents yielding a total of 50 families.

Approximately a dozen random phone calls were made to families who chose not to participate, in an endeavour to establish some explanations for their decision. The rationale given most often was that they were "just too busy" (6) and the other was that the consent form "sat around for so long and it wasn't getting signed so I finally threw it away" (4). From these brief conversations, it did not appear that these were unconcerned parents or that they questioned the value of the study. In fact, most of them endorsed the study enthusiastically. Two parents expressed that their teens were not willing to participate.

Questionnaire packages for parents were then mailed to the home of each consenting family a day or two before the adolescent questionnaire was administered at school; parents and adolescents completed their questionnaires during a relatively similar timeframe. Each questionnaire package contained an explanatory covering letter including precise instructions for completing the questionnaire (Appendix P), questionnaires for each parent (precoded with numeric identity codes), individual envelopes marked MOTHER or FATHER, and a pre-stamped return envelope. In addition, a raffle ticket for a $50.00 gift certificate to a local music store was included (Appendix Q) for each family, to be signed and returned with the completed questionnaires. The
offer of a presentation and discussion was extended to parents and adolescents upon completion of this study, in order to share research findings.

Adolescents' questionnaires (precoded with a numeric identity code matching those of their parents) were administered by the principal investigator in a corner of the cafeteria during homeroom period. Instructions were read aloud (Appendix R) and questions were dealt with before the students commenced.

Preliminary data analysis yielded four distinct "parenting styles"; namely, authoritative, authoritarian, permissive indulgent, permissive indifferent. This distinction was accomplished by dichotomizing adolescents' ratings of parental demandingness and responsiveness scores at the median for each parent. Since fathers and mothers were rated separately by adolescents, it was decided to include only "congruent" father/mother ratings (31 families). The authoritative cell consisted of 7 girls and 4 boys; the authoritarian included 2 girls and 3 boys; the permissive indifferent, 7 girls and 3 boys; and the permissive indulgent, 4 girls and 1 boy. A male and a female adolescent were randomly selected from each of four parenting categories based on adolescents' perceptions of the parenting variables.

A letter was sent to each youth asking him or her to participate in this second phase and outlining expectations
The letters were each followed up by a phone call. All eight selected students agreed to take part. A group briefing session was organized, then conducted at the school by the researcher. The purpose of this meeting was to discuss the intended use of the Activity Log. The booklet was thoroughly reviewed with ample time given to questions and discussion. Anonymity and confidentiality as well as the voluntary nature of the study were reaffirmed.

Adolescents were asked to give detailed descriptions of their leisure time activities from a Wednesday through Saturday (in this particular instance, Thursday happened to be a non-attendance day for the students thereby affording students more leisure time than usual). A new entry page was to be used each time the student changed location. Students were instructed to make their entries at the end of each day and to use a sticker to seal daily entry pages to ensure confidentiality. The Activity Logs, complete with envelopes and stickers, were distributed at the orientation meeting. Entries began the day of the orientation meeting so as to maximize recall of instructions. The researcher's phone number, in case of questions or concerns, appeared prominently in the booklet. All students were phoned on Thursday early evening to follow up on possible questions or concerns. Six out of eight students were available to take the call. It was confirmed that the expectations were clear and there appeared to be no problems. Upon completion of
the Activity Log, the adolescents were asked once again to assemble at the school in order to submit their booklets and to receive a $10 participant gift. Each was given an opportunity to express his or her feelings about being a part of the study and to provide feedback regarding his or her experiences.

In order to increase the representativeness of the adolescent sample, a second sample, comprised of 33 Grade 8 students (23 boys and 10 girls), was obtained from another local junior highschool in the same school district. A letter and consent form (see Appendix T) were sent home with all regular Grade 8 students (approximately 175) for parental signatures, to be returned to their homeroom teachers within two days. An incentive of a $50 gift certificate to a local music store was offered in an attempt to maximize participation. In addition, the offer of a presentation and discussion was extended to parents and adolescents upon completion of this study, in order to share research findings. Twenty-four responses (14% response rate) were obtained. To increase participation, an extension of three days was offered along with the principal's encouragement in the form of a brief public address announcement as well as the homeroom teachers' expressions of support and reminders each day. This process yielded 13 more students (7% response rate) and resulted in a total of 37 participants (21% response rate).
In the presence of the principal, questionnaires were administered in the cafeteria to 33 students (89% participation rate) by the researcher who gave complete detailed instructions prior to administration. Upon completion, the students sealed their questionnaires in envelopes and submitted them. A draw was made by a Grade 8 student for a $50 gift certificate which was later mailed to the winner's home.

**Plan of Analysis**

Data include all adolescents' scores (N = 77) on involvement in risk behaviours as well as their perceptions of the parenting variables, demandingness and responsiveness. However, parents' own perceptions of the aforementioned parenting variables are available only from the sample selected from the first school (N = 44 mothers, 37 fathers). There were no missing data. For the sections of the questionnaire that were relevant, none of the items were omitted. For those adolescents whose fathers were not perceived to be "active" in parenting, the section relevant to fathers was omitted in its entirety. In the analyses, these data were removed from consideration.

Subtotals for each risk behaviour category and a total risk behaviour score were computed for all adolescents. From this procedure, adolescents' levels of engagement in risk behaviours were determined. In addition, totals were calculated for adolescents' perceptions as well as, mothers'
and fathers' perceptions for each parenting variable (demandingness and responsiveness). To investigate the relationship between adolescents' level of risk behaviour and each parenting variable, Pearson correlations were computed among risk behaviour categories including total risk and each participant's perception of demandingness and responsiveness. A multiple regression analysis was conducted to examine the relative strength of the predictor variables. Twelve to 20 participants for each predictor variable was employed as an operational guideline for regression analyses.

Parenting styles were founded on the basis of median scores on adolescents' perceptions of mothers' and fathers' demandingness and responsiveness which resulted in four groups; those who scored above the median in both variables, those who scored below, and those who scored high in one and low in the other. Analyses of variance were conducted in order to investigate adolescents' level of engagement in risk behaviours on the basis of perceived parenting style.

Discrepancy scores were calculated by subtracting parents' scores on demandingness and responsiveness from their adolescents' scores on the same variables. The absolute value, indicating size of discrepancy, was then correlated with adolescents' risk behaviour scores in order to examine a possible relationship.

Eight adolescents were chosen randomly for the
qualitative part of this study; a male and a female from each of the 4 parenting style groups. They were asked to complete a four day activity log of their free-time. A descriptive mini-case study approach was used to outline adolescents' activities, who they spent time with, as well as when and where. The adolescents' entries were related in a narrative portrayal of the their activities as well as their perceived relationships with their families.

In order to analyze Activity Log entries, the following criteria were considered as measures of risk or protection: (a) the context of the activity; that is, was the adolescent alone, with family, or with peers (Larson, 1988); (b) were adults perceived to know about and approve of the activity (Steinberg, 1986; Galambos & Maggs; 1991); (c) adolescents' positive attitude toward risk behaviours (Jessor & Jessor, 1974; Jessor et al., 1994); (d) the concrete mention of risk behaviours; (e) association with peers engaged in risky behaviours (Jessor et al., 1994); and, (f) parents' perceptions of their own demandingness and responsiveness. An adolescent who, for example, spent all his or her free-time alone or with deviant peers was considered at-risk. An adolescent whose parents consistently did not know of his or her whereabouts was considered at-risk.

Findings from Activity Logs were then compared to those obtained from questionnaires and inferences were made in the context of parenting styles.
Chapter 4
Results and Discussion

The purposes of this study were (a) to investigate early adolescents' level of engagement in a wide variety of risk behaviours; (b) to examine associations between adolescents' self-reported risk behaviours and the parenting variables, demandingness and responsiveness as perceived by the adolescents, and their mothers and fathers; (c) to investigate associations between adolescent-parent discrepancies in perceived demandingness and responsiveness, and adolescents' self-reported involvement in risk behaviours; and (d) to explore adolescents' actual leisure time activities.

The requirement of obtaining active consent from each research participant was a challenging endeavour. In order to obtain the most representative sample possible, several approaches to recruitment were attempted. The final sample was comprised of 44 adolescents and their parents from one school, and 33 adolescents from another.

All participants were given an opportunity to express their feelings about being in this study, either by commenting on the questionnaire or by telephone. The majority did not choose to comment. Nevertheless, there were some interesting observations, questions, and suggestions. (Please refer to Tables 4, 5, and 6). The common themes among adolescents and parents mainly focused
Table 4

Adolescents' Comments, Questions, Suggestions Regarding their Experiences in the Research Study

<table>
<thead>
<tr>
<th>Theme</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to Parents</td>
<td>. I realize now that I'm a goody two-shoes that gets along well with my parents.</td>
</tr>
<tr>
<td></td>
<td>. it made me realize how lucky I am to have such caring parents.</td>
</tr>
<tr>
<td></td>
<td>. I always thought my parents were strict before I found out how many of my friends' parents don't even care.</td>
</tr>
<tr>
<td></td>
<td>. this made me realize which parent I am closer to.</td>
</tr>
<tr>
<td></td>
<td>. I hope my answers don't make me or my mom look bad.</td>
</tr>
<tr>
<td></td>
<td>. this is important because adults need to learn about teenagers and how we feel about our parents so they'll be more understanding. (2)</td>
</tr>
<tr>
<td></td>
<td>. it made me realize that my parents don't expect much from me.</td>
</tr>
<tr>
<td></td>
<td>. why do you have to know all this stuff? My parents don't!</td>
</tr>
<tr>
<td></td>
<td>. I like my parents but they don't know me and if they did, they wouldn't like me.</td>
</tr>
<tr>
<td></td>
<td>. I hate my family!</td>
</tr>
<tr>
<td></td>
<td>. I don't get along with my mother or her boyfriend.</td>
</tr>
<tr>
<td></td>
<td>. this better be confidential! (3)</td>
</tr>
<tr>
<td></td>
<td>. I feel I know myself and my parents a bit better.</td>
</tr>
<tr>
<td></td>
<td>. I'm surprised not more people helped you in this study. I guess it's because parents remember what they thought of their parents at this age!</td>
</tr>
<tr>
<td>Measures</td>
<td>. the test was most interesting; a good experience. (3)</td>
</tr>
<tr>
<td></td>
<td>. some of the questions were difficult but in all, it was an understandable questionnaire. (3)</td>
</tr>
<tr>
<td></td>
<td>. would be nice if there was a &quot;maybe&quot; or &quot;sometimes&quot; response on the risk behaviour questionnaire. (2)</td>
</tr>
<tr>
<td></td>
<td>. my mother is a lesbian. For the father part, I referred to her partner.</td>
</tr>
<tr>
<td>Personal Growth or Issue</td>
<td>. I am interested in the results because I know that a lot of kids do drugs even during lunch break.</td>
</tr>
<tr>
<td></td>
<td>. it was great to share my feelings. (2)</td>
</tr>
<tr>
<td></td>
<td>. kinda personal but I hope it helps.</td>
</tr>
<tr>
<td></td>
<td>. I hope you come back next year and do another one in Grade 9.</td>
</tr>
<tr>
<td></td>
<td>. this helped me share my opinion with someone who won't judge me. (2)</td>
</tr>
<tr>
<td></td>
<td>. it was fun and a good waste of time.</td>
</tr>
<tr>
<td></td>
<td>. it was great to get out of class.</td>
</tr>
</tbody>
</table>

Note. The frequency of each comment, in the case of more than one occurrence, appears in brackets.
Table 5
Mothers' Comments, Questions, Suggestions Regarding their Experiences in the Research Study

<table>
<thead>
<tr>
<th>Theme</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to Adolescent</td>
<td>after filling this out, I think some of my answers may be wishful - but they were my first choices. As the questions continued, I began to re-think what I had said.</td>
</tr>
<tr>
<td></td>
<td>parenting teens is so complicated!!!</td>
</tr>
<tr>
<td></td>
<td>it's hard to really know another person, even one's child without communication. It's certainly a transition time in so many areas for a child/woman.</td>
</tr>
<tr>
<td></td>
<td>overall, I feel pretty good about our relationship (except on bad days). No one is perfect, particularly parents, and I don't hesitate to tell my teen that.</td>
</tr>
<tr>
<td></td>
<td>I will be interested in the results.</td>
</tr>
<tr>
<td></td>
<td>my attitude and respect toward my teen is returned toward me and is more important than good grades or a lot of friends.</td>
</tr>
<tr>
<td></td>
<td>this was interesting and doing this questionnaire has made me see the areas that I may need to work on. My children are important to me.</td>
</tr>
<tr>
<td></td>
<td>we live in a &quot;blended family&quot; and do our best but divorces have such serious, long-lasting consequences.</td>
</tr>
<tr>
<td>Measure or Procedure</td>
<td>some questions are very &quot;black and white&quot;. Like question #28: &quot;my answer was 3 because my teens do not always let me to help them to talk about their problems&quot;.</td>
</tr>
<tr>
<td></td>
<td>how my teen &quot;thinks or feels&quot; questions were difficult to answer - only she can really answer these.</td>
</tr>
<tr>
<td></td>
<td>how can a parent really answer #21?</td>
</tr>
<tr>
<td></td>
<td>I always find the choices confusing.</td>
</tr>
</tbody>
</table>
Table 6
Fathers' Comments, Questions, Suggestions Regarding their Experiences in the Research Study

<table>
<thead>
<tr>
<th>Theme</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to Adolescent</td>
<td>I have a lot more worries about my son than daughter. I can talk to my daughter but my son does not discuss his feelings or interests.</td>
</tr>
<tr>
<td></td>
<td>we expect our teen to tell one or the other of us where he's going. I can always find out from his mother.</td>
</tr>
<tr>
<td></td>
<td>at frequent times, I &quot;loose&quot; my temper with him for his &quot;smart alec back sass&quot; answers to routine requests. I feel he is too easily led by others and ends up &quot;holding the can&quot; and I get ticked off with him because of it. He does not appreciate all the benefits we provide him with.</td>
</tr>
<tr>
<td></td>
<td>my teen is responsive when I make time &amp; do one on one. That could happen more. I think I'm lucky my teen has good judgement much of the time.</td>
</tr>
<tr>
<td></td>
<td>discussion is important but not as important as example &amp; interest.</td>
</tr>
<tr>
<td>Measure or Procedure</td>
<td>some questions are subjective and based on parents' opinion so there should be a &quot;don't know&quot; response.</td>
</tr>
<tr>
<td></td>
<td>will we be able to peruse the findings?</td>
</tr>
<tr>
<td></td>
<td>my wife asked me to complete this questionnaire.</td>
</tr>
<tr>
<td></td>
<td>I don't understand question #21. How can I know if s/he gets upset without me knowing about it?</td>
</tr>
</tbody>
</table>
on concerns about participants' relationships or issues regarding the measures. Comments regarding the measures were generally positive other than the expected frustrations of choosing single responses for complex questions. Adolescents expressed insights about their feelings toward their parents and about themselves. Parents were concerned mainly with the trials and tribulations involved in parenting teens. In general, comments regarding relationships were positive, hopeful, and caring. Naturally, there were a few exceptions.

**Levels of engagement in risk behaviour**

Adolescents' involvement in risk behaviours was measured using the Adolescent Risk Behaviour Questionnaire (ARBQ). A 5-point Likert scale assessed whether teens would never try (1), would like to try (2), have tried but probably would not do again (3), sometimes do (4) or, often do (5) a particular behaviour. It was originally intended that analyses be done separately for each sub-category as well as for Total Risk Behaviour. However, following preliminary analyses and consideration of the fairly substantial intercorrelations among the sub-categories (see Appendix U), as well as the high reliabilities for Total Risk Behaviour, it was decided to report results for Total Risk Behaviour only. In addition, inclusion of the five subscales entailed a complex number of tests of significance which, in their consideration and reporting, could have been
confusing in terms of number, and misleading in terms of the increased possibility of Type I error.

What is the level of engagement in risk behaviours for teens in this study? Results in Table 7 indicate that School I adolescents are involved to a lesser extent than adolescents at School II. A score of 26 would suggest that the teen "would never try" any of the risk behaviours presented in the questionnaire whereas a score of 52 would indicate an interest in becoming involved. In general, however, although early adolescents indicate or at least approach a "would like to try" level, (means ranging from 41.43 for girls at one school to 54.87 for boys at another), they are not actively engaged in risk behaviours at this time. Active involvement would be indicated by a score of 104 or more ("sometimes do").

When considering specific category items, as reported in Table 8, it appears that there is very little actual involvement in risk behaviours by the adolescents in this study. Although mean scores rarely reached the "have tried but probably would not do again" level (score of 3), there does appear to be some interest in becoming involved, indicated by the score of 2 ("would like to try"). In the Drug-related behaviour category for both Schools I and II, an interest is evident in drinking alcohol (2.52; 3.18 respectively), getting drunk (1.89; 2.76), and taking marijuana (1.80; 2.42). In the case of drinking alcohol,
Table 7
Means and Standard Deviations of Risk Behaviour for Schools I and II

<table>
<thead>
<tr>
<th>Risk Behaviour Category</th>
<th>School I</th>
<th>School II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Total Risk Behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>43.64</td>
<td>12.86</td>
</tr>
<tr>
<td>girls</td>
<td>41.43</td>
<td>12.41</td>
</tr>
<tr>
<td>boys</td>
<td>47.50</td>
<td>13.10</td>
</tr>
</tbody>
</table>

N for School I = 28 girls and 16 boys
N for School II = 10 girls and 23 boys
Possible range of scores: 26-130
Table 8
Means and Standard Deviations of Individual Risk Behaviour Items for Schools I and II

<table>
<thead>
<tr>
<th>Risk Behaviour Category</th>
<th>School I</th>
<th>School II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Criminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) shoplifting</td>
<td>2.11</td>
<td>1.13</td>
</tr>
<tr>
<td>2) driving a motorcycle or a car after drinking</td>
<td>1.11</td>
<td>.39</td>
</tr>
<tr>
<td>3) driving a motorcycle or car on city streets</td>
<td>1.50</td>
<td>.66</td>
</tr>
<tr>
<td>4) vandalism</td>
<td>1.73</td>
<td>1.09</td>
</tr>
<tr>
<td>5) stealing from others</td>
<td>2.02</td>
<td>1.13</td>
</tr>
<tr>
<td>Safety-related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) carrying a weapon</td>
<td>1.36</td>
<td>.87</td>
</tr>
<tr>
<td>2) accepting rides with strangers</td>
<td>1.27</td>
<td>.79</td>
</tr>
<tr>
<td>3) riding in a car without a seatbelt</td>
<td>3.39</td>
<td>1.42</td>
</tr>
<tr>
<td>4) riding in a car with a driver who's been drinking</td>
<td>1.27</td>
<td>.73</td>
</tr>
<tr>
<td>5) running away from home</td>
<td>1.61</td>
<td>1.06</td>
</tr>
<tr>
<td>Health-related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) having sex</td>
<td>1.48</td>
<td>.59</td>
</tr>
<tr>
<td>2) having sex without a condom</td>
<td>1.27</td>
<td>.79</td>
</tr>
<tr>
<td>3) binging/purging</td>
<td>1.16</td>
<td>.53</td>
</tr>
<tr>
<td>4) crash dieting</td>
<td>1.30</td>
<td>.73</td>
</tr>
<tr>
<td>5) smoking cigarettes</td>
<td>2.32</td>
<td>1.43</td>
</tr>
<tr>
<td>6) taking steroids</td>
<td>1.07</td>
<td>.25</td>
</tr>
<tr>
<td>Drug-related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) drinking alcohol</td>
<td>2.52</td>
<td>1.39</td>
</tr>
<tr>
<td>2) getting drunk</td>
<td>1.89</td>
<td>1.20</td>
</tr>
<tr>
<td>3) taking cocaine/crack</td>
<td>1.07</td>
<td>.33</td>
</tr>
<tr>
<td>4) taking speed</td>
<td>1.14</td>
<td>.41</td>
</tr>
<tr>
<td>5) taking marijuana</td>
<td>1.80</td>
<td>1.25</td>
</tr>
<tr>
<td>6) taking hallucinogens (e.g. mushrooms, LSD)</td>
<td>1.25</td>
<td>.65</td>
</tr>
<tr>
<td>General Deviance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) starting physical fights with other peers</td>
<td>1.84</td>
<td>1.18</td>
</tr>
<tr>
<td>2) cheating on an exam</td>
<td>2.23</td>
<td>1.16</td>
</tr>
<tr>
<td>3) skipping school</td>
<td>1.98</td>
<td>1.02</td>
</tr>
<tr>
<td>4) stealing from your own home</td>
<td>1.95</td>
<td>1.16</td>
</tr>
</tbody>
</table>

N for School I = 44; N for School II = 33.
Possible range of scores for each item: 1 - 5
many adolescents reported that they have already engaged in the behaviour. In contrast, there is very little adolescent activity or interest at present, in taking cocaine, speed, or hallucinogens. Adolescents from School I reported lower levels of involvement for alcohol and marijuana than those in School II. School II adolescents had, on average, already tried these behaviours or reported a propensity toward becoming involved with them.

Within the Criminal behaviours category, shoplifting (2.11; 2.64 respectively) and stealing from others (2.02; 2.39) were the most highly rated items indicating at least a curiosity toward these behaviours. Vandalism approached the "would like to try" level (1.73; 1.97). Driving a motorcycle or car on city streets approached the "would like to try" at School II (1.50; 1.85) whereas there was little or no interest shown at either school in driving a motorcycle or a car after drinking (1.11; 1.03). Although the pattern of interest and involvement in risk behaviours was the same for both school groups, adolescents from School II reported higher levels in general.

Safety-related item means, on average, indicated minimal involvement except for riding in a car without a seatbelt (3.39; 3.48). It would appear that the average teen has already engaged in this behaviour and some do it often. Both groups of teens reported a similar level of involvement in this behaviour. In contrast to School I,
however, teens from School II reported an interest (2.15) in carrying a weapon. Little interest at this time was reported by teens in the remaining Safety-related activities.

*Having sex (1.48; 2.76) and smoking cigarettes (2.32; 2.73)*, Health-related behaviours, are activities teens appear to be on the brink of trying or, in the case of smoking, may have already tried. The remaining behaviours in this category were not an issue for teens in general at this time. School I and II adolescents reported similar levels of engagement in cigarette smoking. There appeared to be a substantial difference, however, in their interest in having sex. Teens from the first school indicated minimal interest at this time, whereas the second group expressed a strong interest which approached the *have tried* level. In addition, the latter group approached the *would like to try* level in having sex without a condom (1.85). There appears to be no interest generally in these teens' lives in binging/purging, crash dieting, or taking steroids at this time.

There was general interest in all behaviours in the General Deviance category, most particularly cheating on an exam (2.23; 3.21 respectively) which approached or reached the *have tried* level. School II adolescents reported a higher level of interest in general deviance than did teens from School I.
Individuals who were involved to some extent in one risk behaviour were typically involved in numerous risk behaviours, supporting the conclusions of Jessor (1991) that problem behaviours occur in clusters. Overall, 22% of all adolescents in this study (6 boys and 4 girls from School I; 6 boys and 1 girl from School II) reported above the average risk behaviour score in each of the risk behaviour categories.

In summary, early adolescents in this study are presently at a stage where their interest in risk behaviours has been piqued. They report a level of curiosity and acceptance toward almost all risk behaviour categories. Drug-related activities in particular, are reported as receiving the highest level of interest among all risk behaviours and are engaged in most frequently; specifically, drinking alcohol, getting drunk, and taking marijuana.

"Riding in a car without a seatbelt", a Safety-related behaviour, was reported to have been tried by the average teen at least once and likely more often. This was the most consistently highly rated item of all the risk behaviours followed by drinking alcohol, getting drunk, and smoking cigarettes.

Given the possible range of scores in each category, results indicated a low overall incidence of engagement in risk behaviours for the average teen. However, a propensity for becoming involved is evidenced for this group.
Adolescents' Perceptions of Parental Demandingness and Responsiveness

Adolescents' perceptions of the parenting variables, demandingness and responsiveness, were measured using the Perceptions of Parenting Questionnaire. A 5-point Likert scale indicated whether teens believed their parents' behaviour to be "almost never or never true", "not very often true", "sometimes true", "often true", or "almost always or always true". Summary statistics describing the family context in terms of perceptions of parenting, are presented in Table 9. A score of 44 on the demandingness scale or 88 on the responsiveness scale, for example, would indicate parental behaviours are perceived by their teen to be "often true". From the results, it is evident that teens rate their parents from a moderate level, that is "sometimes true" (33 and 66 respectively), to approaching the "often true" level, especially in demandingness.

Overall, ratings of both parents were higher for both parenting variables for School I teens, as compared to those from School II. Furthermore, ranges between scores varied more widely for School II. The pattern of perceptions toward parents is similar, however, for teens from both schools. Mothers are rated consistently higher than fathers on both variables by teens from Schools I and II.

For School I teens, mothers' demandingness behaviours were, on average, perceived to be "often true" and fathers' demandingness approached this level. Scores for teens from
Table 9
Means and Standard Deviations for Adolescents' Perceptions of Parental Demandingness and Responsiveness for Schools I and II

<table>
<thead>
<tr>
<th>Parenting Variable</th>
<th>School I Mean</th>
<th>School II Mean</th>
<th>School I SD</th>
<th>School II SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Demandingness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>44.68</td>
<td>40.58</td>
<td>5.48</td>
<td>7.47</td>
</tr>
<tr>
<td>girls</td>
<td>44.68</td>
<td>42.40</td>
<td>5.34</td>
<td>7.21</td>
</tr>
<tr>
<td>boys</td>
<td>44.69</td>
<td>39.78</td>
<td>5.90</td>
<td>7.60</td>
</tr>
<tr>
<td>Mothers' Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>81.52</td>
<td>75.46</td>
<td>14.81</td>
<td>18.94</td>
</tr>
<tr>
<td>girls</td>
<td>82.25</td>
<td>84.50</td>
<td>15.33</td>
<td>21.61</td>
</tr>
<tr>
<td>boys</td>
<td>80.25</td>
<td>71.52</td>
<td>14.26</td>
<td>16.66</td>
</tr>
<tr>
<td>Fathers' Demandingness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>42.68</td>
<td>36.17</td>
<td>7.99</td>
<td>8.51</td>
</tr>
<tr>
<td>girls</td>
<td>41.40</td>
<td>36.50</td>
<td>8.60</td>
<td>9.27</td>
</tr>
<tr>
<td>boys</td>
<td>45.33</td>
<td>36.00</td>
<td>6.01</td>
<td>8.35</td>
</tr>
<tr>
<td>Fathers' Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>73.70</td>
<td>69.77</td>
<td>16.24</td>
<td>19.24</td>
</tr>
<tr>
<td>girls</td>
<td>71.96</td>
<td>69.70</td>
<td>16.57</td>
<td>23.98</td>
</tr>
<tr>
<td>boys</td>
<td>77.33</td>
<td>69.80</td>
<td>15.58</td>
<td>17.10</td>
</tr>
</tbody>
</table>

N for School I = 28 girls and 16 boys
N for School II = 10 girls and 23 boys
Possible range of scores for demandingness: 11 - 55
Possible range of scores for responsiveness: 22 - 110
School II suggested a level of "sometimes true" for both variables. Mothers' and fathers' responsiveness were rated by teens at both schools as being "sometimes true". As with demandingness, School II ratings were lower and exhibited a wider range. These results seem to indicate a relatively positive perception of home climate overall.

**School and Gender Differences**

Based on the results discussed previously, differences apparently exist between the two school groups in adolescents' self-reported levels of risk behaviour and perceptions of parental demandingness and responsiveness. Furthermore, although gender differences were not an initial focus of this study, differences were evident and considered worthy of further investigation.

In order to examine possible differences for School and Gender, an Analysis of Variance was run for Total Risk Behaviour. The results are presented in Table 10. Significant differences were found between school groups (p<.03) but not between genders suggesting that the pattern of behaviour was the same for boys and girls at both schools but the risk behaviour reported by the adolescents in School II was higher overall.

To test for differences between boys' and girls' perceptions of parental demandingness and responsiveness and for differences between school groups, Analyses of Variance were conducted for each parenting variable (see Table 11).
### Table 10

Analyses of Variance of Risk Behaviour for Gender and School

<table>
<thead>
<tr>
<th>Behaviour Category</th>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Risk Behaviour</td>
<td>Gender</td>
<td>1</td>
<td>566.20</td>
<td>2.81</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>1</td>
<td>1001.81</td>
<td>4.98</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Gender X</td>
<td>1</td>
<td>2.66</td>
<td>0.01</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 38 girls; 39 boys
No significant differences in ratings of demandingness were found for Gender; boys and girls typically rated mothers higher than fathers on this variable. However, significant differences for ratings of parents were found between schools for parental demandingness (p<.02 for mothers' demandingness; p<.00 for fathers' demandingness). School I adolescents rated their parents higher overall than adolescents from School II.

Based on Analyses of Variance, no significant differences were found for Gender or School for adolescents' perceptions of mothers' or fathers' responsiveness indicating that boys and girls across school groups rated their parents similarly on this parenting variable but differently, as a group, on demandingness.

Although differences were found between school groups regarding adolescents' reported levels of engagement in risk behaviour (Table 10) as well as their perceptions of parental demandingness (Table 11), patterns of behaviours and relationships within schools were similar. All adolescents, for example, reported the highest level of interest in Drug-related behaviours while the next highest scores were reported in the Safety and Health-related categories, followed by Criminal behaviour and General Deviance (Table 8). All adolescents perceived mothers' demandingness and responsiveness higher than fathers'. In other words, both involvement in risk behaviour as well as
Table 11
Analyses of Variance of Parenting Variables for Gender and School

<table>
<thead>
<tr>
<th>Parenting Variable</th>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demandingness</td>
<td>Gender</td>
<td>1</td>
<td>19.21</td>
<td>.46</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>1</td>
<td>236.73</td>
<td>5.70</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Gender X</td>
<td>1</td>
<td>28.54</td>
<td>.69</td>
<td>.41</td>
</tr>
<tr>
<td>Mothers'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Gender</td>
<td>1</td>
<td>716.01</td>
<td>2.65</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>1</td>
<td>257.49</td>
<td>.95</td>
<td>.33</td>
</tr>
<tr>
<td></td>
<td>Gender X</td>
<td>1</td>
<td>498.66</td>
<td>1.85</td>
<td>.18</td>
</tr>
<tr>
<td>Fathers'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demandingness</td>
<td>Gender</td>
<td>1</td>
<td>55.20</td>
<td>.81</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>1</td>
<td>752.93</td>
<td>11.11</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Gender X</td>
<td>1</td>
<td>71.91</td>
<td>1.06</td>
<td>.31</td>
</tr>
<tr>
<td>Fathers'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Gender</td>
<td>1</td>
<td>132.43</td>
<td>.42</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>1</td>
<td>360.38</td>
<td>1.14</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Gender X</td>
<td>1</td>
<td>101.74</td>
<td>.32</td>
<td>.57</td>
</tr>
</tbody>
</table>

N = 38 girls, 39 boys, 77 total
N = 77 mothers, 67 fathers
perceptions of parenting (Table 9) indicated parallel patterns for both groups, thus they were, in accordance with the original research questions, combined for further analyses. Because the study was based primarily on correlational analyses, it could be argued that school differences increased the variability of scores. The resulting heterogeneity was thus contributive to the analyses.

**Relationships between Adolescent Risk Behaviour and Parenting Variables**

In order to investigate possible relationships between adolescents' self-reported risk behaviour and their perceptions of parental demandingness and responsiveness, Pearson Correlations were calculated. Correlation coefficients are presented in Table 12. Findings indicate a consistent overall negative relationship.

**Mothers' demandingness**

Results indicate a negative association between adolescents' level of engagement in risk behaviour and mothers' demandingness. Higher adolescents' perceptions of mothers' demandingness are associated with lower levels of engagement in a variety of risk behaviours and vice versa. About 38% \((r = -.62, p<.001)\) of the variance in teen risk behaviours may be accounted for by their perceptions of mothers' demandingness. It may, therefore, be inferred that mothers' demandingness is convincingly associated with
Table 12

Correlations Among Adolescent Risk Behaviours and Adolescents' Perceptions of Mothers' and Fathers' Demandingness and Responsiveness

<table>
<thead>
<tr>
<th>Risk Behaviour Categories</th>
<th>MD</th>
<th>MR</th>
<th>FD</th>
<th>FR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Risk Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>-.62***</td>
<td>-.46***</td>
<td>-.44***</td>
<td>-.35**</td>
</tr>
<tr>
<td>girls</td>
<td>-.65***</td>
<td>-.34*</td>
<td>-.57***</td>
<td>-.21</td>
</tr>
<tr>
<td>boys</td>
<td>-.57***</td>
<td>-.51**</td>
<td>-.33</td>
<td>-.57***</td>
</tr>
</tbody>
</table>

N = 38 girls, 39 boys, 77 total

MD = mothers' demandingness; MR = mothers' responsiveness
FD = fathers' demandingness; FR = fathers' responsiveness
*p<.05
**p<.01
***p<.001
adolescents' involvement in risk behaviours for both school groups.

**Mothers' responsiveness**

Mothers' responsiveness correlated significantly and negatively with adolescents' Total Risk Behaviour (r = -.46, p < .001). Overall, one may infer that adolescents' perceptions of mothers' responsiveness are associated with their involvement in risk behaviours.

**Fathers' demandingness**

Correlation coefficients for adolescent risk behaviours and adolescents' perceptions of their fathers' demandingness are reported in Table 12. Results indicate negative associations with adolescents' Total Risk Behaviour for teens (r = -.44, p < .001) suggesting that the higher the perceptions of fathers' demandingness, the lower adolescents' reported involvement in risk behaviours.

It is apparent that correlations for adolescents' involvement in risk behaviours in general, are higher for mothers' demandingness than for fathers' demandingness in regard to adolescents' risk behaviour.

**Fathers' responsiveness**

Fathers' responsiveness was significantly, albeit modestly, associated with adolescents' Total Risk Behaviour (r = -.35, p < .01). Correlations for mothers' responsiveness
were higher in relations to adolescents' risk behaviours than for fathers'.

**Multiple Regression**

To further examine the relative strength of the predictor variables (adolescents' perceptions of parental demandingness and responsiveness), a multiple regression analysis was conducted for Total Risk Behaviour (Table 13). Intercorrelations for the parenting variables are presented in Appendix V. *Mothers' demandingness* made a significant contribution to risk behaviour (Standard beta = -.56, p<.001), while the other parenting variables did not.

**Adolescent Risk Behaviour and Parenting Style**

Four parenting groups were determined on the basis of median scores on adolescents' perceptions of mothers' and fathers' demandingness and responsiveness; namely, Authoritative, Authoritarian, Permissive Indulgent, and Permissive Indifferent. A similar strategy was employed by Lamborn et. al (1991) who emphasized that resulting groupings are sample specific. In other words, those parents categorized as permissive indulgent in this sample may not be categorized as such in another. Ranges of scores and medians are reported in Appendix W. As figures in this table indicate, the median for demandingness is fairly high, particularly for mothers, based on a 5 point Likert scale (scores range between 4.1 for mothers' demandingness to 3.3 for fathers') whereas the median for responsiveness tends to
Table 13

Multiple Regression Analysis for Adolescents' Ratings of Parental Demandingness and Responsiveness with Risk Behaviour Categories

<table>
<thead>
<tr>
<th>Risk Behaviour Category</th>
<th>R</th>
<th>R²</th>
<th>MD</th>
<th>MR</th>
<th>FD</th>
<th>FR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Risk Behaviour</td>
<td>.71</td>
<td>-.50</td>
<td>-.56***</td>
<td>-.22</td>
<td>-.07</td>
<td>.06</td>
</tr>
</tbody>
</table>

Note. N = 77 adolescents, 77 mothers, 67 fathers
MD = mothers' demandingness; MR = mothers' responsiveness
FD = fathers' demandingness; FR = fathers' responsiveness
***p<.001
be more moderate (scores range between 3.7 to 3.3). Thus, this group of adolescents appears to be quite homogeneous in their moderate to fairly high ratings of both parenting variables.

Students were categorized based on their high or low ratings of each parent on each parenting variable relative to their own school group. Those adolescents who rated both of their parents above the median on parental demandingness and responsiveness were categorized in the Authoritative parenting group; those who rated both parents below the median on both variables were categorized in the Permissive Indifferent group. Parents rated above the median on demandingness but below the median on responsiveness were categorized in the Authoritarian group. Finally, those whose perceptions were below the median for both parents in demandingness and high in responsiveness were categorized in the Permissive Indulgent group. In order to clearly differentiate the four parenting styles, only data from those adolescents whose perceptions of parental demandingness and responsiveness were congruent for both mother and father, were included in the data analyses (N = 49). Results are reported in Table 14.

The two parenting groups representing the highest numbers of adolescents were Authoritative and Permissive Indifferent; the first, characterized by being rated above the median on both parenting variables and the second, below
### Table 14
Adolescent Risk Behaviour Means and Standard Deviations Within Parenting Style Groups

<table>
<thead>
<tr>
<th>Parenting Style</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritative</td>
<td>17</td>
<td>36.53</td>
<td>11.67</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>8</td>
<td>46.13</td>
<td>10.25</td>
</tr>
<tr>
<td>Permissive Indulgent</td>
<td>7</td>
<td>49.86</td>
<td>17.63</td>
</tr>
<tr>
<td>Permissive Indifferent</td>
<td>17</td>
<td>58.59</td>
<td>13.80</td>
</tr>
</tbody>
</table>

Note. $F(1, 45 = 8.03, p<.001)$
the median on both parenting variables. In other words, for most adolescents who perceived demandingness for both parents to be high, a high rating was typically reported for responsiveness as well. Lamborn et al. (1991) evidenced the same pattern (p.1054).

Results in Table 14 indicate that adolescents who came from Authoritative homes reported the lowest levels of involvement in all risk behaviours. Higher levels of risk were reported by adolescents from Authoritarian and Permissive Indulgent families. Those from Permissive Indifferent homes reported the highest levels of involvement. Analysis of variance confirmed statistically significant differences based on parenting style for Total Risk Behaviour ($F_{3,45} = 8.03$, $p < .001$). A Tukey HSD comparison of group means indicated that the only significant difference was between the Authoritative and Permissive Indulgent parenting styles ($p < .001$).

Of the total number of adolescents participating in this study, 64% perceived themselves to be parented congruently; that is, both parents were rated either above or below the median on the parenting variables. Adolescents who perceived themselves to be parented incongruently ($N = 28$ or $36$%), reported a Total Risk Behaviour mean of 46.96 which was somewhat higher than levels of risk behaviour reported by adolescents in either the Authoritarian or the Permissive Indulgent parenting group. Thus, it appears that
parental incongruence is less effective in minimizing adolescent risk behaviour than congruent Authoritative parenting but more effective than congruent Permissive Indifferent parenting.

Despite the fact that this group of adolescents was quite homogeneous in rating their parents at an average to above average level on demandingness and responsiveness, differences among groups were found. One would, therefore, expect greater differences in a more varied group.

In summary, the lowest levels of problem behaviours were reported by teens parented Authoritatively. This suggests that adolescents' perceptions of high parental demandingness and responsiveness is consistent with the lowest reported levels of engagement in risk behaviours.

**Parents' perceptions of their own demandingness and responsiveness**

The following analyses of parents' own perceptions of demandingness and responsiveness, involved only adolescents for whom parental data were obtained. Means and standard deviations are reported in Table 15. It is evident that, on average, both mothers and fathers rate themselves at the level of "often true" or above in demandingness. For responsiveness, mothers rate their behaviours as "often true", whereas fathers fall slightly short of that level. These results indicate that parents rate themselves higher on each parenting variable than do their adolescents (see Table 9). Adolescents on average, rate
Table 15
Means and Standard Deviations for Parents' Perceptions of Demandingness and Responsiveness for School I

<table>
<thead>
<tr>
<th>Parenting Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' demandingness</td>
<td>48.89</td>
<td>4.63</td>
</tr>
<tr>
<td>Mothers' responsiveness</td>
<td>91.36</td>
<td>8.89</td>
</tr>
<tr>
<td>Fathers' demandingness</td>
<td>46.50</td>
<td>5.51</td>
</tr>
<tr>
<td>Fathers' responsiveness</td>
<td>84.62</td>
<td>11.23</td>
</tr>
</tbody>
</table>

N = 28 girls; N = 16 boys
their parents at the "sometimes true" to "often true" level. (See Table 9).

Parents' perceptions of demandingness and responsiveness as related to their adolescents' risk behaviours

Mothers' perceptions

In order to determine possible relationships between mothers' own perceptions of parental demandingness and responsiveness and their teens' engagement in risk behaviours, Pearson Correlations were calculated and are reported in Table 16. It would appear that adolescents' own perceptions of mothers' demandingness and mothers' responsiveness are far more useful in predicting adolescent risk behaviour than are mothers' own perceptions (see Table 12 for comparison).

Fathers' perceptions

No significant relationship was found for fathers' perceptions of demandingness or responsiveness with adolescents' involvement in Total Risk Behaviour.

In summary, based on correlations reported in Tables 12 and 16, neither mothers' nor fathers' perceptions of demandingness and responsiveness are as convincingly associated with their adolescents' engagement in risk behaviours as are adolescents' own perceptions. In contrast to adolescents' ratings, parents' ratings showed no significant relationships with their adolescents' involvement in risk behaviours. However, caution must be exercised when interpreting the size of the correlation
Table 16
Correlations Among Adolescent Risk Behaviours and Mothers' and Fathers' Perceptions of Demandingness and Responsiveness for School I

<table>
<thead>
<tr>
<th>Risk Behaviour Categories</th>
<th>MMD</th>
<th>MMR</th>
<th>FFD</th>
<th>FFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Risk Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole group</td>
<td>-.14</td>
<td>-.25</td>
<td>-.28</td>
<td>-.22</td>
</tr>
<tr>
<td>girls</td>
<td>-.17</td>
<td>-.20</td>
<td>-.24</td>
<td>-.38</td>
</tr>
<tr>
<td>boys</td>
<td>-.19</td>
<td>-.37</td>
<td>-.30</td>
<td>-.31</td>
</tr>
</tbody>
</table>

N = 44 mothers, 37 fathers
MMD = mothers' perceptions of demandingness; MMR = mothers' perceptions of responsiveness; FFD = fathers' perceptions of demandingness; FFR = fathers' perceptions of responsiveness.
*p<.05
**p<.01
***p<.001
coefficients in Tables 12 and 16. While there is a stronger association shown in Table 12, particularly with significance, it should be kept in mind that the size of sample in Table 12 was larger (N = 77) than that in Table 16 (N = 44 mothers, 37 fathers), hence the criterion for significance was lower for Table 12.

**Adolescents' risk behaviours as related to discrepancies between adolescents' and parents' perceptions of demandingness and responsiveness?**

Parents' and adolescents' perceptions of the family may differ, thus it seemed important to obtain each family member's perspective on parenting. To examine discrepancies between adolescents and their parents on the same variables, simple subtractions of each parent's score from their adolescent's score, were calculated. Discrepancy means (Table 17) for each variable were negative suggesting that, on average, parents tended to rate their own perceptions of demandingness and responsiveness higher than the rating of their teens. Discrepancies between perceptions of demandingness, for both parent/adolescent dyads, appear to be smaller than those for responsiveness. Discrepancies for responsiveness also evidence greater standard deviation than for demandingness indicating a wider range of responses in this domain for both adolescent-mother and adolescent-father dyads.

To study the relationships between adolescents' level of involvement in risk behaviours and the differences
Table 17

Mean Scores for Parental Demandingness and Responsiveness and Discrepancy Scores between Adolescents' and their Parents' Perceptions of Parental Demandingness and Responsiveness for School I

<table>
<thead>
<tr>
<th>Parenting Variable</th>
<th>Adolescents' Score</th>
<th>Parents' Score</th>
<th>Discrepancy Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers'</td>
<td>44.68</td>
<td>48.89</td>
<td>-4.21</td>
</tr>
<tr>
<td>Demandingness</td>
<td>(5.48)</td>
<td>(4.63)</td>
<td>(6.00)</td>
</tr>
<tr>
<td>Mothers'</td>
<td>81.52</td>
<td>91.36</td>
<td>-9.84</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>(14.81)</td>
<td>(8.89)</td>
<td>(15.92)</td>
</tr>
<tr>
<td>Fathers'</td>
<td>42.68</td>
<td>46.50</td>
<td>-3.81</td>
</tr>
<tr>
<td>Demandingness</td>
<td>(7.99)</td>
<td>(5.51)</td>
<td>(8.92)</td>
</tr>
<tr>
<td>Fathers'</td>
<td>73.70</td>
<td>84.62</td>
<td>-10.92</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>(16.24)</td>
<td>(11.23)</td>
<td>(15.88)</td>
</tr>
</tbody>
</table>

N = 44 adolescents, 44 mothers, 37 fathers
Possible range of scores for demandingness: 11 - 55
Possible range of scores for responsiveness: 22 - 110
Standard deviations are reported in parentheses
between adolescents' and parents' perceptions of demandingness and responsiveness, the "absolute" values of the difference scores were used in calculating correlations since there were both positive and negative scores. This decision was based on Holmbeck and O'Donnell's (1991) review which acknowledges problems in using "difference scores" as opposed to absolute scores as independent variables:

Significant effects involving difference scores are extremely difficult to interpret. Unless the differences scores are all positive or all negative, they constitute a curvilinear, rather than a linear, distribution in the sense that the lowest discrepancies are in the middle of the distribution. Adding a constant to the difference scores does not make interpretation of correlations between difference scores and outcomes any less difficult. It appears that the only way to test for differences between congruence groups and discrepancy groups with the difference score approach is either to use absolute values of the difference scores or to provide tests for curvilinear trends. With the absolute-value approach, information about the direction of the difference score is lost. With tests of curvilinearity, interpretation is made difficult when difference scores are not evenly distributed about zero.

Carlson, Cooper, and Spradling (1991) examined the developmental implications of incongruence among dyadic family relationships (mothers and adolescents) in their subjective realities of the family in relation to adolescents' perceived competence. Dyadic incongruence scores were computed as absolute-value discrepancies on the variables of family cohesion and conflict. The dyadic incongruence scores were then correlated with the dependent variable, adolescent's perceived self-competence. For the
adolescents in this study, incongruent perceptions with father and congruent perceptions with mother were related to perceived self-competence.

Carlton-Ford, Paikoff, and Brooks-Gunn (1991) also discussed the absolute-value discrepancy approach in the context of divergent family perceptions, maintaining that "no easy answers exist to questions regarding the definition of divergent views" (p.92). This appears to be an area which requires further research.

For the purposes of this study, and to respond to the question of adolescent-parent discrepancies and their relationship to adolescent risk behaviour, absolute values were employed as indicators of the size of the discrepancies regardless of their direction. As such, significant but moderate relationships were found between discrepant perceptions regarding parental demandingness and adolescents' involvement in risk behaviour (r = .32 for adolescents-mothers and .33 for adolescents-fathers, p<.05). This would suggest that the greater the discrepancy in adolescent-parent perceptions of parental demandingness, the higher their adolescents' involvement in risk behaviours. No significant relationships were found for adolescent-parent discrepancy in mothers' (r = .21) or fathers' (r = .24) responsiveness, and their adolescents' reported interest or involvement in risk behaviour.
It may be surmised that neither parents' own perceptions about their demandingness and responsiveness nor discrepancy scores between adolescents and parents' perceptions of parental demandingness and responsiveness are as useful in predicting adolescents' involvement in risk behaviours as are teens' own perceptions of these parenting variables. Discrepancy analyses do, however, raise questions about the theoretical meaning of and the relevance of differences in perceptions, and how they might be measured. For example, a stronger theoretical framework is necessary in order to determine more clearly, the impact of discrepancy on adolescents' choices and whether the actual size of the discrepancy is as important as the specific issue about which discrepant perceptions exist.

**Adolescents' leisure time activities**

Leisure time provides adolescents with opportunities to choose activities which, in some cases, may be considered potentially risky. The purpose of the Activity Log was to examine adolescents' self-reported leisure time activities with particular regard for risk and protective factors within relevant contexts.

Following analyses of questionnaire results, Activity Log booklets were analyzed for eight students, two from each parenting style. The plan for analysis was as follows: (a) to note explicit mention of engagement in any risk behaviours; (b) to assess the attitude toward risk
behaviours based on statements made in the booklet. Jessor, et al. (1994) claimed that the more negative the attitude toward risk behaviour, the less the involvement; (c) to compare log entries and questionnaire results of self-reported engagement in risk behaviours; (d) to note risk and protective factors (see Table 1, Jessor, et al., 1994) within the contexts of time spent alone, with family, and with friends (Larson & Kleiber, 1993; Larson, 1988); and, (e) to consider parental knowledge and approval of their adolescents' activities (Steinberg, 1986; Galambos & Maggs, 1991).

The results are presented for each adolescent in mini-case study format and are organized in terms of adolescents' perceived parenting styles. Fictitious names were employed for each adolescent so as to ensure anonymity. A detailed description is provided of what the teens did in their leisure time for four consecutive days, and who was present at the time. Results from the Activity Log as well as from the questionnaires are utilized to render a tentative, inferential summary statement for each adolescent.

**Authoritative Parenting Style (High Demandingness; High Responsiveness)**

**Female (Melissa)**

Wednesday: Melissa went to a physiotherapy appointment with mother after school, she went home and watched television with her sister (biography of Charles Manson,
American Justice), she watched television in the evening with her family (Hackers movie).

Thursday (no school): watched television (Much Music) with sister, watched television alone (Grammy Awards; Much Music), played on the computer alone (Ultima 6), worked on Science homework while watching television alone.

Friday: after school, watched television first with sister and then with family (talk shows, Much Music, Batman cartoon), went swimming with sister in early evening, did Science homework alone during later evening, played on computer alone (Ultima 6).

Saturday: went with her family to a fair at a local recreation centre, played solitaire and watched Much Music, cleaned her bedroom alone, watched television with family later in the afternoon followed by watching a movie (Aliens) with the family in the evening while also working on a puzzle with her mother.

Melissa's attitude toward the risk behaviours highlighted in this study was very clear. She attributed her own negative opinion toward all the risk behaviours, to her parents' communication of their values. Choosing to smoke or have sex would be her choice in later life but everything else is illegal. "Besides", she said, "cigarette smoke 'smells icky'". She admits she is not a good liar and would therefore, likely get into a lot of trouble if she did choose to engage in any of these risk behaviours.
Melissa reported that her parents knew of and approved all the activities in which she chose to engage during her leisure time over the four day period. This appears to be congruent with her perception of high parental demandingness and responsiveness.

Her score in the Adolescent Risk Behaviour Questionnaire was 29 (possible range is 26 to 130) suggesting a very low propensity toward engagement in risk behaviours at this point in time. In terms of adolescent-parent discrepancies on perceptions of parental demandingness and responsiveness, Melissa rated her mother higher on both variables than mother herself did, rated her father higher on demandingness, and was congruent with her father on the responsiveness variable. Mother and father were perceived as equally demanding but mother was perceived as much more responsive than father.

In summary, the majority of Melissa's leisure time was spent at home either alone or with her family, watching television. Much Music seemed to be a favourite. At no time were any friends mentioned, however, she seemed to spend a lot of time with her sister. Questionnaire results as well as self-reported leisure activities intimate Melissa's respect for and closeness to her parents. There appears to be little reason to suspect that Melissa has any interest in becoming involved in risk behaviours in the near future.
Male (Brad)

Wednesday: Brad spent time hanging around at a friend's house, talking with three friends. The rest of the time was spent at home playing basketball with his brother, doing homework, writing (maybe a journal?), followed by going to band practice and coming home again.

Thursday (no school): Brad and his brothers cleaned the house, he and his friend went to the library to work on a project. The later afternoon and evening were spent at home watching television and writing.

Friday: Brad did his brother's paper route for him because he had a track meet, went to the track meet with the family in the evening.

Saturday: home all day, spent time alone writing, doing homework, listening to music and watching television. Later, played basketball with his brother, then watched television and listened to music alone.

Unfortunately, Brad either forgot or chose not to make any comments in the log booklet regarding his attitude toward risk behaviours. However, the Adolescent Risk Behaviour Questionnaire results indicated a total score of 30 which suggests a low propensity toward engaging in risk behaviours at this time. Brad rated each parent higher on parental demandingness and responsiveness than the parents themselves did, indicating perceptions of family structure as well as attachment. Mother and father were perceived to
be equally demanding and responsive. Brad reported that his parents knew of most of his whereabouts and were perceived by the teen to approve all his leisure activities.

In summary, Brad enjoyed sports, played in the school band, had several friends, seemed conscientious about school, had occasional household responsibilities, and spent leisure time at home with his family. Rating both parents higher on parenting variables than they themselves is perhaps suggestive of his respect for them as parents. There seems to be no immediate reason for concern regarding Brad's involvement in risk behaviour.

Authoritarian Parenting Style (High Demandingness; Low Responsiveness)

Female (Lucy)

Wednesday: Lucy went home after school and watched television, did chores in the early evening with the family. She and her sister went out later evening to "walk around the neighbourhood to meet new teenage guy neighbours". She reported that her parents did not know where the girls went, however, they were perceived to approve of the activity.

Thursday (no school): home alone all day watching "lots of T.V." which was perceived as not having parental approval. Lucy worked on French homework in her bedroom alone after supper followed by another stroll through the neighbourhood "to see new neighbours again...didn't see the new neighbours the first night". Once again, the parents
were not perceived to know the girls' whereabouts but they were perceived to approve of the activity.

Friday: came home after school and wrote in computer diary, then watched baseball game on television with Dad. She wrote in her activity log, "In case you haven't noticed, I lead a very boring life. I don't do anything bad". She and her sister "walked around the neighbourhood bouncing a basketball" early in the evening. Then, the family went out "looking at cars". Later that evening, the teen babysat two young children next door.

Saturday: she and her father went to McDonalds for breakfast, then to the bank to make a deposit for the school band. In the afternoon, she, her mother, and her sisters visited her grandmother. Early evening, she practised her trombone alone in her bedroom. "My dad was proud of me for practising without him asking me to". The whole family gathered in the T.V. room to watch the Mariners "lose another game".

When asked about risk behaviours, Lucy felt most strongly about, the following: smoking cigarettes, taking steroids, taking cocaine/crack, taking speed, taking marijuana, and taking hallucinogens. Her comments regarding all the aforementioned drugs were generally negative because she felt that drugs are "bad for your body". "People are stupid to take cocaine (sic) or crack, because it just dissolves their brains". She thought cigarettes were
particularly bad because her grandfather died of lung cancer. She did, however, write, "I still want to try it only once".

It appears that Lucy's parents disapproved of their children watching too much television or "fooling around making lots of noise". This suggests that there are some rules and expectations regarding acceptable behaviour in this family.

There was a lack of mention of any friends although Lucy spends ample time with her family. Although she perceived both her parents as being low in responsiveness, it appears they do spend time together as a family as well as maintaining close contact with the grandmother. From all that was written in this teen's activity log, there appear to be few signs to indicate a propensity toward risk behaviours at this time.

The Adolescent Risk Behaviour Questionnaire resulted in a total of 35. Lucy's highest self-reported involvement was in the Safety-related risk behaviour category which was mainly accounted for by the most highly rated item overall, "riding in a car without a seatbelt".

Lucy rated both her parents higher on demandingness and lower on responsiveness than they themselves did. Mother and father were perceived similarly by their daughter in demandingness. Mother and father, however, rated themselves considerably higher on responsiveness than did their
daughter. Mother was perceived as the more responsive of the two parents.

In summary, Lucy spent the majority of her leisure time either alone or with family members. There were indications of clear family rules and expectations. Comments made in the Activity Log gave little indication of propensity toward any risk behaviours in the near future.

**Male (Collin)**

Wednesday: Collin went shopping at the mall after school with a friend. He spent the rest of the day and evening at home. His friend was over for a while; they played video games and watched television.

Thursday (no school): he rented, then played video games alone. He ate lunch at McDonalds alone, watched a hockey game at home later in the afternoon by himself, went out onto the street and played hockey alone.

Friday: came home alone after school and played video games, then watched a basketball game on television alone, played hockey on the street by himself, surfed the internet alone.

Saturday: went to the mall in the morning with his parents to shop for clothes, worked on a school project in the afternoon and evening.

The risk behaviours Collin felt most strongly about and negatively toward were drug-related activities: STUPID, WASTE OF MONEY, thats (sic) about the most ridiculous thing
I could think of". In contrast to this statement made in the Activity Log, the results of the Adolescent Risk Behaviour Questionnaire indicated above average scores in all risk behaviour categories with a total score of 56. This suggests at least an interest or accepting attitude toward some behaviours in each category. Interestingly enough, considering the statement Collin made in the Activity Log, his highest reported level of activity lay in Health- and Drug-related behaviours (smoking cigarettes and having sex had the highest average means).

The questionnaire results indicated that this teen has already tried the following: shoplifting, stealing from others, carrying a weapon, crash dieting, smoking cigarettes, drinking alcohol, getting drunk, taking marijuana, starting physical fights with other peers, and cheating on an exam. He indicated interest in having sex, having sex without a condom, taking steroids, and skipping school.

Collin and his mother were relatively congruent in their perceptions of mothers' demandingness, however, mothers' perception of her own responsiveness was considerably higher than her son's. Father was rated more responsiveness than mother but was rated lower by his son than father perceived himself to be. Mother was perceived as more demanding and less responsive than father.
Entries in the Activity Log indicated that parents were perceived to know and approve of all activities. There were no comments to indicate closeness to family, family responsibilities, or parental supervision. Both parents rated themselves higher than their teen on perceptions of parental demandingness and responsiveness. Most of the teen's leisure time was spent by himself either playing video games or playing hockey. Due to the scarcity of detail in the Activity Log entries and some conflicting information, it was difficult to make many reliable inferences. However, it does seem plausible to suggest that Collin has an accepting attitude and a propensity toward engagement in a number of risk behaviours.

**Permissive Indulgent Parenting Style (Low Demandingness; High Responsiveness)**

**Female (Brenda)**

Wednesday: Brenda went to her best friend's house to help her with her paper route. Parents were perceived to know and approve of this activity. She went home for dinner and got ready for swimming. Went swimming with her friend until about 9 p.m. and then over to her friend's house for a sleepover. They played cards, ate popcorn, then fell asleep.

Thursday (no school): hung around her best friend's house mostly just talking. Then, she and her friend went to her house and worked on making jewellery. Her friend left at dinner time. Brenda then watered her strawberry plants
and attended to her dog who had a "ceasure (sic) but he is fine now". She and her family had McDonalds for dinner after which Brenda did some homework, made some cheese biscuits "which turned out pretty good", and watched some television.

Friday: went home after school and watched television by herself even though she had planned to do something with her best friend but her best friend did something with another girl instead. Had dinner at her sister's and her boyfriend's place. They watched television together and then they paid her $7 to do the dishes. Brenda went home and watched television (Outer Limits) with her parents and then read in bed until she fell asleep.

Saturday: went for a bike ride with her best friend, window-shopped, played in a park, looked at the beautiful scenery, went back to best friend's house to pick up her stuff and got home late afternoon. Cleaned her room, ate McDonalds, did some baking, then watched television with parents and brother for most of the evening.

According to her Activity Log, Brenda's attitude regarding engagement in risk behaviours was most negative toward shoplifting because "I have done it before and regret doing for the rest of my life and will never ever, ever do it again. I think I mostly shoplifted under peer pressure." Other behaviours Brenda felt strongly about were smoking
cigarettes, drinking alcohol, taking speed, taking marijuana, and taking hallucinogens.

The Adolescent Risk Behaviour Questionnaire resulted in a total score of 41 which indicated a low interest in risk behaviours overall. Brenda's highest self-reported scores were in Criminal and Safety-related behaviours. She indicated having already tried shoplifting, driving a motorcycle or car on city streets, stealing from others, riding in a car with a driver who's been drinking, and drinking alcohol, however, there is no way of knowing the level of commitment to any one of these behaviours.

Activity Log entries indicated that Brenda's parents were not always perceived to know her whereabouts, however, in all cases, parents were perceived to approve of the activities. Mothers' demandingness was perceived by Brenda to be slightly higher than by mother herself, whereas fathers' demandingness was perceived higher by the father. Responsiveness was rated higher by both parents. Brenda perceived mother to be more responsive and more demanding than father.

In summary, Brenda appears to have tried a number of risk behaviours already, therefore, may be considered to be open to further experimentation. She also admitted to being susceptible to peer pressure. These factors, coupled with a perception of low parental demandingness, may suggest a propensity to further experimentation.
Male (Marty)

Wednesday: Marty went shopping at a mall with a friend, ate supper, went home where he and his friend watched a basketball game and played video games.

Thursday (no school): at home all day "being sick but not on purpose". Parent was home also.

Friday: went to a family friend's house after school where they talked and played cards.

Saturday: Went to a late afternoon movie (Mission Impossible) with a friend. Came home afterward and watched a hockey game alone; no one was home.

Marty identified driving a motorcycle or a car after drinking as "stupid...because it's very easy to crash and probably die" and taking hallucinogens is a "very bad idea...because there (sic) very dangerous". His entries in the Activity Log were sparse.

The Adolescent Risk Behaviour Questionnaire resulted in a total score of 37 indicating very little interest in risk behaviours in general. The only reported behaviours already having been tried were shoplifting and stealing from others. Interest was shown in trying running away from home, having sex, having sex without a condom, and skipping school. There appeared to be no interest in any drugs or alcohol at this time.

Marty is parented by a single mother who perceived herself to be more demanding than does her son. They are
fairly congruent in their perceptions of responsiveness although the son rated his mother slightly higher than she herself did. His mother was presumed by her son to be cognizant and approving of all aforementioned activities.

In summary, Marty gave very little information in the Activity Log, therefore, inferences were difficult to make. He and his mother appeared to have a warm relationship although mother was not perceived, by Marty, as being very demanding. Judging from questionnaire results coupled with the self-reported activities in the Activity Log, there may be some interest in risk behaviours but little indication of engagement at this time.

**Permissive Indifferent Parenting Style (Low Demandiness; Low Responsiveness)**

**Female** (Paula)

Wednesday: Paula and a friend went to a gas station and smoked a cigarette. They then ran a quick errand and went to Paula's house to snack and watch television. She and her mother went to a mall later and then to a restaurant for supper.

Thursday (no school): For all of the morning and most of the afternoon, Paula and her friend watched television and played Monopoly. They went to the corner store after supper to buy candy and pop. Went back later (around 9:30 p.m.) to buy cigarettes and smoke. The girls then went back to Paula's house, watched television, ate candy, and fell asleep.
Friday: she and her friend went to Paula's doctor appointment (she had swollen knees). They then went to the friend's house and had Kraft Dinner with her friend's mom's boyfriend. They watched television and Paula iced her knees. Between 10 - 11:30 p.m., Paula and four others (2 girls, 2 boys) hung around at a park near her house, smoked cigarettes and "drank some beer (but not enough to get drunk)". Paula got home at 11:40 p.m. and watched television with her parents.

Saturday: went to a friend's house in the early afternoon, suntanned and listened to music with friends (1 girl, 1 boy). Later, went to a mall with her parents to buy clothes and a new BBQ. Stopped for a bite at McDonalds with parents. Went to an early evening show (Twister) with her friend and then home to watch television with parents.

Paula indicated strong feelings about shoplifting, carrying a weapon, and smoking cigarettes. About shoplifting, she said, "It's pretty stupid! I tried it for a while, it got addicting, kinda like cigarettes (sic)". Carrying a weapon "is SO dangerouse (sic) and stupid. Don't go kill someone or hurt someone it will just come back to you in the future". "Smoking cigaretts (sic) is dumb, addiction and life threatning (sic). I smoke once in a while, I don't know why though (I wish I could stop completly (sic))". 
The Adolescent Risk Behaviour Questionnaire resulted in a total score of 74 with the highest involvement being in Drug-related activities (a score of 22 indicating a level between have tried but probably won't do again and sometimes do). Behaviours Paula reported at this level are: stealing from others, riding in a car without a seatbelt, running away from home, crash dieting, smoking cigarettes, drinking alcohol, getting drunk, cheating on an exam, and skipping school. According to the questionnaire, the one activity Paula does often is taking marijuana.

Paula reported that her parents knew about and approved all the activities mentioned in her Activity Log, other than being in the park late evening, smoking cigarettes and drinking alcohol. This teen perceived both her parents to be low in demandingness and responsiveness; father being perceived as lowest. Both parents perceived themselves to be more demanding and responsive than did their daughter, particularly the father in demandingness.

Both the Activity Log and the questionnaire provided ample information to suggest that Paula is engaged in a number of problem behaviours. It appears as though her parents are either not aware of her smoking cigarettes, using pot, or drinking, or perhaps they accept that fact. Curfew and supervision in general may be too liberal for a teen her age. There were no clues in the log book as to the quality of communication between Paula and her parents,
however, scores on the questionnaire intimated a perception of little warmth or involvement.

In summary, there is a strong possibility, due to early involvement in risk behaviours and the level of commitment (number of behaviours and level) at this point, that this teen will continue to be involved in and may become more involved in problem behaviours in the near future.

Male (Ken)

Wednesday: Ken went to the mall after school with a friend "to find everyone". Parents were perceived not to know his whereabouts, however, were perceived to approve. Went to a friend's house with 3 other boys at 5:30 p.m. to play basketball. Parents did not know but would approve. They bought Kentucky Fried Chicken at 7 p.m. and then had a pine cone war. Parents did not know his whereabouts but were perceived to approve. Ken got home at 11 p.m. No mention of parents being home.

Thursday (no school): went to a friend's house and had a water fight with about 10 others. Parents were perceived to know about and approve of this activity. Went home to have dinner at 5 p.m. (no mention of parents). Went to a mall at 8:30 p.m. by himself, met a friend and had a cigarette. Parents were perceived not to approve of him smoking. Home at 9 p.m. to talk on the phone.
Friday: went to the mall after school to meet everyone. Parents were perceived to know and approve. Home for dinner (once again, no mention of whether parents were home). In the early evening, went to a female friend's house "to party and drink". Parents were perceived not to know about or approve of this activity. Got home at 11 p.m.

Saturday: went to a friend's house mid-afternoon to watch a movie with two other boys. Went home for supper (no mention of parents being home). Went out with a male friend from 6:30 - 11 p.m. to drink. Parents were perceived not to know his whereabouts and not to approve.

His score in Adolescent Risk Behaviour Questionnaire was 72 which indicated a high overall interest in risk behaviours. The scores also indicated above average involvement in each risk behaviour category. The questionnaire items themselves revealed the teen's having tried four out of 5 criminal behaviours. The behaviours reported as sometimes do are: carrying a weapon, riding in a car without a seatbelt, taking marijuana, and cheating on an exam. Behaviours Ken reported to engage in often are: smoking cigarettes, drinking alcohol, and getting drunk. This was congruent with the Activity Log entries. Other responses indicated an interest in taking steroids, taking speed, and taking hallucinogens. Contradictorily, he reported often do to "having sex without a condom" despite
the fact he reported he would like to try "having sex". At
the very least, he appears interested.

Parents were perceived by the teen to approve of all
activities mentioned other than smoking and drinking (the
only problem behaviours mentioned in the log book). There
is no evidence in the log book, of time spent as a family or
time spent communicating with parents, even during a meal.
In fact, not a word was mentioned about his parents so it is
difficult to judge the family's relationship. Parents were,
in most cases, not aware of Ken's activities and were
perceived not to approve of involvement in problem
behaviours. This perception of disapproval, however, did
not seem to deter Ken.

The questionnaire results, however, provided some
insights in this regard. The parents were both perceived as
being low in demandingness and responsiveness. Mother was
perceived as being higher than father in both but only
slightly. Mother rated herself higher on demandingness when
compared to her son's perceptions whereas father and son
were congruent. Mother and father both rated themselves
higher on responsiveness in comparison to their son.

In summary, there appears to be enough information from
both the Activity Log and the questionnaire to suggest that
this teen is engaged in a number of problem behaviours and
may continue to do so due to his early involvement, his
attitude toward problem behaviours, and his level of commitment.

The final group meeting with all eight adolescents was brief, as necessitated by the students' school schedules, thus there was very little feedback. The overall feeling seemed to be that the booklet was "easy, fun, interesting, neat drawings, too much like work, hard to remember what to put in, gets repetitive, OK". One female student commented that the book should be black in colour rather than "too bright". One male wished to reaffirm absolute confidentiality. Otherwise, no suggestions were offered as to how to improve the format for a subsequent group such as themselves.

In general, information obtained from the eight adolescents' Activity Log entries appeared to support findings from the questionnaire results of the larger sample as well as reveal some interesting family-related behaviours. Adolescents from Authoritative homes reported the least propensity toward risk behaviours at this time. Parents spent time with their teens and were perceived to know their whereabouts during their leisure hours and also to approve of their activities. Adolescents rated their parents higher on both parenting variables suggesting a perception of clear family structure as well as warmth and caring. It appeared that adolescents parented Authoritatively enjoyed spending time with their families.
Of the adolescents from Authoritarian homes, the female was not involved in risk behaviours at this time whereas the male was. Parents, in both instances, perceived themselves to be more responsive than did their teens. The mother of the daughter and the father of the son were perceived to be the more responsive of the two parents. Both adolescents appeared to spend a great deal of time by themselves; that is, little mention of friends.

Adolescents from Permissive Indulgent homes reported an interest in becoming involved in some risk behaviours. Even though these adolescents rated their parents high on responsiveness, parents rated themselves even higher indicating parents' value of warmth and caring. Mother and daughter rated demandingness similarly but father imagined himself to be more demanding than did his daughter. Both adolescents reported to have already tried some risk behaviours; the female more so than the male. Higher adolescents' and parents' perceptions of parental responsiveness may be associated with more accepting attitudes toward involvement in risk behaviour.

Adolescents from Permissive Indifferent families undoubtedly reported the highest levels of engagement in risk behaviours as compared to adolescents from the other parenting styles. Both teens reported having already tried numerous behaviours. Parents perceived themselves to be
either congruent with their adolescents or higher on parental variables than did their adolescents.

It seems evident that adolescents parented differently, behaved differently. Those from families perceived to be high in demandingness and responsiveness were least involved in risk behaviour. In contrast, those who perceived their parents to be low in both parenting variables were most involved. It also seems evident that teens' perceptions of the parenting variables, demandingness and responsiveness, were more strongly associated with their involvement in risk behaviour than were parents' perceptions or adolescent-parent discrepancies in perceptions.
Chapter 5
Inferences and Implications

Adolescent Risk Behaviour

This study has provided evidence to support the hypothesis that early adolescence is a time when teens show interest in problem behaviours or risk behaviours (Eccles, et al., 1993). It is a time in the life-span characterized by experimentation which is developmentally appropriate and socially adaptable albeit potentially harmful (Baumrind, 1987). Because engagement in risk behaviours can help to fulfil goals that are central to normal adolescent development, one focus of this study was the examination of adolescents' levels of involvement in risk behaviours. Increased knowledge about adolescents' engagement in risk behaviours and the potential of subsequent jeopardy to adolescents' psychological health and well-being, may be effective in preventing, delaying, or minimizing involvement in risk behaviours.

The measure used in the present study to assess adolescents' interest and engagement in a wide variety of risk behaviours, the Adolescent Risk Behaviour Questionnaire, proved to have good internal consistency (Alpha = . 90 for Total Risk Behaviour, N = 77). Based on adolescents' responses to items on this instrument, early adolescents from varied backgrounds expressed at least an interest or an accepting attitude toward a wide range of
risk behaviours. Teens from the school situated closer to the downtown core indicated a more avid interest across all risk behaviour categories than those from the school situated somewhat further away. Drug-related behaviours in particular, specifically drinking alcohol, getting drunk, and taking marijuana were the most highly rated. Very little attention had been given by teens thus far, to cocaine, speed, or hallucinogens.

Within the Criminal risk behaviour category, shoplifting and stealing from others were viewed favourably as was vandalism, although to a lesser extent.

Not wearing a seatbelt was the most highly reported transgression from within the Safety-related risk behaviours category. Only teens from the school closer to the downtown area expressed a definitive interest in carrying a weapon.

Teens in general expressed an unequivocal interest in smoking cigarettes. The other Health-related behaviour for which an accepting attitude was reported was having sex, but only by adolescents from the School II. Adolescents from the more suburban school were, for the most part, not interested at this time. Regarding the remaining health-related behaviours which were mainly related to body image, no activity was reported.

General deviant behaviours were all looked upon favourably by the teens in this study, most particularly the school-related transgressions of cheating on an exam and
skipping school. The latter, as well as academic performance, have been found to correlate with other problem behaviours (McCreary, Adolescent Health Survey, 1993). Stealing from their own homes and starting fights with their peers were also rated positively by teens.

Adolescents attending School II reported a higher level of risk behaviour interest than those attending School I. Differences were noted in Health- and Drug-related behaviours, General Deviance, and Total Risk Behaviour. More specifically, adolescents who lived closer to the downtown area were more interested in having sex, drinking, getting drunk, using marijuana, and stealing. There could be countless reasons for these differences, among them being easier access or availability to alcohol and drugs, more models for deviant behaviour, and possibly a higher tolerance for deviance.

The results of this study augment the findings from an extensive survey funded by the McCreary Centre Society (1993). This survey sought information on the health status and health practices of adolescents in Greater Victoria, British Columbia for the purpose of prevention as well as intervention. It was hoped that communities would become informed about the risk factors and protective factors present in youth environments and associated with risk behaviours. The survey involved 1,536 Grade 7 through 12 students from 3 out of 4 school districts. Several findings
for early adolescents (Grades 7 to 9) were relevant to the present study. Almost 20% of early adolescents had already tried drinking; 22% of males and 32% of females smoked cigarettes occasionally or regularly; 10% of all early adolescents had already tried marijuana whereas less than 1% had tried cocaine; 25% (31% of males and 21% of females) reported already having tried sex; weapon carrying appeared highest among students in grades 8 and 9; physical aggression is highest among males in grades 7 and 8, and among females in grades 8 and 9; binging and purging was more prevalent for females than males (9% and 3% respectively).

Overall, although early adolescents in the present study were not, as yet, involved to a great extent in problem behaviours, a favourable attitude or propensity toward a variety of these behaviours was expressed. Research supports the notion that these findings, as well as those of the 1993 survey, may be cause for concern. Kandel (1986) emphasized that initiation into substance use is preceded by values favourable to its use. Furthermore, among assorted protective factors against risk, Jessor et al. (1994) included "intolerant attitudes toward deviance" (p.7). Since "having friends as models for problem behaviour" is a risk factor for becoming involved in problem behaviours (Jessor, et al., 1994), it could be argued that tolerant attitudes may lead to association with peers who
share the same outlook or may already be involved in risk behaviour and, this may subsequently lead to involvement.

Although not a specific focus of the present study, some interesting gender issues surfaced. Predictably, boys reported higher levels of interest in criminal activity such as shoplifting and stealing from others. Unpredictably, however, there were no significant differences among the sexes in any other risk behaviour categories even though mean scores were consistently higher for boys. Is it time we began to think differently about young adolescent women? Lagging behind substantially in problem behaviours no longer seems to be the case. Has the recent historical surge toward equality created a more accepting society in which girls may do whatever boys do? (Baumrind, 1987).

Those adolescents who were unequivocally interested or active in one risk behaviour, typically reported activity in other risk behaviours. Over one-fifth of teens in this study reported above average interest or involvement in each of the risk behaviour categories. According to Jessor (1991), this clustering of behaviours reflects an adolescent's way of being; a lifestyle. Reasons given for these patterns of behaviour were (a) that adolescents' social context provides them with opportunities as well as normative expectations to learn risk behaviours together and, (b) a variety of risk behaviours may serve the same developmental function. For example, engaging in sex or
using marijuana may both be an attempt to establish independence. In any event, the possible consequence is the compromise of successful development and the jeopardy of life chances (Jessor, 1991). Successful intervention programs must, therefore, consider a variety of risk factors underlying a variety of risk behaviours when setting long-term goals and objectives. Programs that work are directed toward remediating multiple risk factors rather than individual risk behaviours (Dryfoos, 1993).

In addition to considering a variety of risk behaviours, intervention programs should consider social network support. Eggert and Herting (1990) found that teachers' support of adolescents' helping behaviours and "'caring' transactions between the teacher and student participants" (p.17) served to minimize adolescent drug use. This network approach could be extended to include family support. The presence of high demandingness and responsiveness in adolescents' most immediately influential contexts, the home as well as the school, may further prevent, control, or reduce adolescents' involvement in risk behaviours if supportive networking takes place. In contrast to their findings regarding teachers' support, Eggert and Herting (1990) found that peer-group social support (another influential context), as defined by participants' perceptions of their classmates' helpfulness and acceptance, surprisingly did not serve to decrease drug
use. This may be encouraging in terms of the relative influence of the three aforementioned contexts. On the other hand, perhaps peers' intolerance for and lack of involvement in risk behaviours (Jessor et al., 1994) influences reduction in risk behaviours more than helpfulness and acceptance.

Given the level of young adolescents' interest or involvement in risk behaviour, it is vital that teens be provided with opportunities to fulfil developmental tasks in safe, sensible, and healthy ways. We must find ways to promote adolescents' feeling of worth and belonging. Baumrind (1987) claimed that adolescents are made to feel like outsiders in our culture. Entry into the adult world of commitment and responsibility are delayed due to the gap between puberty and psychosocial maturity. How can we foster an atmosphere conducive to adolescents' needs to both belong and be independent?

Eccles et al. (1993) argues that "individuals are not likely to do well, or be motivated, if they are in social environments that do not meet their psychological needs" (p.91). The family, the school, and the peer group are considered to be the three most influential microsystems for adolescents (Bronfenbrenner, 1979). With the developmental tasks of adolescence in mind - their need to struggle with identity, establish autonomy, form intimate relationships, express their sexuality, and explore their future
aspirations (Steinberg, 1993b; Baumrind, 1987; Jessor, 1984; Feldman & Elliott, 1993) - it is crucial that the family and the school provide a conducive atmosphere. Otherwise, adolescents will seek fulfilment within their social environment where, relatively speaking, there is more potential for risk. Findings from this study, as will be discussed subsequently, indicate that high levels of parental demandingness and responsiveness are present in families where adolescents are less interested or involved in problem behaviours.

Adolescents' Perceptions of Parental Demandingness and Responsiveness, and Relationships to Adolescent Risk Behaviour

Overall, adolescents perceived their parents favourably in terms of their demandingness and responsiveness. Were these positive perceptions related to teens' risk behaviour? One of the primary objectives of this study was to examine this relationship between adolescents' ratings of parental demandingness and responsiveness, and adolescents' involvement in risk behaviours. The rationale underlying the perceived worth of the two parenting variables was based on Baumrind's (Maccoby & Martin, 1983; Baumrind, 1994) parenting typology and the supposition that high levels in both demandingness and responsiveness would result in adolescents' psychological good health and well-being.

The Parenting Perception Questionnaire, created from conceptually similar instruments, was used to assess
demandingness and responsiveness. Reliability coefficients proved to be excellent, particularly for ratings of mothers' and fathers' responsiveness.

The present study provided evidence to support the notion that high levels of parental demandingness and responsiveness are associated with adolescents' relatively low levels of interest in risk behaviours. In contrast to numerous studies which included adolescents only (Dornbusch, et al., 1987; Steinberg, Elmen, & Mounts, 1989; Lamborn, et al., 1991) or adolescents and their mothers (Jessor & Jessor, 1974), this study included adolescents, mothers, and fathers in providing information about the parenting variables. This inclusion was considered particularly important because of the assumption that not everyone in the family shares the same view (Larson & Richards, 1994).

Adolescents' ratings of parents' demandingness and responsiveness were found to correlate significantly with interest in risk behaviour. Correlations for mothers' demandingness and responsiveness were higher than those for fathers. Thus, in the present study, adolescents' perceptions of mothers' parenting were generally more strongly associated with risk behaviours than perceptions of fathers' parenting. In their study of parent-adolescent relationships, Youniss and Smollar (1985) found that mothers were perceived to be more engaged in adolescents' interests as compared to fathers who focused more practically on their
teens' futures. Mothers and their teens reported mutually close relationships characterized by openness although sons sometimes found their mothers to be intrusive. Mothers and daughters shared confidences as well as conflicts while continuing to remain closely connected.

In contrast, daughters in the Youniss and Smollar study perceived their fathers as authority figures. Interactions were reported by daughters as infrequent and awkward. Father-son relationships seemed to be distant and lacking in mutual respect. Issues centred around school performance and the son's transgressions. Clearly, further examination of the relative impact of mothers and fathers on adolescents' involvement in risk behaviours is warranted.

Overall, perceptions of mothers' demandingness in particular, followed by mothers' responsiveness, evidenced stronger relationships with adolescents' curiosity in risk behaviours than did perceptions of fathers' parenting. In support of these findings, Baumrind (1991a) found that "unlike the demandingness variables, very few responsiveness variables were associated with presence or absence of externalizing problem behavior" (p.149). Parental demandingness appears to be the key variable associated with low levels of problem behaviour. Mothers' controls and regulations were found by Jessor and Jessor (1974) to correlate positively with adolescents' negative perceptions of problem behaviours. These negative perceptions are
assumed to minimize involvement in problem behaviours. Additional support was found in a study by Patterson, Dishion, and Bank (1984), in which monitoring and discipline, two family management skills, were found to relate significantly to delinquency.

An interesting finding was that adolescents' perceptions of mothers' and fathers' responsiveness were more strongly related to boys' attention to risk behaviours as compared to girls. This would suggest that the greater parents' responsiveness, the less the interest of boys in risk behaviours. Thus, although mothers' demandingness has the strongest relationship with both boys' and girls' attitudes toward risk behaviours, it appears that for boys in particular, parental caring and involvement cannot be overlooked. It could also imply that the less deviant the adolescent, the more parents demonstrate warmth and caring.

Lamborn et al. (1991) speculated that responsiveness may be the primary contributor to positive self-conceptions and psychological well-being while demandingness may be the primary contributor to academic achievement and fewer problem behaviours. In the present study, mothers' demandingness was the primary contributor to adolescents' lower interest or engagement in risk behaviours.

Adolescent participants in Youniss and Smollar's (1985) study, rated mothers as being warmer and more involved with their teens than fathers. The findings in the present study
seem to support this pattern in that no gender differences were found in how teens perceived their parents' demandingness and responsiveness. Mothers were generally rated higher than fathers by both boys and girls. Teens from School I, however, rated their parents more demanding and responsive overall than did those from School II. Interestingly, teens from School I also reported lower interest and involvement in risk behaviours. A connection can perhaps be made between teens' perceptions of high levels of parental control and involvement, and lesser interest in problem behaviours.

Possible gender differences for relationships between adolescents' interest or involvement in risk behaviours and their perceptions of their parents' demandingness and responsiveness warrant further study. Overall, it appears that parental demandingness is more closely associated with girls' attitudes toward risk behaviours while parental responsiveness is related more convincingly to boys' attitudes. Parents' setting of rules, regulations, and supervision seem to have less effect on boys than parental caring and support of their sons. Girls, on the other hand, are more influenced by their perceptions of parental demandingness when it comes to getting involved in risk behaviours.

Parents, whose adolescents attended School II, were perceived as having less influence over their teens'
behaviours and being less responsive than parents whose adolescents attended School I. This may, in part, be due to school contextual variables. School II was more proximal to the downtown core than the other and this context may present a higher number of risk factors for adolescents. Parents are perhaps more immersed in problems of their own. They may themselves be models for deviant behaviour. Adolescents may have more liberal access to risk-promoting situations. One can only speculate, given the limited information available in this study. In any case, it appears as though adolescents' perceptions of high parental demandingness and responsiveness are inversely related to their self-reported level of interest or engagement in risk behaviours. Also, it would seem important that school or community contextual variables be investigated as influencing parenting or, at least, how parents are perceived.

**Adolescent Risk Behaviour and Parenting Styles**

The primary focus of the present study was to determine adolescents' level of interest or engagement in risk behaviours as a function of parental demandingness and responsiveness indicative of Baumrind's parenting typology (Baumrind, 1987). This study provides evidence that parenting styles are worthy of consideration in attempting to understand early adolescents and their propensity for involvement in a wide variety of risk behaviours.
Authoritatively parented teens are least interested and involved in risk behaviours. Adolescents from Authoritarian families in the present study, reported the second lowest rate of risk behaviour followed by those from Permissive Indulgent homes. Indifferently parented teens reported the highest interest and involvement. In support of these findings, Lamborn et. al. (1991) found that "the benefits of authoritative parenting and the costs of neglectful parenting transcend demographic groups" (p.1062). Teens from Authoritative families generally get into less trouble while those from indifferent families are more prone to misbehave (Lamborn et al., 1991).

Lamborn et al. (1991) found that adolescents parented permissively, whether indulgent or indifferent, reported a higher frequency of drug and alcohol use, and school misconduct. Authoritative and Authoritarian groups, both high in demandingness, consistently reported less involvement in risk behaviours than permissive groups which are both low in demandingness. Lamborn et al. (1991) also concluded that reported drug use and delinquency did not differ significantly for Authoritative and Authoritarian groups. Authoritatively parented adolescents in the present study reported less interest in risk behaviour in all categories than adolescents in any other parenting group.

The relatively low levels of interest in risk behaviour among youth raised in Authoritative and Authoritarian homes
suggests that demandingness may deter deviance in early adolescence. High demandingness, which has been hypothesized to typically minimize involvement in risk behaviours (Dornbusch et al., 1987), may be even more effective when combined with high levels of responsiveness. The simultaneous existence of responsiveness and demandingness identifies the Authoritative style as the one most likely to produce a healthy adolescent. Responsiveness is associated with social skills and a strong self-concept, whereas demandingness fosters the development of self-control and cooperation with others (Maccoby & Martin, 1983).

Elkind (1995) argues that society in general and families, more specifically, expect independence and autonomy from their youth. Adolescents are perceived, in our society, to be more competent and more sophisticated as compared to their counterparts of fifty years ago. In addition, the pressures of family and work in today's economically stressed and technologically sophisticated world, are often overwhelming for parents. Where parents once sacrificed their own needs and desires to further their children's growth and development, Elkind maintains that the "tables are now turned"; it is adolescents who are now making sacrifices for their overworked and exhausted parents. Adolescents spend more and more time on their own, they must make many difficult decisions without guidance,
and they have fewer behavioural guidelines or boundaries. This freedom can contribute to feelings of insecurity and anomie. Adolescents, in the necessity to "cope with age-inappropriate demands" (Elkind, 1995, p.194), are experiencing a great deal of stress. Today, psychological and social pressures, as opposed to disease, account for most illness and death among youth (Tonkin, 1987).

"Young people who are stressed often do what adults do: they engage in actions that are destructive to themselves, to others, or to both" (Elkind, 1995, p.188). Substantial increases in violence and substance abuse may be indicators of the pressures teens are experiencing.

Elkind states that interdependence as opposed to independence of family members will bring balance to the family unit, where individuals' autonomy may flourish within the context of mutual support and guidance. Elkind (1995) sees a continuing need for parent-training programs which emphasize knowledge about child development and parenting techniques. This will provide parents with confidence and security about their parenting and, in turn, provide children with age-appropriate parental demandingness and responsiveness.

The results of this study imply that parenting style is a reliable predictor of adolescents' interest and involvement in risk behaviours. Parent education programs should consider emphasizing the importance of both
demandingness and responsiveness in the home. In order to increase fathers' involvement in parent education, the value of fathers' responsiveness should be highlighted.

Although research regarding parenting styles in relation to problem behaviour has been done in the past, none has employed such a wide variety of problem or risk behaviours as the adolescent outcome variables considered in the present study. The results of this study yield more specific information on the range of risk behaviours that are related to mothers' and fathers' parenting styles.

An interesting finding was that the majority of teens in this study perceived that both parents were congruent in their parenting style. The Authoritative and Permissive Indifferent styles were clearly predominant in this study. Implications for parent education, especially in the case of permissive indifferent parents, would be to emphasize the importance of both parents' involvement.

The remaining adolescents in the study, those who were perceived to be parented incongruently, reported levels of risk behaviour that were higher than those parented authoritatively. This may be a convincing argument for the simultaneous benefits of high demandingness, high responsiveness, and congruence. Parenting programs must advocate the importance of both mothers as well as fathers as providers of guidance, warmth, and support. Discussion groups for parents, educators, and community program
organizers could be made available in order to raise awareness of salient parenting variables as well as to emphasize the value of congruency.

**Adolescent Risk Behaviour and Parents' Own Perceptions of Demandingness and Responsiveness**

Most research focusing on adolescent behaviour in relation to parenting has relied on adolescents' self-report for information regarding their own as well as their parents' behaviour (Lamborn, et al., 1991; Steinberg, et al., 1989; Dornbusch, et al., 1987). The inclusion of parents' own ratings of their demandingness and responsiveness in the present study, permitted examination of possible relationships to their adolescents' interest or engagement in problem behaviour. Mothers' own perceptions, even of demandingness, were found not to be related significantly to adolescents' risk behaviours.

Similarly, fathers' perceptions of demandingness and responsiveness were not good predictors in general of their adolescents' interest in risk behaviours. Once again, adolescents' perceptions related more consistently to risk behaviour.

In general, parents' perceptions of demandingness and responsiveness did not prove to be as strongly related to adolescents' involvement in risk behaviours as adolescents' own perceptions. This finding, according to Paikoff (1991), is typical of research involving parents' and adolescents' ratings of parental behaviour. Adolescents' personal
meaning has far greater predictive value for their behaviour than parents' perceptions. Levitt et al. (1991) suggested that personal meaning synthesizes knowledge and skills to determine the personal significance of a particular risk or behaviour. Personal meaning is defined as the filter through which new skills, experiences, and information pass. The implication of Levitt et al.'s (1991) model for the findings of this study is that adolescents' own perceptions are closely connected to their actions. Personal meaning is, after all, one's reality.

Jessor and Jessor (1977) depict the perceived environment as having the most invariant relationship with behaviour because it is "the environment of immediate meaning and the one to which the actor is responding" (p.27). It is, therefore, essential that provisions be made for exploration of personal meaning of potentially risk-laden situations as generated by adolescents themselves.

An important message to parents and educators is that when adolescents feel recognized and have a sense of being understood, they are able to tolerate rules and limit setting (Kegan, 1982). Offering knowledge and skills training alone will prove ineffective in predicting or preventing adolescent risk behaviours (Levitt, et al., 1991).
Adolescent-parent Discrepancies in Perceptions of Demandingness and Responsiveness as Related to Adolescent Risk Behaviour

The present study provides evidence that in general, parents, particularly mothers, tended to rate themselves higher on demandingness and responsiveness than did their sons and daughters. This discrepancy in views may be considered normal during the stage of adolescence when family members' status begins to shift and relationships are renegotiated (Youniss and Smollar, 1985). Due to adolescents' increasing ability to view their parents as people who have weaknesses and flaws, it should not be surprising that they rate their parents less favourably on parenting variables than parents themselves do. Mothers, in particular, are more consistently involved in their adolescents' daily lives and, therefore, may perceive themselves to be putting forth more effort into parenting than perceived by fathers or adolescents. "Wishful thinking", as was mentioned by one mother in the present study, may also influence mothers' ratings of their own parenting. They perhaps recognize areas where they would like to be stronger or more consistent and respond accordingly.

Carlson, Cooper, and Spradling (1991) found fathers and adolescents to be more congruent on affective dimensions of their relationship than mothers, whereas mothers and adolescents were more congruent on instrumental domains.
They also found that incongruent parent-adolescent relationship perceptions between adolescent and father, and congruent perceptions between adolescent and mother, were related to adolescents' perceived self-competence.

Relationships were found, in the present study, between discrepant perceptions and adolescents' involvement in risk behaviours. Adolescent-mother discrepancy in demandingness \( r = .32, p<.05 \) and adolescent-father discrepancy in demandingness \( r = .33, p<.05 \) were found to associate moderately with adolescents' involvement in risk behaviours. Thus, the greater the gap between perceptions of demandingness, the greater chance of adolescents being interested or involved in risk behaviours. Discrepancies in responsiveness were not found to be significant.

Overall, judging from the results of the present study, neither parents' own perceptions about their demandingness and responsiveness nor discrepancies in adolescent-parent perceptions of these variables are deemed as reliable in predicting adolescents' interest in risk behaviours as are adolescents' own perceptions. Adolescents' personal meaning about parenting seems to be the best predictor of their propensity to engage in risk behaviours.

Mixed reviews continue to exist regarding the concept of discrepancy in perception and how it should be measured. As Carlson, Cooper, and Spradling (1991) pointed out, a developmental thrust toward distinctive identity and
autonomy from the family is characteristic of adolescence. Consequently, distinct family realities may be positively related to adolescents' health and well-being. When all is considered in the present study, adolescents' perceptions of parents' demandingness and responsiveness, particularly mothers', were found to have the strongest associations with adolescents' risk behaviour. Adolescents' higher ratings than their parents', on parental demandingness and responsiveness, as was reported by the students who completed the Activity Logs, appeared to be inversely related to adolescents' interest in risk behaviours.

**Adolescents' Leisure Time Activities as they Relate to Risk Behaviour**

Adolescent behaviour must be understood in the contexts within which teens spend much of their time. We must be concerned with the factors operative in a given context which facilitate or hinder optimal development. Baumrind (1987) considered two realities that impact negatively on adolescent development: (a) society does not provide adolescents with a safe environment within which to explore and experiment; and (b) the social role of women has changed such that the traditional maternal role has diminished, adult supervision has lessened, and adolescent girls have increased their risk-taking behaviours.

Furthermore, the onset of adolescence is accompanied by broadening horizons within which they experience life. Early adolescents move to larger schools, likely to be
located some distance from their neighbourhoods. They are expected to behave more independently both at home, at school, and in their community, and thus are given more freedom and responsibility in making choices.

Time after school and weekends often provide adolescents with free time in which to choose their own activities within the contexts of time spent alone, with family, or with friends (Larson, 1988). Recent research has determined a link between the amount of free time adolescents have and the amount of time spent with peers, and involvement in problem behaviour (Steinberg, 1986; Galambos & Maggs, 1991). Furthermore, Galambos and Maggs (1991) established that adolescents' propensity to engage in problem behaviour is moderated by the authoritative parenting style.

In the present study, evidence acquired from the log books basically supported that which was found in the larger study; that is, adolescents parented authoritatively reported negative attitudes toward, as well as the lowest level of interest or involvement in problem behaviours. They perceived their parents to know about and approve of their whereabouts and activities during their free time. Generally, there appeared to be affection and interaction in the family as well as respect.

The Activity Log also provided some insights into family relationships. Contextual variables deemed worthy of
further consideration are parental knowledge and approval of teens' activities and whereabouts, family rules and expectations, and family cohesion. The Activity Log also succeeded in providing glimpses into actual daily activities chosen by early adolescents. Furthermore, the simplicity of the measure was paramount to its success due to adolescents' typical attitude toward being given "more work to do". In future, the Activity Log could be better utilized over a longer period of time, with a larger sample, and in conjunction with interviews. Entries made over a span of eight weekends, for example, accompanied by weekly focus group meetings, would yield more reliable results. Regular contact with the adolescents by way of telephone or personal interviews, would serve to clarify details of their entries as well as personal meanings underlying their activity choices. The Activity Log could also be used as the basis of interventions to assist adolescents in reflecting on their decisions and patterns of behaviour.

Limitations and Future Directions

The present study yielded information about parental demandingness and responsiveness in relation to adolescents' interest or involvement in a wide variety of risk behaviours. Some interesting differences were noted between genders, between schools, and for parents. Despite these findings, which serve to add another layer of knowledge to an already sizeable hailstone of information about
parenting, there remains a need for further research which will serve to increase our understanding of parenting and its consequences.

The correlational nature of the present study precludes inferences of a causal nature. Dornbusch et al. (1987), however, provided cross-sectional findings which were subsequently supported by Steinberg et al.'s (1989) longitudinal data and called into question that "parental authoritativeness merely follows from, rather than precedes, the development of competence in children" (p.1433). The present study provides information from two independent school groups that Authoritative parenting is unequivocally linked to lower adolescent risk behaviour.

The results of the present study, when considered on their own merits, do not allow for broad generalizations. The sample was small due mainly to low rates of parental participation and to the restriction of having to obtain active consent. The sample was biased due to the voluntary nature of recruitment. Furthermore, parent data was obtained from only one school group. However, when the findings are considered along with what is already known about parenting styles, particularly the simultaneous existence of the dimensions of demandingness and responsiveness, the results become more viable. The application of parenting styles to adolescents' involvement in risk behaviours seems a worthwhile endeavour when
considering safe and productive environments within which adolescents may explore and grow.

The sample in this study was, for the most part, homogeneous with respect to ethnicity and social class. Despite this homogeneity, differences were found between parenting style groups. It would, however, seem important to replicate this study with a larger and more diverse group of adolescents in order to determine whether patterns of parenting effects hold true.

There is also a need to further investigate fathers' role in parenting. Findings from this study intimate that fathers play a more significant role than has perhaps been acknowledged in past research. Research employing adolescent-mother-father triads may yield information on communication and interaction patterns that shed more light on the role of the father.

Dryfoos (1993) provided a synthesis of information that could be considered useful for prevention, delay, or intervention purposes. Dryfoos (1993) summarized concepts which might easily be applied within the family or the school setting and are enhanced by findings from the present study. The following were considered by Dryfoos to be crucial elements of successful programs: (a) adolescents require intensive individual attention in terms of support and guidance; (b) in high-risk conditions, early intervention is paramount; (c) cooperation and collaboration
at home, school, or within the larger community promotes a sense of worth and belonging; (d) parental involvement is critical in school and community programs; (d) social skills must be taught over an extended period of time to facilitate healthy decision-making both in the present and for the future; and (e) introduction to career planning and exposure to the work world could serve to counteract what Baumrind (1978) viewed as adolescents' "feelings of abandonment and alienation" (p.101).

Almost all programs reviewed by Dryfoos, intervened in only one risk domain; that of substance abuse, for example. As Jessor (1991) maintained and as this study corroborated, problem behaviours typically occur in organized patterns or clusters. Addressing singular problem behaviours within a culture of numerous coexistent behaviours may result consistently in failure or recidivism.

If the results from this study are to be considered solely on their own merits, it may be said that the extent to which adolescents see their parents as being both effectively controlling and caring is related to their interest and involvement in risk behaviours. Adolescents' perceptions of parenting are clearly more related to risk behaviours than are parents' perceptions or divergent views. Although causal relations cannot be established, the circular or bidirectional effects seen in adolescent-parent relationships are nonetheless of import. Parents,
educators, and adolescents may benefit by the knowledge that their behaviour is a consequence of or an influence on the others' and that there is an optimal way of behaving. The results of this study suggest that a climate of authoritativeness, high in parental demandingness and responsiveness, is associated with less self-reported adolescent risk behaviour.
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APPENDIX A

LEVITT, SELMAN, & RICHMOND'S MODEL OF RISK-TAKING BEHAVIOR
Early Adolescent Risk-Taking

Risk Factors
- Biological Predispositions
- Socio-cultural Factors
  - family
  - peers
  - community

Psychosocial Development
- Knowledge of Risks
  - factual
  - developmental
- Personal Meaning
  - to self
  - to relationship

Outcome
- Risk-Taking Outcome Behaviors
- Risk Management Strategies
  - coping
  - negotiation

(derived from Levitt, Selman, & Richmond, 1991, p. 365)
APPENDIX B

FURBY'S STEPS IN DECISION-MAKING (pp.6-8, 1990)
Decision-making about risky behaviour

The following steps depict how the decision-making model can be applied to a real-life risky behaviour situation; an adolescent at a party, for example, where marijuana is readily available.

1. **Identify possible options**: The decision facing this teen involves two alternatives, to smoke marijuana or not to smoke it.

2. **Identify possible consequences that may follow each option**: The exact list of possible consequences depends on the individual who is facing this decision. Some possible consequences of choosing to smoke marijuana are that she will feel high, she will feel part of the group, she will disappoint her parents, she will feel sick, she will get addicted, and she will enjoy trying something that is illegal. Some possible consequences of not smoking are her feeling good about not giving in to social pressure, her friends' calling her a "goody goody," and her regretting her decision later.

3. **Evaluate the desirability of each possible consequence**: Each possible consequence might be more or less desirable for different individuals. For example, being part of the group might be very important for one teenager but less so for another.

4. **Assess the likelihood of each possible consequence**: Just as individuals might differ in their consequence desirability judgments, they might also differ in their assessments of the probability that a given consequence will occur. For example, some may feel that there is no chance they will become addicted if they choose to smoke the marijuana being passed around at this party, whereas others may feel that there is at least a small probability they could become addicted as a result of smoking it.

5. **Combine all of the above information according to some decision rule**: As mentioned above, choosing that option with the largest subjective expected utility has been one suggested decision rule, but there are others that can be defended as equally effective in maximizing one's well-being. For example, adults who criticize adolescents for risk taking might advocate a decision rule that eliminates an option if it has any chance at all of a very big loss, even if that chance is very small and the subjective expected utility of that option is larger than the SEU for any other option.
APPENDIX C

THE CONCEPTUAL STRUCTURE OF PROBLEM-BEHAVIOR THEORY
(Jessor & Jessor, 1977, p.39)
The Conceptual Structure of Problem-Behavior Theory

Demographic Variables
- parental education
- parental occupation

Socialization
- parental ideology
- home climate
- maternal controls
- maternal affectional interaction
- peer influence
- media influence

Personality System
- motivation
- beliefs
- controls

Perceived Environment System
- parental support
- parental controls
- peer supports
- peer controls

Behavior System
- risk behaviors

(derived from Jessor & Jessor, 1977, p. 39)
APPENDIX D

THREE MAJOR SYSTEMS:
PERSONALITY, PERCEIVED ENVIRONMENT, BEHAVIOR
(Jessor & Jessor, 1977)
**Personality System**

This domain characterizes the nature of the person from a socio-cognitive perspective. It involves three sub-systems:

1. **The motivational-instigation structure**: The value placed on goals and the expectation of attaining goals implies a higher likelihood of action in a particular direction. The specific goals selected for their relevance to this age group as well as to problem behavior are: academic achievement, independence (essentially from adult regulation and control), and peer acceptance.

2. **The personal belief structure**: The cognitive controls against nonconformity that originate in beliefs and values about self, society, and self in relation to society. Four variables constitute this structure: social criticism (acceptance or rejection of social norms), alienation (anomie, confusion about role in society, feeling of isolation), self-esteem, and internal-external locus of control (neither of these is well-substantiated, see Jessor & Jessor, 1977, p. 21). Each is considered to restrain engagement in problem behavior.

3. **The personal control structure**: Relates more directly to problem behavior than the more general personal belief structure. The following factors are more proximal, and directly refer to, problem behaviors: tolerance of deviance, religiosity, and positive versus negative functions (personal meanings attached to various problem behaviors).

**Perceived Environment System**

A field theoretical approach, borrowed from Lewin’s "life space" notion (Jessor, 1977; Nielsen, 1991), coordinates both person and environment as contributors to behavior. The particular conceptualization of environment within this theoretical framework is one with which the participant has had personal experience. This was done for logical as well as methodological reasons in that the perceived environment is the one to which a person responds and the information can be accessed through the participant. Objective information in the form of demographic data was collected but, due to its remoteness from action, served more as analytical controls rather than influences on behavior.

This structure differentiates between distal and proximal variables which originate in the underlying theory of this framework; that is, perceived social supports and controls, influential social agents, and the opportunity to learn and practice problem behaviors.

1. **Distal structure**: The social context consists of parents and family, friends and peers. Support refers to being helped when necessary, being encouraged, and having interest shown in one's life. Controls refer to groups standards and sanctions for behavior. Compatibility between the two worlds would imply clarity in behavioral expectations.
b) proximal structure: refers to "the degree to which an adolescent is located in a social context where problem behavior is prevalent and there is social support for its occurrence" (Jessor & Jessor, 1977, p.30). An environment where support is perceived, engaging in problem behavior can be a way to gain acceptance. The significance for models and support would vary with the adolescents' relationships to the models and sources of support.

**Behaviour System**

Behaviour, from a social-psychological perspective, is psychologically different depending on the environmental context in which it occurs and requires the specifications of personal meaning, social definition, relation to age and status, context of occurrence, and time in history (p.32). The phenomenon of problem behavior is relative to societal concerns and expectations rather than being a value term; those behaviors considered to be inappropriate or undesirable.

Two structures represent this domain.

a) problem behaviour: the specific problem behaviours chosen to depict this domain comprehensively, are characteristic of their prevalence at that time in history (the 70's). These behaviours were found to covary in their association with other influential factors. In response to this interrelationship, a multiple problem-behavior index was devised.

b) conventional behaviour: refers to behaviour which is socially approved. Although the major focus is on problem behaviour, it was felt that the framework should also be accountable for normative societal expectations.

The extent of problem behaviour is conceived as a balance between the two structures, with behaviour of one kind serving as a constraint on behaviour of another.

Secondary areas of import, namely, demographic data and socialization factors, are acknowledged, however, are not emphasized in the research due to their remoteness to the issue of problem behaviour or to their difficulty in conceptualizing and measuring.
APPENDIX E

Interrelated Conceptual Domains of Risk Factors and Protective Factors

**Social Environment**
- **Risk Factors**
  - poverty
  - racial inequality
  - illegitimate opportunity
  - family history
- **Protective Factors**
  - quality schools
  - cohesive family
  - neighborhood resources
  - interested adults

**Perceived Environment**
- **Risk Factors**
  - models for deviant behavior
  - parent-friend normative conduct
  - parent-friend conflict
- **Protective Factors**
  - models for conventional behavior
  - high controls against deviant behavior

**Personality**
- **Risk Factors**
  - low perceived life chances
  - low self-esteem
  - risk-taking propensity
- **Protective Factors**
  - value on achievement
  - value on health
  - intolerance of deviance

**Behavior**
- **Risk Factors**
  - problem drinking
  - poor school work
- **Protective Factors**
  - church attendance
  - involvement in school and voluntary clubs

(derived from Jessor, 1991, p. 602)
APPENDIX F

PRODUCT-MOMENT CORRELATIONS BETWEEN MATERNAL SOCIALIZATION MEASURES AND JUNIOR AND SENIOR HIGH SCHOOL STUDENT BEHAVIOUR AND ATTITUDES
(derived from Jessor & Jessor, 1974, p.251)
### Table of Product-Moment Correlations between Maternal Socialization Measures and Junior and Senior High School Student Behavior and Attitudes (derived from Jessor & Jessor, 1974, p.251)

<table>
<thead>
<tr>
<th>Maternal socialization measure</th>
<th>Problem behavior index</th>
<th>Total negative function</th>
<th>Total positive function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Home Climate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's controls and regulations</td>
<td>-.22**</td>
<td>-.30***</td>
<td>.29***</td>
</tr>
<tr>
<td>Mother's affectionate interaction</td>
<td>-.28***</td>
<td>-.05</td>
<td>.12</td>
</tr>
</tbody>
</table>

**Note.** p values are based on two-tailed tests.

The n for females ranges from 75 to 91 for the different measures; for males, the n ranges from 79 to 93.

* p<.10  
** p<.05  
*** p<.01
APPENDIX G

PARENTING STYLES TYPOLOGY BASED ON TWO DIMENSIONS:
DEMANDINGNESS AND RESPONSIVENESS
<table>
<thead>
<tr>
<th>Demanding, controlling</th>
<th>Authoritative reciprocal High in bidirectional communication</th>
<th>Authoritarian Power assertive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undemanding, low in control attempts</td>
<td>Indulgent</td>
<td>Neglecting, ignoring, indifferent, uninvolved</td>
</tr>
</tbody>
</table>

Figure 1. A two-dimensional classification of parenting patterns
(derived from Maccoby & Martin, 1983, p.39)

**Parenting Style Variables:** Factor analyses of parenting variables have consistently yielded two primary dimensions.

1. **Responsiveness** refers to "the extent to which parents intentionally foster individuality and self-assertion by being attuned, supportive and acquiescent to children's needs and demands" (Baumrind, 1994, p.23). This dimension, with its seminal roots emanating from ethological theory, consists of warmth, friendly discourse, reciprocity, and attachment.
   
   (a) **Warmth** - parental affection, emotional expression, empathy
   
   (b) **Friendly discourse** - open and genuine communication, reciprocal interactions between parents and children, adults provide explanations for their actions
   
   (c) **Reciprocity** - parental acceptance and willingness to take into account the needs and desires of the adolescent; harmonious interactions
   
   (d) **Attachment** - secure attachment fosters healthy autonomy

2. **Demandingness** "includes firm discipline and monitoring" (Baumrind, 1994, p.27); direct confrontation as opposed to subtle manipulation.

   (a) **Confrontation** - direct, assertive, supportive, non-punitive, authentic, sensitive
   
   (b) **Monitoring** - close supervision
   
   (c) **Consistent discipline** - "an organized household, consistent expectations, clear guidelines and defined responsibilities" (Baumrind, 1994, p.28).
Authoritative parents are highly demanding and highly responsive. Authoritarian parents are highly demanding but low in responsiveness. Permissive indulgent parents are highly responsive and low in demandingness. Permissive indifferent parents are low in both responsiveness and demandingness.
APPENDIX H

PERCEPTIONS OF PARENTING QUESTIONNAIRE
ADOLESCENT FORM
### ADOLESCENT'S PERCEPTIONS OF PARENTING QUESTIONNAIRE

The following statements ask you to think about your relationship with your mother and father. If you live with both parents, answer all the questions. If you live only with your mother, answer only questions 1-33. If you live only with your father, answer only questions 34-66. Answer truthfully about WHAT IS, not what you WISH it would be like or what you think it SHOULD be like. All of your responses will remain confidential. Read each item carefully and circle ONE response that comes closest to what you think.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Almost never or never true</th>
<th>Not very often true</th>
<th>Sometimes true</th>
<th>Often true</th>
<th>Almost always or always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My mother expects me to tell her where I’m going and who I’m going with</td>
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<td>2. My mother knows where I am when I’m not in school</td>
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<td>3. My mother makes no demands about me having to be home at a certain hour</td>
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<td>4. My mother gets upset when I stay out later than I am supposed to</td>
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<td>5. My mother talks to me about why it’s important to come home when I am supposed to</td>
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<td>6. My mother expects me to do certain jobs around the house</td>
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<td>7. It’s OK with my mother when I don’t do my chores after I’ve been told to</td>
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<td>8. My mother talks to me about why it’s important for me to do my chores</td>
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<td>9. My mother knows the friends I hang out with</td>
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<td>10. My mother knows how I do in school</td>
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<td>11. When I got a poor grade in school, my mother encourages me to try harder</td>
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<td>12. My mother respects my feelings</td>
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<td>13. I feel my mother does a good job as my mother</td>
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<td>14. My mother accepts me as I am</td>
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<td>15. I like to get my mother’s point of view on things I’m concerned about</td>
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<td>16. I feel it’s no use letting my feelings show around my mother</td>
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<td>17. My mother can tell when I’m upset about something</td>
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<td>18. Talking over my problems with my mother makes me feel ashamed or foolish</td>
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<td>19. My mother expects too much from me</td>
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<td>20. I get upset easily around my mother</td>
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<tr>
<td>21. I get upset a lot more than my mother knows about</td>
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<tr>
<td>22. When we discuss things, my mother cares about my point of view</td>
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<tr>
<td></td>
<td></td>
<td>Almost never or never true</td>
<td>Not very often true</td>
<td>Sometimes true</td>
<td>Often true</td>
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<tr>
<td>23.</td>
<td>My mother trusts my judgement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24.</td>
<td>My mother has her own problems, so I don't bother her with mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25.</td>
<td>My mother helps me to understand myself better</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26.</td>
<td>I tell my mother about my problems and troubles</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27.</td>
<td>I don't get much attention from my mother</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28.</td>
<td>My mother helps me to talk about my difficulties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29.</td>
<td>My mother understands me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30.</td>
<td>When I am angry about something, my mother tries to be understanding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31.</td>
<td>My mother doesn't understand what I'm going through these days</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32.</td>
<td>I can count on my mother when I need to get something off my chest</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33.</td>
<td>If my mother knows something is bothering me, she asks me about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34.</td>
<td>My father expects me to tell him where I'm going and who I'm going with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35.</td>
<td>My father knows where I am when I'm not in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>36.</td>
<td>My father makes no demands about me having to be home at a certain hour</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37.</td>
<td>My father gets upset when I stay out later than I am supposed to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38.</td>
<td>My father talks to me about why it's important to come home when I am supposed to</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>39.</td>
<td>My father expects me to do certain jobs around the house</td>
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<td>2</td>
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<td>4</td>
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<tr>
<td>40.</td>
<td>It's OK with my father when I don't do my chores after I've been told to</td>
<td>1</td>
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<tr>
<td>41.</td>
<td>My father talks to me about why it's important for me to do my chores</td>
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<td>4</td>
</tr>
<tr>
<td>42.</td>
<td>My father knows the friends I hang out with</td>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43.</td>
<td>My father knows how I do in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44.</td>
<td>When I get a poor grade in school, my father encourages me to try harder</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45.</td>
<td>My father respects my feelings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46.</td>
<td>I feel my father does a good job as my father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47.</td>
<td>My father accepts me as I am</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>48.</td>
<td>I like to get my father's point of view on things I'm concerned about</td>
<td>1</td>
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<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>Almost never or never true</td>
<td>Not very often true</td>
<td>Sometimes true</td>
<td>Often true</td>
<td>Almost always or always true</td>
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<tr>
<td>49. I feel it's no use letting my feelings show around my father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50. My father can tell when I'm upset about something</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>51. Talking over my problems with my father makes me feel ashamed or foolish</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52. My father expects too much from me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53. I get upset easily around my father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54. I get upset a lot more than my father knows about</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55. When we discuss things, my father cares about my point of view</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>56. My father trusts my judgement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>57. My father has his own problems, so I don't bother him with mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>58. My father helps me to understand myself better</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>59. I tell my father about my problems and troubles</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>60. I don't get much attention from my father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>61. My father helps me to talk about my difficulties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>62. My father understands me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>63. When I am angry about something, my father tries to be understanding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>64. My father doesn't understand what I'm going through these days</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>65. I can count on my father when I need to get something off my chest</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>66. If my father knows something is bothering me, he asks me about it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please feel free to make comments about your experience in filling out this questionnaire and being part of this study. Any questions or concerns will be addressed at a meeting where findings of this study will be presented and discussed.
APPENDIX I

PERCEPTIONS OF PARENTING QUESTIONNAIRE
MOTHER/FATHER
BACKGROUND INFORMATION

1. The following family structure most closely resembles mine:
   ______ (a) two-parent household
   ______ (b) single-parent household
   ______ (c) other (please be specific) __________________

2. I have completed __________ years of formal education.

3. My current occupation is: ____________________________ (please be specific)

MOTHER'S PERCEPTIONS OF PARENTING QUESTIONNAIRE

The following statements ask you to think about your relationship with your son or daughter. Answer truthfully about WHAT IS, not what you WISH it would be like or what you think it SHOULD be like. All of your responses will remain confidential. Read each item carefully and circle ONE response that comes closest to what you think.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Almost never or never true</th>
<th>Not very often true</th>
<th>Sometimes true</th>
<th>Often true</th>
<th>Almost always or always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I expect my teen to tell me where s/he's going and who s/he's going with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I know where my teen is when s/he's not in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I make no demands on my teen about having to be home at a certain hour</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I get upset when my teen stays out later than s/he's supposed to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I talk to my teen about why it's important to come home when s/he's supposed to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I expect my teen to do certain jobs around the house</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. It's OK with me when my teen doesn't do the chores after s/he's been told to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I talk to my teen about why it's important to do the chores</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I know the other kids my teen hangs out with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I know how my teen does in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. When my teen gets a poor grade in school, I encourage him or her to try harder</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I respect my teen's feelings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I feel I do a good job as a mother</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I accept my teen as s/he is</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I like to get my teen's point of view on things s/he's concerned about</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. My teen feels it's no use letting his or her feelings show around me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Almost never or never true</td>
<td>Not very often true</td>
<td>Sometimes true</td>
<td>Often true</td>
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<td>----------</td>
</tr>
<tr>
<td>17. I can tell when my teen is upset about something</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. Talking over his or her problems with me makes my teen feel ashamed or foolish</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. I expect too much from my teen</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. My teen gets upset easily around me</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. My teen gets upset a lot more than I know about</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. When we discuss things, I care about my teen's point of view</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. My teen trusts my judgment</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. I have my own problems, so my teen doesn't bother me with his or hers</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25. I help my teen to understand him or herself better</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26. My teen tells me about his or her problems and troubles</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27. I don't give much attention to my teen</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. I help my teen to talk about his or her difficulties</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29. I understand my teen</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30. When my teen is angry about something, I try to be understanding</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. I don't understand what my teen is going through these days</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. My teen can count on me when s/he needs to get something off his or her chest</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. If I know something is bothering my teen, I ask him or her about it</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please feel free to make comments about your experience in filling out this questionnaire and being part of this study. Any questions or concerns will be addressed at a meeting where findings of this study will be presented and discussed.

*To ensure confidentiality, seal your completed questionnaire in the enclosed envelope marked MOTHER and then into the pre-stamped return envelope. Please mail AS SOON AS POSSIBLE! BY APRIL 17.

THANK YOU FOR YOUR PARTICIPATION!
APPENDIX J

MEASURE EMPLOYED TO ASSESS PARENTING STYLE
(excerpts from Dornbusch, et al., 1987; Lamborn, Mounts, Steinberg, & Dornbusch, 1991, p.1063)
Items for Parenting Scales

Parental Warmth/Involvement

What do you think is usually true or usually false about your father?

. I can count on him to help me out, if I have some kind of problem
. he keeps pushing me to do my best in whatever I do
. he keeps pushing me to think independently
. he helps me with my school work if there is something I don't understand
. when he wants me to do something, he explains why

What do you think is usually true or usually false about your mother?

. I can count on her to help me out, if I have some kind of problem
. she keeps pushing me to do my best in whatever I do
. she keeps pushing me to think independently
. she helps me with my school work if there is something I don't understand
. when she wants me to do something, she explains why

When you get a poor grade in school, how often do your parents praise you? (never, sometimes, or usually)

When you get a good grade in school, how often do your parents praise you?

How much do your parents really know who your friends are?

How often do these things happen in your family? (almost every day, a few times a week, a few times a month, almost never)

. my parents spend time just talking with me
. my family does something fun together

(excerpts from Dornbusch, et al., 1987; Lamborn, Mounts, Steinberg, & Dornbusch, 1991, p. 1063)
APPENDIX K

RISK BEHAVIOR ITEMS
(excerpts from Lavery, Siegel, Cousins, & Rubovits, 1993, p.286)
Risk Behavior Categories and Items  
(excerpts from Lavery, Siegel, Cousins, & Rubovits, 1993)

<table>
<thead>
<tr>
<th>Category</th>
<th>Behavior Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal</td>
<td>shoplifting</td>
</tr>
<tr>
<td></td>
<td>driving after drinking</td>
</tr>
<tr>
<td></td>
<td>vandalism</td>
</tr>
<tr>
<td>Vehicle</td>
<td>accepting a ride with a stranger</td>
</tr>
<tr>
<td></td>
<td>riding in or driving a car</td>
</tr>
<tr>
<td></td>
<td>driving/riding without a seatbelt</td>
</tr>
<tr>
<td></td>
<td>riding a motorcycle</td>
</tr>
<tr>
<td></td>
<td>riding with a drunk driver</td>
</tr>
<tr>
<td>Health</td>
<td>having sex</td>
</tr>
<tr>
<td></td>
<td>binging/purging</td>
</tr>
<tr>
<td></td>
<td>having sex without a condom</td>
</tr>
<tr>
<td></td>
<td>crash dieting</td>
</tr>
<tr>
<td></td>
<td>sunbathing</td>
</tr>
<tr>
<td>Status</td>
<td>running away from home</td>
</tr>
<tr>
<td></td>
<td>cheating on an exam</td>
</tr>
<tr>
<td></td>
<td>physical fights with peers</td>
</tr>
<tr>
<td></td>
<td>cutting school</td>
</tr>
<tr>
<td>Drug</td>
<td>drinking alcohol</td>
</tr>
<tr>
<td></td>
<td>smoking marijuana</td>
</tr>
<tr>
<td></td>
<td>taking cocaine/crack</td>
</tr>
<tr>
<td></td>
<td>taking speed</td>
</tr>
<tr>
<td></td>
<td>getting drunk</td>
</tr>
<tr>
<td></td>
<td>smoking cigarettes</td>
</tr>
</tbody>
</table>
APPENDIX L

ADOLESCENT RISK BEHAVIOUR QUESTIONNAIRE (ARBQ)
ADOLESCENT RISK BEHAVIOUR QUESTIONNAIRE

This questionnaire asks you to think about your present feelings about or involvement in certain behaviours. Answer truthfully about WHAT IS, not what you think it SHOULD be. Your honesty is extremely important and REMEMBER...your responses will be kept completely confidential!

For each statement there are 5 possible responses:

A. Would never try
B. Would like to try
C. Have tried but probably would not do again
D. Sometimes do
E. Often do

Please be sure to answer every statement as well as you can. Respond by choosing the appropriate letter and putting it in the space provided to the left of each statement. For example: If a person had tried smoking cigarettes a couple of times and would probably do it again, he or she would respond by putting a “D” in the blank to the left of “smoking cigarettes”.

_1. shoplifting_  
_2. driving a motorcycle or a car after drinking_  
_3. driving a motorcycle or car on city streets_  
_4. vandalism_  
_5. stealing from others_  
_6. carrying a weapon_  
_7. accepting rides with strangers_  
_8. riding in a car without a seatbelt_  
_9. riding in a car with a driver who’s been drinking_  
_10. running away from home_  
_11. having sex_  
_12. having sex without a condom_  
_13. binging/purging_  
_14. crash dieting_  
_15. smoking cigarettes_  
_16. taking steroids_  
_17. drinking alcohol_  
_18. getting drunk_  
_19. taking cocaine/track_  
_20. taking speed_  
_21. taking marijuana_  
_22. taking hallucinogens (e.g. mushrooms, LSD)_  
_23. starting physical fights with other peers_  
_24. cheating on an exam_  
_25. skipping school_  
_26. stealing from your own home_
APPENDIX M

ACTIVITY LOG
Personal Identity Code: ____________

What's AL all about?

1. Most importantly, you can tell AL anything and it will be kept a secret!

2. AL wants to know all about what you do when you're not in school - where you go and who you spend time with. Why? So we can get to know kids your age a bit better.

3. It's really important to be open and honest!

Turn to the next page for examples of how to use AL.
**Where?**
- mall
- music lessons
- soccer game
- school trip
- friend's house
- home - in the kitchen
- beach

**Who?**
- alone (no one else around)
- alone (someone else at home)
- friend (x)
- soccer team
- teacher
- parents/family
- boyfriend/girlfriend

**When?**
- after school (3-6 pm)
- supper time (6 pm)
- early evening (7 pm)
- later evening (9-11 pm)
- late (after 11 pm)

**What?**
- reading
- listening to music
- smoking
- homework
- talking
- drinking
- partying
- babysitting
- watching T.V.
- working
- chores

---

**Where?**

- school portable
- friend's house
- beach

**When?**

- after school
- 7 till 9 pm
- after 9 pm

**Who?**

- a bunch of kids
- my best friend, her mom was home
- big crowd, some kids I didn't know

**What?**

- hung out
- homework, computer
- drinking, smoking, the police headed us

---

*Please be specific and honest!*
Remember those "risk behaviours" you were asked to rate on a questionnaire (criminal, safety-related, health-related, drug-related, and general deviance).

Please try to express your attitude toward those behaviours you feel most strongly about. Tell AL... what you THINK, how you FEEL, and what you DO.
APPENDIX N

RECRUITMENT LETTER (SCHOOL I) AND CONSENT FORM
Dear Parent(s) and Grade 8 Student:

I am a doctoral candidate at the University of Victoria as well as being a teacher by profession and a parent of two adolescents. I am studying adolescent-parent relationships and adolescent risk behaviours. This is an extremely important area of concern for parents, adolescents, and educators and I would very much appreciate your assistance in pursuing further knowledge in this area.

Each parent who agrees to participate in this study will be asked to respond to a questionnaire regarding his or her own approach to parenting. The questionnaire will be mailed to your home and should require no more than 10 minutes to complete. Each adolescent will be asked to respond to a questionnaire regarding his or her perception of parenting as well as his or her involvement in risk behaviours such as smoking, drinking, or aggression. The adolescent questionnaire should require no more than about 30 minutes of class time to complete. Adolescents' responses will NOT be made known to parents and vice versa, nor will any personal data be made available to teachers or school administrators. The information is strictly for research purposes.

All information provided by your family will be much appreciated and will be kept confidential. To ensure absolute confidentiality and anonymity for all participants, a numeric code rather than names will appear on all questionnaires. Questionnaires will be locked securely in a filing cabinet and will be available only to me. Following completion of the study, all questionnaires will be shredded. As important as your participation is in this study, your involvement is strictly voluntary. If you should initially decide to participate, you would still be free to withdraw at any time and any data would be destroyed.

As a thank you for participating in this important study, your family will be eligible to enter a draw for a $50.00 gift certificate from A & B Sound. Upon completion of this study, findings will be made available in the form of a presentation at your school to any participants who may be interested.

Your first reaction is probably, "Just what we all need, something else to take up our time!", but I hope you will also consider this brief time investment in relation to the value of learning more about adolescents, how they spend their time, and how parents' behaviours might relate to adolescents' choices. This research cannot be done without you! Please sign the enclosed consent form and mail it in the enclosed, self-addressed envelope. Research participants will be reimbursed for postage. I thank you in advance for your consideration.

Sincerely,

Claudia Petersmeyer

If you have any questions or concerns, please call:
Claudia Petersmeyer, Principal Investigator, 658-4000 or
Dr. Don Knowles, Faculty Advisor, 721-7792
PLEASE SIGN AND MAIL IN THE ENCLOSED ENVELOPE AS SOON AS POSSIBLE

Identity code: ___________ Date: ___________

PARENTAL CONSENT FORM

I/we agree to participate and give permission for our son/daughter to participate in the research study, Adolescent-parent Relationships and Adolescent Risk Behaviours, to be conducted by Claudia Petersmeyer, Principal Investigator.

_________________________ (mother's signature) __________________________ (father's signature)

* Note: the terms "mother" or "father" refer to those who currently serve in the roles of mother or father, biological or otherwise. If you are interested in participating but have some questions or concerns you would like to discuss first, please feel free to call Claudia Petersmeyer at 658-4000. Leave a message if there is no answer and your call will be returned as promptly as possible.

STUDENT CONSENT FORM

I agree to participate in the research study, Adolescent-parent Relationships and Adolescent Risk Behaviours, to be conducted by Claudia Petersmeyer, Principal Investigator.

_________________________ (student's signature)

THANK YOU FOR AGREEING TO PARTICIPATE!
APPENDIX O

REMINDER RECRUITMENT LETTER (SCHOOL I)
March 1996

Dear Parent(s) and Grade 8 Student:

You might recall receiving a letter in the mail from me recently in regard to a research study I am conducting in order to complete my doctoral degree at the University of Victoria. The study is about adolescent-parent relationships and adolescent risk behaviours which is an important area of concern for parents, adolescents, and educators. All Grade 8 students and their parents received a letter and will be receiving this second notice as well.

For those parents and students who have already volunteered to participate, I thank you very much! Parents and students who have not yet volunteered, PLEASE reconsider. The more parents and students that become involved, the more reliable and useful the results will be.

I will once again emphasize the confidentiality of each participant's responses. Adolescents' responses will NOT be made known to parents and vice versa. All information is strictly for my own research purposes.

Should you decide to participate, parent questionnaires, which will only take 10 minutes to complete, will be sent home with your son or daughter while student questionnaires will be administered during a brief classroom session. As a participant, your name will be entered in a draw for a $50.00 gift certificate from A & B Sound.

PLEASE sign the consent form and have your son or daughter return it to the General Office by April 2. I need your help and I thank you for reconsidering!

Sincerely,

Claudia Petersmeyer

*If you have any questions or concerns, please call: Claudia Petersmeyer, Principal Investigator, 658-4000 or Dr. Don Knowles, Faculty Advisor, 721-7792
APPENDIX P

COVER LETTER FOR QUESTIONNAIRE TO PARENTS
April 1996

Dear Parent(s):

Thank you for consenting to participate in the research project entitled Adolescent-parent Relationships and Adolescent Risk Behaviours. Your efforts are greatly appreciated.

Enclosed are two questionnaires; one for MOTHER and one for FATHER. Please complete your questionnaire while keeping the following points in mind:

1. The terms "mother" or "father" refer to those who currently serve in the role of mother or father, biological or otherwise. If either father or mother is a single parent, please simply disregard the irrelevant questionnaire.

2. Please complete the questionnaires independently and without discussion prior to completion. It is important that each family member expresses his or her own view and respects the privacy of others' expressions.

3. Answer the questions frankly and truthfully. There is no advantage in giving an untrue answer because you think it is the right thing to say. Your responses will remain confidential.

4. Answer the questions as quickly as you can. Don't spend too much time thinking about what to answer. Give the first natural answer that comes to mind.

5. Don't skip any questions or provide two answers to any question. Make sure you respond to every statement with only one answer.

6. Although some questions may seem much like others, there are no two statements exactly alike so be sure to respond to every statement.

Upon completion, please seal questionnaires, first in the designated envelope and second, in the stamped, self-addressed return envelope. Please mail by APRIL 17, and don't forget to include your raffle ticket! Your participation is very important and I thank you once again!

Sincerely,

Claudia Petersmeyer

If you have any questions or concerns, please call:
Claudia Petersmeyer, Principal Investigator, 658-4000 or
Dr. Don Knowles, Faculty Advisor, 721-7792
APPENDIX Q
RAFFLE TICKET
As a small token of appreciation for your participation in the study, Adolescent-parent Relationships and Adolescent Risk Behaviours, you are eligible to win:

Gift Certificate from
A & B Sound

Name: ____________________________ (please print)

Phone: ____________________________

Date of Draw: May 30, 1996
APPENDIX R

QUESTIONNAIRE INSTRUCTIONS FOR QUESTIONNAIRE ADMINISTRATION TO STUDENTS
INTRODUCTION

"Thank you for volunteering. Research like this could not be done without you volunteering your time and effort!

The purpose of this study is to learn more about adolescents in terms of their relationships with their parents as well as their involvement in certain behaviours called risk behaviours. Risk behaviours are those behaviours considered by many people to be harmful to mental and physical well-being; for example, smoking, drinking, drugs, or extreme dieting."

DISTRIBUTE THE QUESTIONNAIRE

"Please do not begin until instructions have been clarified to the whole group":

a) "First of all, ignore the IDENTITY CODE at the top of the page but please circle the correct responses for sex and age."

b) Either pen or pencil is acceptable. It is very important to answer ALL items by choosing ONE best answer. If you make a mistake, don't worry about it...erase your circle or put an X through the one you don't want. Some of the items sound similar to others but they are all different, so please answer them all.

c) If there are any words or terms you don't understand, just put your hand up and someone will come and help you. On the first page, note #13. Some of you may not be familiar with the terms "binging/purging" which simply means extreme overeating and then purposely vomiting in an attempt to avoid gaining weight. Another term that may be unfamiliar is #22, "hallucinogens", which are chemical substances that cause hallucinations or visions of things that aren't really there."

d) READ INSTRUCTIONS AND RESPONSE CHOICES TO FIRST QUESTIONNAIRE ALOUD TO STUDENTS AND ASK IF THERE ARE ANY QUESTIONS?

e) "It's important to keep in mind that this questionnaire refers to the present time in your life...what you think and do NOW! So when you think you "would like to try" something, think about it in terms of now or the near future."
f) **READ INSTRUCTIONS AND RESPONSE CHOICES TO THE SECOND QUESTIONNAIRE ON PAGE 2 ALOUD.** INSTRUCT STUDENTS TO THINK IN TERMS OF TRUE or FALSE TO HELP THEM CHOOSE THE BEST RESPONSE. USE #1 and #7 AS EXAMPLES SINCE THESE ITEMS ARE WORDED "NEGATIVELY" AND MAY BE AWKWARD.

g) "Note that the first section of this questionnaire, numbers 1-33, asks you about your mother and the second section, numbers 34-66, asks you about your father. The terms "mother" and "father" refer to those who currently serve in the roles of mother or father, biological or otherwise so if your mom, for example, has remarried or has a new partner who lives with you, you may choose to refer to him in the "father" part of this questionnaire. Others of you may live with only one parent and not see the other parent very much. In that case, just fill out half of this questionnaire."

h) "Turn to the last page and note that you are encouraged to take 5 minutes to write down how you felt about filling out the questionnaire and being a part of this study. This part is optional."

"**PLEASE be assured that your responses to these questionnaires are ABSOLUTELY CONFIDENTIAL.** No one will see them but the researcher. Your names will not appear on the questionnaires, therefore, you can be completely honest. It won't help at all if you lie or exaggerate."

"**Finally, in order to maintain confidentiality while you're completing the questionnaire today, you are asked to work quickly, quietly, and independently...that means there should be NO discussion with anyone while you're in this room. When you're finished, please seal your questionnaire in the envelope provided and hand it in.**"

"**Any questions before we begin? In that case...you may begin.**"

**THANK YOU ONCE AGAIN FOR AGREEING TO PARTICIPATE!**
APPENDIX S

RECRUITMENT LETTER FOR THE ACTIVITY LOG
May 27, 1996

Hi _______,

You probably recall being a part of a University of Victoria research study recently in which you were asked to complete a questionnaire. Your involvement was greatly appreciated.

I am now working on a second phase of the study which involves the participation of a small group of adolescents who are being asked to complete a four-day CONFIDENTIAL activity log describing what kids do during out-of-school time, where, and with whom. The purpose of this study is for me to become more knowledgeable about adolescents' choices and activities. I promise you, this will not take up a lot of your time and will quite likely be interesting and fun!

How were you chosen? You were selected at random from all the Grade 8's who completed a questionnaire. Your participation continues to be completely voluntary.

What exactly are you been asked to do? Firstly, I am asking that you meet with me briefly so that I can give you an Activity Log and explain how to fill it out. Secondly, you are being asked to make entries in the Activity Log for four (4) days in a row. I am hoping that you will feel comfortable enough to provide information openly and honestly. Finally, you will be asked to attend a brief meeting to hand in your log and give me some feedback about your experience in filling it out. That's it!

What's it in for you? First of all, you will have the satisfaction of being part of a research project having as its primary goal a better understanding of today's adolescents. Second, as a token of my appreciation for your participation, you will receive $10.00 upon completion of the Activity Log.

When do we start? I need to hear from you by Monday June 3rd, so please call me at 658-4000 if you're interested in participating. If I'm not there, just leave a message and I'll get back to you as soon as possible. Please feel free to call me any time, to ask questions or express any concerns you might have about participating.

Thanks for your time and consideration.

Sincerely,

Claudia Petersmeyer
APPENDIX T

RECRUITMENT LETTER (SCHOOL II) AND CONSENT FORM
April 1, 1996

Dear Parent(s):

I am currently pursuing my doctorate at the University of Victoria as well as being a teacher by profession and a parent of two adolescents. As a requirement for my degree, I am researching adolescent-parent relationships and adolescent risk behaviours which is an extremely important area of concern for parents, adolescents, and educators. All regular Grade 8 students in your school are being asked to participate in this study.

Adolescents who receive parental consent and who themselves agree to participate in this study will be asked to respond to a questionnaire regarding their perception of parenting as well as their involvement in risk behaviours such as smoking, drinking, or aggression. The adolescent questionnaire will be completed during a brief classroom session.

All information provided by the participants is strictly for my own research purposes and will be kept confidential. Adolescents' names will not appear on questionnaires nor will their responses be made known to parents or teachers. Questionnaires will be locked securely in a filing cabinet and will be available only to me. Following completion of the study, all questionnaires will be shredded. Involvement in this study is completely voluntary. Should your adolescent initially decide to participate, he or she would still be free to withdraw at any time and any data would be destroyed.

PLEASE consider helping me with this important study. The more students that become involved, the more reliable the study. It requires only a very brief time commitment and will hopefully be of educational value to all who become involved. Upon completion of this study, I will be pleased to share my findings in the form of a presentation at your school for any participants and their parents who may be interested. As a thank you for agreeing to participate, your teen's signed consent form will automatically be entered into a draw for a $50.00 gift certificate from A & B Sound.

PLEASE sign the consent form and have your son or daughter return it to their homeroom teacher no later than April 3. I thank you for your thoughtful consideration.

Sincerely,

Claudia Petersmeyer

If you have any questions or concerns, please call: Claudia Petersmeyer, Principal Investigator, 658-4000 or Dr. Don Knowles, Faculty Advisor, 721-7792
APPENDIX U

Correlations Among Adolescent Risk Behaviour Categories for Schools I and II
Correlations Among Adolescent Risk Behaviour Categories for Schools I

<table>
<thead>
<tr>
<th>Risk Behaviour Categories</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Criminal</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Safety-related</td>
<td>0.40</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Health-related</td>
<td>0.60</td>
<td>0.62</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drug-related</td>
<td>0.59</td>
<td>0.60</td>
<td>0.83</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. General Deviance</td>
<td>0.53</td>
<td>0.43**</td>
<td>0.64</td>
<td>0.61</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. Total Risk Behaviour</td>
<td>0.75</td>
<td>0.73</td>
<td>0.90</td>
<td>0.91</td>
<td>0.78</td>
<td>1.00</td>
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</tbody>
</table>

N = 28 girls; 16 boys; 44 adolescents in total
All coefficients at p<.001 except when otherwise indicated
Correlations Among Adolescent Risk Behaviour Categories for Schools II

<table>
<thead>
<tr>
<th>Risk Behaviour Categories</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Criminal</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Safety-related</td>
<td>0.62</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Health-related</td>
<td>0.58</td>
<td>0.41**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drug-related</td>
<td>0.65</td>
<td>0.51</td>
<td>0.59</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. General Deviance</td>
<td>0.74</td>
<td>0.74</td>
<td>0.55</td>
<td>0.60</td>
<td>1.00</td>
<td></td>
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<tr>
<td>6. Total Risk Behaviour</td>
<td>0.85</td>
<td>0.78</td>
<td>0.77</td>
<td>0.84</td>
<td>0.87</td>
<td>1.00</td>
</tr>
</tbody>
</table>

N = 10 girls; 23 boys; 33 adolescents in total
All coefficients at p<.001 except when otherwise indicated
APPENDIX V

CORRELATIONS AMONG ADOLESCENTS' PERCEPTIONS OF PARENTING VARIABLES FOR SCHOOLS I AND II
Correlations Among Adolescents' Perceptions of Parenting Variables for Schools I

<table>
<thead>
<tr>
<th>Parenting Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Mothers' Demandingness</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mothers' Responsiveness</td>
<td>.37*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Fathers' Demandingness</td>
<td>.60***</td>
<td>.41**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4. Fathers' Responsiveness</td>
<td>.45**</td>
<td>.55***</td>
<td>.68***</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. N = 44 adolescents, 44 mothers, and 37 fathers
Correlations Among Adolescents' Perceptions of Parenting Variables for Schools II

<table>
<thead>
<tr>
<th>Parenting Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>1. Mothers' Demandingness</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mothers' Responsiveness</td>
<td>.42**</td>
<td>1.00</td>
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<td></td>
</tr>
<tr>
<td>3. Fathers' Demandingness</td>
<td>.44**</td>
<td>.29</td>
<td>1.00</td>
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</tr>
<tr>
<td>4. Fathers' Responsiveness</td>
<td>.36*</td>
<td>.79***</td>
<td>.36*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. N = 33 adolescents, 33 mothers, and 30 fathers
APPENDIX W

RANGES OF SCORES AND MEDIANs FOR PARENTING VARIABLES FOR SCHOOLS I AND II
Ranges of Scores and Medians for Parenting Variables for School I and School II

<table>
<thead>
<tr>
<th>Parenting Variable</th>
<th>School</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Median</th>
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</thead>
<tbody>
<tr>
<td>Mother Demandningness</td>
<td>I</td>
<td>44.68</td>
<td>5.48</td>
<td>39.21 - 50.16 = 10.95</td>
<td>45</td>
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<tr>
<td></td>
<td>II</td>
<td>40.58</td>
<td>7.47</td>
<td>33.11 - 48.05 = 14.94</td>
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<tr>
<td>Mother Responsiveness</td>
<td>I</td>
<td>81.52</td>
<td>14.81</td>
<td>66.71 - 96.33 = 29.62</td>
<td>81.5</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>75.46</td>
<td>18.94</td>
<td>56.52 - 94.40 = 37.88</td>
<td>79</td>
</tr>
<tr>
<td>Father Demandningness</td>
<td>I</td>
<td>42.68</td>
<td>7.99</td>
<td>34.69 - 50.67 = 15.98</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>36.17</td>
<td>8.51</td>
<td>27.66 - 44.68 = 17.02</td>
<td>36.5</td>
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<tr>
<td>Father Responsiveness</td>
<td>I</td>
<td>73.70</td>
<td>16.24</td>
<td>57.46 - 89.94 = 32.48</td>
<td>75</td>
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<tr>
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<td>II</td>
<td>69.77</td>
<td>19.24</td>
<td>50.53 - 89.01 = 38.48</td>
<td>72</td>
</tr>
</tbody>
</table>

School I N = 44 mothers, 37 fathers
School II N = 33 mothers, 30 fathers